

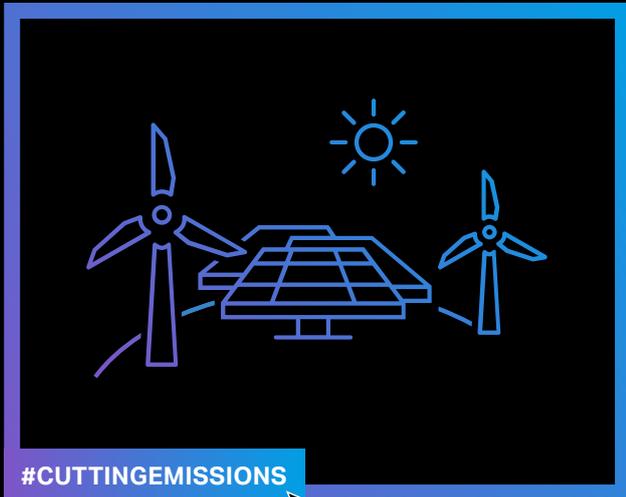
SPEEDING UP TO

CIRCULARITY

ANNUAL REPORT 2022

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Markus Steilemann, Sucheta Govil, Klaus Schäfer and Thomas Toepfer put the past year in context, provide an outlook for 2023 and explain how we are further accelerating our vision of becoming fully circular.

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REPORT PROFILE

FORWARD-LOOKING STATEMENTS

This Report may contain forward-looking statements based on current assumptions and forecasts made by the management of Covestro AG, Leverkusen (Germany). Various known and unknown risks, uncertainties, and other factors could lead to material differences between the actual future results, financial situation, development, or performance of the Group and the estimates given here. The various factors include those discussed in Covestro's public reports, which are available at www.covestro.com. The company assumes no liability whatsoever to update such forward-looking statements or to conform them to future events or developments.

INCLUSIVE LANGUAGE

Diversity, equity, and inclusion are important to Covestro. To ensure better readability, we therefore strive to use gender-neutral language and avoid gender-specific terms in this Report. All terms should be taken to apply equally to all genders.

INTERACTIVITY

This document contains a number of interactive elements. Both the tables of content, the headers and internal references are linked to the content they refer to and will take readers directly to the indicated target when clicked. External references made throughout the texts are also interactive and, when clicked, will take readers to a target outside this document, such as our Covestro website.

Reference Key

- Reference to content in the Group Management Report, the Compensation Report, or the Notes to the Consolidated Financial Statements.
- ↪ Reference to content in the supplementary sustainability information. The supplementary sustainability information, which is not part of the statutory audit of the Consolidated Financial Statements was subjected to a separate review with limited assurance by the auditor, and is identified as follows in this document:

[Supplementary information >](#)

[< Supplementary information](#)

- + Reference to content not contained in the Group Management Report, supplementary sustainability information, the Compensation Report and the Notes to the Consolidated Financial Statements. The auditor did not substantively audit or review the information referenced.

ROUNDING AND PERCENTAGE DEVIATIONS

As the indicators in this Report are stated in accordance with commercial rounding principles, totals and percentages may not always be exact.

If a deviation changes from positive to negative or vice versa, or if it is greater than 1,000%, this is shown by a period.

PUBLICATION

The publication of this Annual Report does not comply with the legally required uniform electronic reporting format pursuant to Section 328, Paragraph 1, Sentence 4 of the German Commercial Code (HGB). A report in this format has been submitted to the operator of the electronic Federal Gazette in Germany and is accessible via the website www.unternehmensregister.de.

This Annual Report was published on March 2, 2023. It is available in German and English.
The German version is binding.

KEY DATA

COVESTRO GROUP

	2021	2022	Change
Sales	€15,903 million	€17,968 million	13.0%
Change in sales			
Volume	6.5%	-5.0%	
Price	34.7%	10.1%	
Currency	-0.8%	5.9%	
Portfolio	8.1%	2.0%	
EBITDA¹	€3,085 million	€1,617 million	-47.6%
Changes in EBITDA			
Volume	23.8%	-10.0%	
Price	252.0%	51.8%	
Raw material price	-125.3%	-95.3%	
Currency	-0.1%	4.7%	
Other ²	-40.9%	1.2%	
EBIT ³	€2,262 million	€267 million	-88.2%
Financial result	(€77 million)	(€137 million)	77.9%
Net income⁴	€1,616 million	(€272 million)	.
Earnings per share ⁵	€8.37	(€1.42)	.
Cash flows from operating activities ⁶	€2,193 million	€970 million	-55.8%
Cash outflows for additions to property, plant, equipment and intangible assets	€764 million	€832 million	8.9%
Free operating cash flow⁷	€1,429 million	€138 million	-90.3%
Net financial debt ^{8,9}	€1,405 million	€2,434 million	73.2%
Return on capital employed (ROCE) ¹⁰	19.5%	2.0%	
Weighted average cost of capital (WACC) ¹¹	6.6%	7.0%	
ROCE above WACC^{10, 11}	12.9% points	-5.0% points	
Employees ^{9, 12}	17,909 FTE	17,985 FTE	0.4%
Greenhouse gas emissions (CO₂ equivalents)¹³	5.2 million metric tons	4.7 million metric tons	-9.6%

¹ Earnings before interest, taxes, depreciation and amortization (EBITDA): EBIT plus depreciation, amortization, and impairment losses; less impairment loss reversals on intangible assets and property, plant and equipment.

² Other changes in EBITDA such as changes in provisions for variable compensation.

³ Earnings before interest and taxes (EBIT): income after income taxes plus financial result and income taxes.

⁴ Net income: income after income taxes attributable to the shareholders of Covestro AG.

⁵ Earnings per share: according to IAS 33 (Earnings per Share), net income divided by the weighted average number of outstanding no-par value voting shares of Covestro AG. The calculation for fiscal 2022 was based on 190,933,438 no-par shares (previous year: 193,165,396 no-par shares).

⁶ Cash flows from operating activities according to IAS 7 (Statement of Cash Flows).

⁷ Free operating cash flow (FOCF): cash flows from operating activities less cash outflows for additions to property, plant, equipment and intangible assets.

⁸ Excluding provisions for pensions and other post-employment benefits.

⁹ As of December 31 in each case.

¹⁰ Return on capital employed (ROCE): ratio of EBIT after imputed income taxes to capital employed. Since the year 2022, imputed income taxes have been calculated by multiplying an imputed tax rate (previously: effective tax rate) of 25% by EBIT.

¹¹ Weighted average cost of capital (WACC): weighted average cost of capital reflecting the expected return on the company's equity and debt capital.

¹² Employees calculated as full-time equivalents (FTEs).

¹³ Greenhouse gas (GHG) emissions (Scope 1 and Scope 2, GHG Protocol) at main production sites (responsible for more than 95% of our energy usage).

FOREWORD

3 QUESTIONS FOR...



EXPLORE
ONLINE



Dr. Markus Steilemann,
Chief Executive Officer



Sucheta Govil,
Chief Commercial Officer



Dr. Klaus Schäfer,
Chief Technology Officer



Dr. Thomas Toepfer,
Chief Financial Officer

Dr. Markus Steilemann, Chief Executive Officer

3 QUESTIONS FOR MARKUS STEILEMANN

How do you look back on the year 2022? The year 2022 was one of extremes: war in Europe, sharp increases in raw material and energy costs, rising inflation and ongoing restrictions due to the coronavirus pandemic in China. All these crises also had a major impact on Covestro, and yet we mastered the past year and, at the same time, achieved strategically important successes. For example, we proved how well our new organizational structure, introduced in 2021, with its even stronger customer focus, is taking hold. What has also become apparent is that our focus on the circular economy is more than ever exactly the right way to go. And, as a great and united team, my colleagues around the world once again demonstrated adaptability and flexibility in 2022 – in keeping with our “We are 1” culture. I am very proud of this.

Apart from all the challenges in the past year, what were your highlights? There are a number of highlights from the past year for me. Our dedication to sustainability showed once again in 2022 that we kept our finger on the pulse. For example, with the announcement of our climate neutrality target: net-zero emissions in our own production processes and purchased energy by 2035. We have anchored sustainability even more firmly in our processes and, last year, also integrated it into our management system. We also have our sights firmly set on the second chapter of our strategy: sustainable growth. The integration of the RFM business, which is running better and faster than planned, is a good example of this. Overall, we have moved even closer to our vision of a circular economy and have launched several climate-neutral and recyclable products on the market. It was also a great highlight for me that we were once again able to inspire thousands of visitors with our innovative solutions at K 2022, the world’s largest plastics trade show, last year. Guests from all over the world experienced and tested our innovative solutions. This close interaction and collaboration with partners and customers is critically important, and we will continue to build upon it.

What are your expectations for 2023? I expect the new year to go on as 2022 ended for the time being. The acute crises and long-term challenges will continue to require our full attention. It is particularly important to press ahead with the green transformation of the economy and society with full force. The highest priority is the rapid transition to renewable energy sources. This is a feat that can only succeed if business, society and politics join forces. The list of challenges is long – but so is our list of solutions. I am convinced that we have the flexibility and creativity to deal with and adapt to almost any situation. That’s why I look forward to 2023 with optimism and anticipation, because Covestro is on the right track.

»I am convinced that we have the flexibility and creativity to deal with and adapt to almost any situation.«

Dr. Markus Steilemann,
Chief Executive Officer



Sucheta Govil, Chief Commercial Officer

3 QUESTIONS FOR SUCHETA GOVIL

2022 was marked by a war in Europe, global energy and gas shortages and pandemic challenges that caused a number of disruptions in global supply chains. What impact did this have on Covestro? We witnessed tremendous global and regional challenges last year: a deeply moving humanitarian crisis due to the ongoing war in Europe and the still prevailing pandemic, especially in Asia. As a result, many countries are experiencing ongoing energy and gas shortages. Also, vitally important product supply chains around the globe have been disrupted, which has impacted many industries and societies. Also in recent years, we have clearly felt how sensitive global supply chains are. At Covestro, we therefore pursue a clear strategy: we produce in the regions, for the regions, and in the markets, for the markets. This makes us less dependent on fluctuations and enabled us to continue supplying our customers reliably last year. We also try new ways and collaborate with food retailer Lidl for sea transport, for example. We will remain the best possible partner for our customers.

Despite a challenging year, Covestro is speeding up toward circularity. Were there any accelerating partnerships last year that you are particularly proud of? I personally feel that any challenge makes us more resilient and creative, also in our collaborations. On our journey to full circularity, there are many partners making the joint vision come true. Cross-industry collaboration and partnerships are fundamental to embedding the circular economy in all parts of the value chain. Last year, for example, we achieved a major breakthrough with biotechnology pioneer Genometica. For the first time, we were able to produce significant quantities of a plant-based variant of the chemical raw material HDMA. Our collaboration with Sinomax for more climate-friendly foams and with CGN to produce particularly powerful wind turbines for more green electricity should also be mentioned here. I am convinced that we can only meet the big challenges of our time in close cooperation with partners from the industrial and science sectors, as well as our customer base.

Last year, the launch of the ambitious climate targets represented a major goal, especially for the customers of Covestro. Could you explain how? We want to help our customers to reduce their own carbon footprint and become circular. That's why we want to become operationally climate-neutral by 2035. This can only be achieved by adapting our product portfolio accordingly: in the long term, we want to offer every product in a climate-neutral version. We already achieved a number of milestones in this regard last year, including the addition of the first climate-neutral MDI to our product range, an essential raw material for producing effective insulating materials, for example. With our new "CQ" concept launched in 2022, we highlight products that contain at least 25 percent alternative raw materials. This makes it even easier for our customers to recognize sustainable alternatives. Together, we are speeding up toward a circular economy.



»Cross-industry collaboration and partnerships are fundamental to embedding the circular economy in all parts of the value chain.«

Sucheta Govil,
Chief Commercial Officer

Dr. Klaus Schäfer, Chief Technology Officer

3 QUESTIONS FOR KLAUS SCHÄFER

Prices for gas, electricity and raw materials increased sharply in 2022. How did Covestro deal with this?

The Russian war of aggression in Ukraine severely impacted the situation regarding the availability and pricing of energy and raw materials in 2022, particularly here in Europe. To illustrate the scope: our global energy costs more than tripled from 2020 to 2022. Covestro is continuously working to make processes more energy efficient. Against the backdrop of the drastic price increases last year, we also took several short-term measures. For example, we implemented a temporary fuel switch from gas to oil at individual sites, we accelerated investments in energy efficiency projects at our plants and consolidated our office space over the winter. We will continue to consistently exploit all opportunities to reduce our energy consumption. At the same time, we are keeping our sights on our target of achieving operational climate neutrality by 2035.

What is Covestro doing in terms of its production processes to become climate neutral? Our ambitious target of becoming operationally climate neutral by 2035 is underpinned by a concrete roadmap. To achieve this, we are using three major levers. First, we are making our production processes more energy efficient and climate friendly. This is done, for example, by reducing nitrous oxide emissions and using digital technologies to control plants more efficiently and simulate processes. Second, we are converting our production to 100 percent renewable electricity. For example, since January 2023, we have been covering about 30 percent of our electricity demand in Shanghai with renewable energy. The third lever relates to steam for our production processes. For this, we also want to use renewable energies and are investigating the use of innovative technologies such as high-performance heat pumps, biogas and green hydrogen as an energy source. This transition is not easy, but it is feasible. And with our technologies and a clear plan, we are well on our way.

What is the outlook for investments at Covestro? On our way to becoming fully circular, investments in innovative technologies and in the expansion of our sustainable product portfolio are fundamental. Due to the economic environment in 2022, we had to adjust our investment planning. These decisions were not easy for us. However, we already invested around 2.5 billion euros in growth from 2015 to 2022 and successfully completed projects such as the construction of the new chlorine plant in Spain and a Vulkollan plant in Thailand. We also invest 400 million euros annually in the maintenance of our plants to ensure safe, reliable and efficient operations. We are also sticking to our planned investments in projects relating to the circular economy. Last year, for example, a new research laboratory focusing on white biotechnology was built in close cooperation with RWTH Aachen University. It is clear that Covestro will continue to invest in sustainable growth opportunities, the expansion of our production capacities and our transformation to a circular economy.

»We will continue to invest in sustainable growth opportunities, the expansion of our production capacities and our transformation to a circular economy.«

Dr. Klaus Schäfer,
Chief Technology Officer



Dr. Thomas Toepfer, Chief Financial Officer

3 QUESTIONS FOR THOMAS TOEPFER

How do you assess the past fiscal year 2022? Overall, 2022 was certainly challenging. After a strong 2021, the past twelve months were severely impacted by the massive increases in energy and raw material prices, especially in Europe. This was accompanied by high inflation and a weakening global economy. All of this had a negative effect on our business performance last year. Our sales were around 18 billion euros and EBITDA came to around 1.6 billion euros. The recessionary environment and extraordinary depreciation additionally impacted our net income, so we have not had an easy year. However, despite all the current challenges, we are generating cash, as evidenced by our positive free operating cash flow for the full year 2022. My thanks for this go to our employees around the world, from production to laboratories, sales and administration, who again showed extraordinary commitment in the past year.

What is your outlook for 2023? The current year will remain challenging for the time being. The economic environment continues to be volatile and geopolitical risks are also still present. Nevertheless, I am confident: Covestro has already proven many times that it can handle cyclical fluctuations. We have a solid balance sheet that equips us for a potentially prolonged economic downturn, and we are competitive in all our regions. We will continue to act in a cost-sensitive manner and consistently leverage efficiencies. In addition, we are well positioned for the long term with our products, which meet the ever-growing demand for greater sustainability, for example in key areas such as construction, energy and mobility. I therefore look to the year realistically, but also with anticipation, and look forward to the further steps we will take in line with our vision of becoming fully circular.

Are there any projects that will be particularly exciting for you this year? There are many exciting projects at Covestro that I was already able to accompany last year. Some of them will continue in 2023: these include our focus on sustainable growth and financing with regard to environmental, social and governance criteria. Demand and interest in these areas are growing continuously. We are therefore increasingly aligning our sustainability and financing strategies. For example, colleagues from finance and sustainability jointly published a Green Financing Framework in the first half of 2022. We then successfully issued our first green bond within this framework in November 2022. In addition, nonfinancial key performance indicators will continue to gain in importance in the future, and ongoing digitalization will increasingly automate and simplify internal and external processes. These are all exciting developments that I am very much looking forward to seeing implemented further at Covestro this year.



**»Nevertheless, I am confident:
Covestro has already proven
many times that it can handle
cyclical fluctuations.«**

Dr. Thomas Toepfer,
Chief Financial Officer

STORY HIGHLIGHTS 2022

With this year's title of our Annual Report "Speeding up to circularity", we are underscoring the urgency of becoming fully circular and thus increasingly independent of fossil resources. We are making steady progress on this path, such as our ambitious climate neutrality target by 2035, new innovative technologies and our ambition to work with industries and partners worldwide to make the world a brighter place. Our highlights from 2022 focus on three topics:

#CUTTINGEMISSIONS

#CRAFTINGCONNECTIONS

#CREATINGSUSTAINABLESOLUTIONS



CUTTING EMISSIONS

By 2035, we want to achieve net zero emissions for scope 1 and scope 2. How can this work and where do we save emissions?

#CUTTINGEMISSIONS

#CRAFTINGCONNECTIONS

#CREATINGSUSTAINABLESOLUTIONS

NOT EASY, BUT POSSIBLE

Climate neutral for scope 1 and scope 2 by 2035 – that's ambitious! But what does it mean? Scope 1 describes the emissions from our own production, and scope 2 the emissions from procurement and consumption of external energy.

These emissions are to be reduced by 60 percent down to 2.2 metric tons of CO₂ equivalent by 2030 – a major task that is not easy, but it is possible. With this ambitious target, we are one of the pioneers and accelerators towards climate neutrality in the industry.



-100%

climate neutral by 2035

-  More sustainable manufacturing
-  Renewable electricity
-  Renewable steam

MORE SUSTAINABLE PRODUCTION, MORE CLIMATE PROTECTION

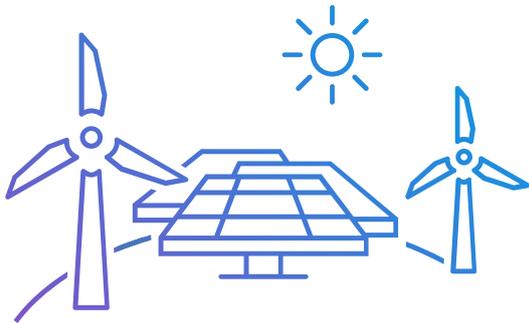
Climate neutrality by 2035 – no easy task for a global chemical company. In concrete terms, what are the levers that need to be adjusted? Take nitrous oxide, for example: this greenhouse gas is around 300 times more harmful to the climate than carbon dioxide (CO₂).

By increasing the use of highly efficient, innovative catalysts, Covestro is reducing emissions caused by nitrous oxide in its production processes. The catalysts are already being used at our sites in Shanghai, China, and Baytown, USA, thus helping us take a significant leap on our path to climate neutrality and a circular economy.



»That's how we reduced GHG emissions in Baytown.«

Demetri Zervoudis,
Senior Vice President and Head of Performance Materials Operations of Covestro in North America



30%

of the energy demand of Covestro's largest site in Shanghai is met with power from wind and solar since 2023.

RENEWABLE ELECTRICITY

Covestro's production sites are being converted to green electricity, and Covestro is concluding supply agreements to this end. For example, onshore wind energy already covers 45 percent of the demand at the Antwerp, Belgium, production site, and 10 percent of Covestro Shanghai's electrical energy needs have so far come from solar parks.

From 2023 on, the share of renewable energy to cover electricity demand in Shanghai will rise to around 30 percent. Starting in 2025, 10 percent of the electrical energy of the German sites will come from Ørsted offshore wind farms.

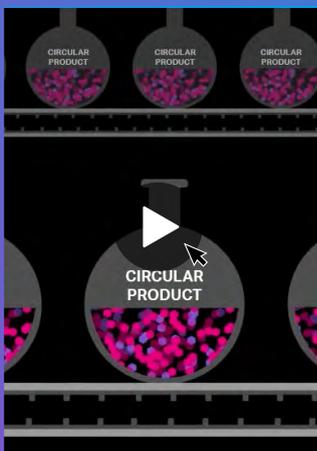
FULL STEAM AHEAD

Steam is an important source of energy in chemical production processes. Covestro plans to switch to renewable energy for steam generation. Heat pumps are a key technology in this endeavor: they enable the use of waste heat generated during production to produce steam. This steam can then be put to good use again. Together with Chempark operator Currenta, we are working on concrete solutions for heat recovery in Krefeld-Uerdingen, Germany.



»We can use heat pumps to take waste heat from our processes and reuse it in production. This helps us reduce greenhouse gas emissions.«

Maria Carrascosa Mas,
Circular Economy
Coordinator for NRW,
Germany, of Covestro



FROM CRADLE TO GATE

We want to make it as easy as possible for our customers to opt for sustainability, which is why we are continuously expanding our portfolio of climate-neutral production. In 2022, we reached major milestones on this path – for example with variants of the plastic polycarbonate and the rigid-foam raw material methylene diphenyl diisocyanate (MDI) that are climate-neutral¹ from the cradle to the factory gate. At the beginning of the manufacturing process at suppliers, vegetable residues are added and mathematically assigned to the products by means of a certified mass-balance approach. In some cases, renewable electricity is also used. As a result, no CO₂ emissions are generated on balance within this part of the value creation cycle.

¹Carbon neutrality is the result of an internal assessment of a partial product life cycle from raw material extraction (cradle) to the factory gate (of Covestro), also known as cradle-to-gate assessment. The methodology of our LCA, for which an external audit and certification will soon be available, is based on the ISO 14040 and 14044 standards. The calculation takes into account biogenic carbon sequestration based on preliminary data from the supply chain. No compensation measures were applied.

CRAFTING CONNECTIONS

How can we shape a sustainable future together? The path to the circular economy needs a strong will within the company and joint efforts with global partners and industry.

#CUTTINGEMISSIONS

#CRAFTINGCONNECTIONS

#CREATINGSUSTAINABLESOLUTIONS



BOOSTING INNOVATION

Innovation is part of our identity at Covestro. As there is great potential in our employees worldwide, we always encourage them to develop, drive forward and implement new solutions. For example, we regularly recognize successful innovation projects at our regional Innovation Celebrations. In 2022, our colleagues again took part in the events in North America and Asia-Pacific. In addition, globally outstanding research successes were honored with the "Covestro Science Medal" at the largest trade fair for plastics and rubbers, "K 2022".

COLORFUL TOGETHER

When we talk about diversity, equity and inclusion at Covestro, we are talking about our 18,000 employees in 21 countries worldwide. We are dedicated to maintaining a discrimination-free work environment in which every colleague can develop freely, regardless of their origin, religion, age, sexual orientation or gender identity. Our journey is far from over, but we are on the right track. In 2022, we continued to educate, discuss and show solidarity at our sites around the world – **because we are 1 and we are colorful.**





MEETING THE INNOVATORS

Innovations are the key to a more sustainable society and economy. Behind innovations are pioneers who are researchers, inventors or developers in search of solutions for the future.

Covestro works with innovators at suppliers, customers, Original Equipment Manufacturers (OEMs), start-ups, designers, universities and other partners to promote the use of alternative raw materials and renewable energies, but also to develop efficient recycling technologies.

FROM TARP TO BAG TO TARP TO ...

New kinds of collaborations are needed to truly have a circular economy for materials. The collaboration between bag manufacturer Freitag, tarp manufacturer Heytex and material manufacturer Covestro is an example of what such a circular future can look like. Whereas Friday's bags were previously made by classic upcycling of old truck tarps, this idea is now being brought to the next level – and closing the circle along the way.

The key? Using thermoplastic polyurethane (TPU) as the material for the truck tarps. The advantage? TPU can be completely recycled, so the tarp becomes a bag, the bag a tarp, the tarp a bag – and so on.



ELECTRIFYING PARTNERSHIPS



With our products, we contribute to creating a sustainable living environment for the long term – for example with electric mobility. For the expansion of electric mobility, significantly more charging stations are required. EVBox is the first manufacturer to use the more sustainable plastic Makrolon® RE from Covestro for its Livo wall box.

Makrolon® is produced with the mass-balance approach using biowaste and residual materials and partly with renewable electricity. It therefore also has a small carbon footprint. Another plus is that customers can use it directly as a substitute for its fossil-based counterpart.

CREATING SUSTAINABLE SOLUTIONS

What solutions do we offer to support the shift toward a circular and climate-neutral future? What are the future markets and opportunities to drive sustainable growth and how does Covestro come into play?

#CUTTINGEMISSIONS

#CRAFTINGCONNECTIONS

#CREATINGSUSTAINABLESOLUTIONS



ENERGY SOURCE OF THE FUTURE

Much of our hope for the climate transformation rests on hydrogen.

For Covestro, it is both a valuable raw material and an energy source of the future. And yet green hydrogen is still in short supply. International partnerships, for example with the Australian company Fortescue Future Industries, promise to help in this regard. Up to 100,000 metric tons of the valuable molecule are expected to find their way to Covestro's production facilities soon. The reward for the efforts? Up to 900,000 metric tons fewer CO₂ emissions per year.

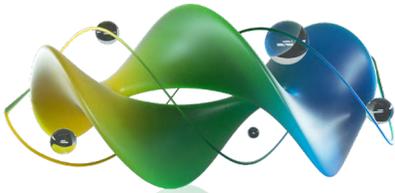


CIRCULAR AND INTELLIGENT

To make the circular economy a reality, the raw-material base of the chemical industry needs to be completely converted to alternative non-fossil or recycled materials. In order to make it clear which products contain such alternatives, Covestro now marks them with "CQ." Products with this label currently contain at least 25 percent of alternative raw materials. In the long term, all products are to be available in a climate-neutral version. In addition, innovative approaches and solutions for recycling will also be highlighted with the CQ label. The CQ label thus helps customers to quickly find the most sustainable materials and solutions in our portfolio.

UNLOCKING THE FULL RECYCLING POTENTIAL

In principle, plastic waste can be recycled over and over and reused for new products. In this way, raw materials can be put to optimal use and fossil resources conserved. That is why innovative recycling processes are a priority at Covestro: the company has now bundled these technologies under the name "Evocycle® CQ." Together with partners from all areas of reclamation, the aim is to tap the recycling potential for Covestro products along the entire value chain.



Each year, the EU alone produces 40 million used polyurethane mattresses – stacked on top of each other, this would be 900 times higher than Mount Everest. Thanks to Covestro's innovative chemolysis technology, the two principal raw materials of the PU foam can be recycled

100%

SOMETHING IS SPINNING!

How can we get more energy from wind? By producing larger and cheaper rotor blades that last longer and can thus generate more electricity, for example.

How can this be done? With materials from Covestro! At its Wind Technology Center in Leverkusen, which opened in 2022, Covestro works with customers to research innovative materials and processes for the wind energy sector. Chemical development and practical application go hand in hand – creating sustainable solutions for a better climate.

THE IMPACT OF POLYURETHANE SOLUTIONS:

-8% Blade manufacturing costs (pultrusion and infusion resin)

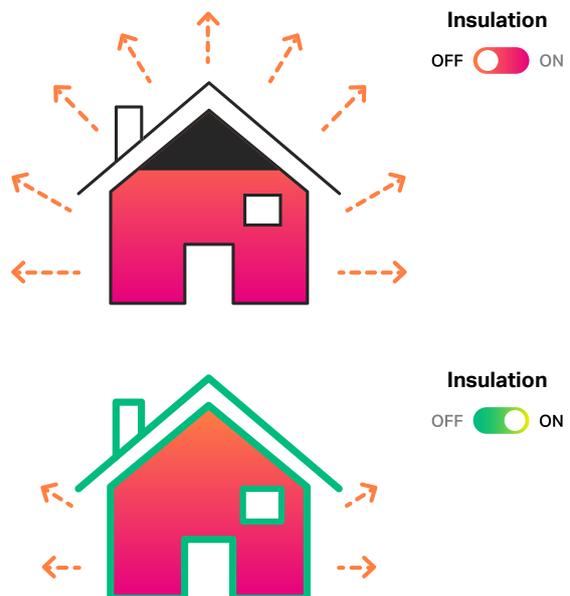
-30% Maintenance and repair costs (leading edge protection coating)

-2.4% Levelized Cost of Energy (LCOE)

LET'S KEEP IT WARM

Buildings are a major contributor to rising greenhouse gas emissions. Heat escapes due to a lack of insulation, resulting in more heating being used than necessary. This is where methylene diphenyl diisocyanate (MDI) comes into play.

Excuse me? MDI is used in large quantities worldwide as a raw material for the production of rigid polyurethane (PU) foam, a very effective insulating material for buildings. Covestro is a world leader in the production of MDI. Using MDI can reduce the heating or cooling requirements of buildings by up to 70 percent, which reduces CO₂ emissions and is easy on the wallet at the same time.



CAPITAL MARKET

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Report of the Supervisory Board



Dr. Richard Pott, Chairman of the Supervisory Board of Covestro AG

Dear Shareholders,

The year 2022 was challenging overall. In Europe in particular, the Russian war against Ukraine and the associated gas and energy crisis shaped the economic environment. High inflation, sharply increased prices for raw materials and energy, and a decline in demand had an additional negative impact on the global economy and Covestro. The lockdowns in China during the year as a result of the ongoing coronavirus pandemic, as well as logistical difficulties and partially disrupted supply chains, also contributed to this.

In these critical times, the Board of Management of Covestro always analyzed the situation and developments very closely, developed measures, and made the necessary decisions to safeguard the company's business and future. This also included safeguarding the company's liquidity and profitability.

We, the Supervisory Board, closely accompanied the Board of Management and supported its decisions.

Despite the crisis situations of fiscal 2022, there were also very positive developments and successes for Covestro: For example, the company continued on its path toward full alignment with the circular economy and established and published its path to climate neutrality. To anchor sustainability even more firmly in the company, Covestro also made it part of its management system last year. The Resins & Functional Materials (RFM) business unit acquired from the Netherlands-based Koninklijke DSM N.V. was also successfully integrated in 2022, faster than planned despite acute challenges. More than ever, the demands placed on globally operating groups have increased. Covestro, with its focus on circularity, renewable resources, and sustainable products, is ideally positioned to master these successfully.

During this period, the Supervisory Board took important decisions to set the course for the continuity of Covestro's management: The contract of the Chairman of the Board of Management, Dr. Markus Steilemann, was extended ahead of schedule by a further 5 years. The expiring contract of the Chief Technology Officer (CTO), Dr. Klaus Schäfer, was extended by six months to ensure personnel stability for Covestro given the current tense policy situation in the energy markets. Also, the long-term succession of the CTO was secured by appointing the current Head of the Coatings & Adhesives Business Unit, Dr. Thorsten Dreier, to the Board of Management as CTO from July 2023.

There have been changes in the composition of the Supervisory Board as of the Annual General Meeting in 2022: Firstly, due to the election of new employee representatives to the Supervisory Board and, secondly, due to the election of a shareholder representative at the Annual General Meeting.

An important area of the Supervisory Board's work in 2022 included the amendments to the German Corporate Governance Code (GCGC) and their implementation.

During the reporting period, the Supervisory Board of Covestro AG performed its duties with due care in accordance with the law, the Articles of Incorporation, and the rules of procedure. During fiscal 2022, it monitored the conduct of the company's business by the Board of Management with regular frequency based on detailed written and oral reports received from the Board of Management, and also acted in an advisory capacity. The discussions between the Supervisory Board and Board of Management were always constructive and were conducted in the spirit of openness and trust.

The Supervisory Board Chair was in regular contact with the Board of Management outside of Supervisory Board meetings and remained informed about current developments in the company's business performance and material transactions. In addition, the Chair of the Supervisory Board was in close contact with the Chair of the Board of Management to discuss important questions and decisions one on one. The full Supervisory Board was informed in detail about the content of these discussions no later than during the next meeting.

In this way, the Supervisory Board was kept regularly and fully informed in the respective meetings about the company's intended business strategy, corporate planning (including financial, investment, and human resources planning), the company's profitability, the state of the business, and the situation of the company and the Group (including the risk situation, risk management, and the compliance situation). Where Board of Management decisions or actions required the approval of the Supervisory Board during the reporting period, whether by law, or under the Articles of Incorporation or the rules of procedure, the draft resolutions were inspected and discussed in detail by the members of the Supervisory Board at its meetings, sometimes after preparatory work by the responsible committees, or approved in writing on the basis of documents circulated to the members. The Supervisory Board was always directly involved in decisions of material importance to the company. It discussed in detail the business trends described in the reports from the Board of Management and the prospects for the development of the Covestro Group as a whole, the individual segments, and the regions. The Supervisory Board continually ensured that the actions of the Board of Management were lawful, due and proper, and appropriate.

Meetings of the Full Supervisory Board and Member Attendance

In fiscal year 2022, the Supervisory Board held a total of six meetings, all of which – with the exception of the constituent meeting on April 21 – were also attended by at least one member of the Board of Management, except where issues were discussed that required them to be absent. In the year 2022, it became possible again to hold physical Supervisory Board meetings (video conferences from January to April, physical meetings from June). Most of the 16 committee meetings were held as video conferences – unless they took place on the same day as one of the Supervisory Board meetings.

The members of the Supervisory Board attended the meetings of the Supervisory Board of Covestro AG and its committees, as follows:

	Supervisory Board	Presidial Committee	Audit Committee	Human Resources Committee	Nomination Committee	Sustain-ability Committee	Overall amount of meetings ¹	
	Meeting attendance	Meeting attendance	Meeting attendance	Meeting attendance	Meeting attendance	Meeting attendance	Meeting attendance	%
Supervisory Board member								
Dr. Richard Pott (Chair)	6/6	1/1	–	5/5	1/1	–	13/13	100.0
Dr. Christine Bortenlänger	6/6	–	4/4	–	–	–	10/10	100.0
Dr. Christoph Gürtler (since April 2022)	4/4	–	–	3/3	–	3/3	10/10	100.0
Lise Kingo ²	5/6	–	–	–	–	5/5	10/11	90.9
Petra Kronen (Vice Chair)	6/6	1/1	4/4	5/5	–	–	16/16	100.0
Irena Küstner	6/6	–	4/4	–	–	–	10/10	100.0
Dr. Ulrich Liman (until April 2022)	2/2	–	–	2/2	–	2/2	6/6	100.0
Frank Löllgen (since April 2022)	4/4	–	–	–	–	–	4/4	100.0
Prof. Dr. Rolf Nonnenmacher (until April 2022)	2/2	–	1/1	–	–	–	3/3	100.0
Petra Reinbold-Knape	6/6	1/1	4/4	–	–	–	11/11	100.0
Dr. Sven Schneider (since April 2022)	4/4	–	3/3	–	–	–	7/7	100.0
Regine Stachelhaus	6/6	1/1	–	5/5	1/1	–	13/13	100.0
Marc Stothfang ³	4/6	–	–	–	–	3/5	7/11	63.6
Patrick Thomas	6/6	–	4/4	–	1/1	5/5	16/16	100.0
Frank Werth (until April 2022)	2/2	–	–	–	–	–	2/2	100.0
Total	69/72	4/4	24/24	20/20	3/3	18/20	138/143	96.5

¹ Three Supervisory Board and 13 committee meetings were held as video conferences, three Supervisory Board and three committee meetings were held physically.

² Absence due to other diary commitments made before the Supervisory Board appointment.

³ Due to illness no meetings attended since October 2022.

In total, Supervisory Board members attended meetings of the Supervisory Board and its committees with a 96.5% attendance rate. In addition, some Supervisory Board members attended meetings of the Sustainability Committee intended for guest attendance (the Chairman of the Supervisory Board and Petra Kronen attended all five meetings, Regine Stachelhaus attended four, Irena Küstner and Petra Reinbold-Knape three each, and Frank Löllgen one). Moreover, the Chairman of the Supervisory Board attended all four meetings of the Audit Committee as a guest.

Based on its composition and experience, the Supervisory Board as a whole has in-depth industry expertise in the polymer sector in which Covestro operates.

The members of the Supervisory Board once again participated in continuing personal education in the reporting year 2022 in order to enhance the expertise of the Supervisory Board as a whole. The Supervisory Board subjected its activities to an externally facilitated effectiveness and efficiency review in the reporting period. In addition to individual interviews with all Supervisory Board members, a written questionnaire, and 360-degree feedback, this included a two-day workshop in October; in this externally facilitated workshop, aspects relevant to the Supervisory Board's work were discussed. The particular tasks and roles of the Supervisory Board in the context of the current crisis situation (Russian war against Ukraine, energy crisis) and its effects on the company were included in the areas on which the workshop focused in-depth. Another workshop was held in November. This strategy workshop, which had been organized by the Board of Management in connection with the Supervisory Board's strategy meeting, also dealt with issues such as the effects of the crisis situation on the

company and on the corporate strategy. In the Supervisory Board meeting on November 10, training was given by external experts on capital market matters and capital market law.

The Supervisory Board also took advantage of the three-yearly K plastics trade fair in Düsseldorf to learn about the plastics industry and the latest trends and challenges, and to obtain information on how Covestro is positioned and the specific products in this environment, focusing on the aspects of sustainability and the circular economy. All costs incurred for the above measures were covered by Covestro.

Change in the Composition of the Supervisory Board

At the Annual General Meeting on April 21, 2022, Dr. Sven Schneider was elected to the Supervisory Board for a term of office of four years; he succeeds Prof. Rolf Nonnenmacher, who stepped down. Moreover, in the election of employee representatives by delegates on March 17, Petra Kronen, Irena Küstner, and Marc Stothfang were reelected to the Supervisory Board and Dr. Christoph Gürtler was elected as a new member to succeed Dr. Ulrich Liman, who stepped down. The candidates proposed by the IG BCE trade union, Petra Reinbold-Knape and Frank Löllgen, were also elected. Petra Reinbold-Knape was reelected and Frank Löllgen was elected as a new Supervisory Board member to succeed Frank Werth, who stepped down. The employee representatives were elected for a term of office of five years, which began at the close of the Annual General Meeting (AGM) on April 21.

The Supervisory Board would like to thank the members who stepped down, Prof. Rolf Nonnenmacher, Dr. Ulrich Liman, and Frank Werth, for the good working relationship on a basis of trust over many years.

Principal Topics Discussed by the Supervisory Board

The deliberations of the Supervisory Board focused on the Board of Management's regular reports on business activities, which contained detailed information on the development of the sales and earnings for the Group and the segments as well as on the strategy, opportunities and risks situation, and personnel matters at Covestro.

The current crisis situation in connection with the Russian war against Ukraine and its impact on the company were discussed at every Supervisory Board meeting in the year 2022; they were also the subject of many additional reports by the Board of Management outside of Supervisory Board meetings. The continued transformation of the Group, which had been launched in the year 2021, and the integration of the RFM business acquired from DSM in 2021 were also discussed at almost all Supervisory Board meetings (the integration of the RFM business was successfully concluded in June 2022). At these meetings, the Supervisory Board received very detailed reports, extensively discussed the existing challenges and progress made, and verified the underlying assumptions. In addition, the Supervisory Board concentrated on the following topics in individual meetings and also through circular resolutions:

The Compensation Report, which had to be created jointly by the Board of Management and Supervisory Board and approved by the AGM for the first time in the year 2022, was adopted by the Supervisory Board on February 10, 2022, after detailed discussion by way of a circular resolution. This followed the resolution to adopt the report by the Board of Management.

In its meeting on February 22, 2022, the Supervisory Board discussed in detail the Financial Statements and Consolidated Financial Statements for fiscal 2021, the Combined Management Report including the nonfinancial Group statement and the proposal for the appropriation of distributable profit. The Supervisory Board also reviewed in detail the audit report and the auditor's oral report concerning the material results of the audit. In addition, the Supervisory Board examined internal risk reporting, which sets out the material risks for the Group and current developments in this regard, as well as the relevant countermeasures. Furthermore, the organization, statistics, training efforts, processes, and effectiveness of the Group's compliance management system were reviewed in depth. In this meeting, the Supervisory Board also approved the Board of Management's decision to hold a virtual AGM on April 21, 2022, due to the ongoing coronavirus pandemic and discussed the AGM agenda and proposed resolutions as well as the election of a shareholder representative to take place there. Further topics included various compensation issues. In this meeting, the Supervisory Board also discussed the path to climate neutrality for the company presented by the Board of Management and approved the proposal and the associated emission reduction targets.

At the Supervisory Board meeting on April 21, 2022, the main agenda item was the virtual AGM held on the same day. Ahead of the AGM, the Chairman of the Supervisory Board had already held discussions with investors relating to the agenda of the AGM, in particular the aspects of Board of Management compensation, Supervisory Board compensation, terms of office and periods of appointment for Supervisory Board members, and other governance topics.

After the AGM, a constituent meeting of the Supervisory Board was held, since the six new employee representatives elected to the Supervisory Board by the Covestro workforce in March and the new shareholder representative, Dr. Sven Schneider, elected at the AGM began their terms of office at the end of the AGM. In this constituent meeting, Petra Kronen was elected Vice Chair of the Supervisory Board. The members representing employees on the Supervisory Board committees were also elected. Dr. Sven Schneider, who had been appointed as a new member of the Supervisory Board by the AGM, was elected to the Audit Committee in Prof. Rolf Nonnenmacher's place and elected as its Chair. In this meeting, an overview of the system for the externally facilitated self-assessment of the effectiveness and efficiency of the Supervisory Board's work, which had to be performed in that year, was also presented.

In the Supervisory Board meeting on June 9, 2022, the system for the self-assessment of the Supervisory Board was discussed in depth and in detail. In this meeting, the Supervisory Board also debated gender representation in the Board of Management and Supervisory Board and specified a new gender quota for the transition period, taking account of the applicable new representation requirements introduced by the Act Supplementing and Amending the Law on Equal Participation of Women and Men in Leadership Positions in the Private and Public Sectors (FüPoG II). In this meeting, the Supervisory Board was also informed about the amendments to the GCGC, which had been published shortly before the meeting. Moreover, the Supervisory Board resolved to reappoint the Chief Executive Officer (CEO), Dr. Markus Steilemann, and extend his contract by another five years following the end of his current appointment.

In the period from the end of July to the beginning of October, the Supervisory Board dealt with four time-critical matters and decisions, each time by way of circulation: On July 29, it discussed the sale of the additive manufacturing business. On August 4, the Supervisory Board approved an increase in the external credit line, and on August 25, it approved the issuance of a Euro Commercial Paper Programme and the issuance of Schuldschein loans. On October 4, the Supervisory Board resolved to appoint Dr. Klaus Schäfer as Chief Technology Officer (CTO) for another six months. Dr. Schäfer had declared that he would be prepared to extend his contract, which was due to expire at the end of the year, by this period to ensure staffing stability for Covestro given the tense policy situation in the energy markets.

In the Supervisory Board meeting held on November 9 and 10, the Supervisory Board resolved to appoint Dr. Thorsten Dreier to the Board of Management as CTO to succeed Dr. Klaus Schäfer, who will step down on June 30, 2023. One particular focus of this meeting was the Group strategy; the Supervisory Board had already discussed the general framework of this strategy at the strategy workshop held earlier. The trends and challenges shaping the short-, medium-, and long-term prospects as well as Covestro's specific skills and strategic scope were also discussed in this context. The meeting also included externally facilitated training on capital market matters and capital market law.

In its meeting on December 16, 2022, the Supervisory Board considered various compensation issues. It reviewed the Board of Management's fixed compensation on a regular basis and considered the long-term variable compensation for the Board of Management. The Board additionally discussed in detail the financial planning for fiscal 2023 proposed by the Board of Management and the medium-term outlook also presented. It approved both the financial plan and the financing framework proposed for fiscal 2023. In this meeting, the Supervisory Board also planned the AGM to be held in the year 2023, discussing the agenda and proposed resolutions and approved the decision of the Board of Management to hold the 2023 AGM as a virtual meeting. In this meeting, the Supervisory Board also voted to issue an unqualified declaration of conformity with the GCGC.



Covestro AG Supervisory Board (as of December 31, 2022; from left to right):
First row: Dr. Richard Pott, Petra Kronen, Dr. Christine Bortenlänger, Dr. Christoph Gürtler
Second row: Lise Kingo, Irena Küstner, Frank Löllgen, Petra Reinbold-Knape
Third row: Dr. Sven Schneider, Regine Stachelhaus, Marc Stothfang and Patrick Thomas

Committees of the Supervisory Board

In the past fiscal year, the Supervisory Board had five permanent committees set up so that it can continue to exercise its duties effectively and efficiently. The committees prepared resolutions by the full Supervisory Board and provided information on other topics to be discussed by this body. Moreover, certain decision-making powers of the Supervisory Board were delegated to the committees to the extent legally permissible. The Supervisory Board currently has the following permanent committees: Presidial Committee, Audit Committee, Human Resources Committee, Nominations Committee, and Sustainability Committee.

The tasks and responsibilities of the standing committees and their current composition are described in greater detail in "Declaration on Corporate Governance" under "Committees of the Supervisory Board" in the Combined Management Report.

The meetings and decisions of all committees, and especially those of the Audit and Sustainability Committees, were prepared on the basis of reports and explanations provided by the Board of Management. The committee chairs regularly provided comprehensive reports on the work of the committees to the full Supervisory Board.

The **Presidial Committee**, on which shareholders and employees are equally represented, made preparations in the year 2022 for the decisions relating to the qualification matrix required by the new GCGC and convened for a meeting for this purpose on November 23, 2022. This followed the preparation by the Nomination Committee of a proposed qualification matrix, including a review of and adjustments to the Supervisory Board's areas of skill.

The **Audit Committee** met a total of four times in the year under review: on February 21, May 2, July 25, and October 24, 2022, each time in the presence of the CFO. Three of these meetings were also attended by the auditor. The Audit Committee conducted a preparatory review of the Financial Statements of Covestro AG, the Consolidated Financial Statements of the Covestro Group, the Combined Management Report, and the proposal for the use of the distributable profit for the Supervisory Board. Additionally, it also discussed in detail the respective audit report and in particular, along with the oral report by the auditor on the material results of the audit. The Combined Management Report also included the Group's nonfinancial statement. In conducting its review, the Audit Committee found no grounds for objections. It recommended to the Supervisory Board to approve the Financial Statements and Consolidated Financial Statements for fiscal 2021 as well as to consent to the Combined Management Report and the proposal for the use of the distributable profit. In addition, the Audit Committee discussed with the Board of Management the half-year financial report in light of the results of the review by the auditor, and the Q1 and Q3 2022 interim statements prior to their publication.

The Audit Committee monitored the accounting and financial reporting process and the appropriateness and effectiveness of the internal control system, the risk management system, and the internal audit system, including sustainability-related aspects, and deliberated on the audit of the Financial Statements and compliance. In doing so, the Committee received reports, including from the heads of Corporate Audit and the Corporate Law, Intellectual Property & Compliance functions and from the auditor. No material weaknesses were identified in the internal control system for financial reporting purposes or the risk early warning system.

The Audit Committee additionally undertook preparations for the Supervisory Board's proposal for the appointment of the financial statement auditor by the AGM, the engagement of the auditor and agreement on the auditor's fee. It monitored the quality of the audit and the independence of the auditor as well as the supplementary non-audit services provided in addition to the financial statement audit. In this context, the committee had the auditor confirm their independence.

The Audit Committee discussed the audit risk assessment, audit strategy, audit planning, key audit matters, and audit results with the auditor. The Chairman of the Audit Committee had regular feedback sessions with the auditor on the audit progress and reported on this to the Audit Committee.

Particular topics discussed by the Audit Committee in the fiscal year under review were current and future regulatory requirements for sustainability reporting and their implementation, including especially the requirements of the EU Taxonomy; the amendments to the GCGC; pension plan asset management; information security; and cyber risk management. Furthermore, the Audit Committee obtained information on an ongoing basis on enhancements to the compliance management system (particularly regarding anti-corruption measures), the handling of suspected compliance violations, progress in significant litigation, new legal and regulatory risks, and the risk situation, risk tracking, and risk monitoring in the Group. The Corporate Audit function provided regular reports about risk assessments.

The heads of the relevant corporate functions also participated in meetings of the Audit Committee on selected agenda items, reported on these, and answered questions. In addition, the Chair of the Audit Committee discussed important matters between meetings, particularly with the Supervisory Board Chair, the CFO and the auditor. The key results of these discussions were reported regularly to the Audit Committee and the Supervisory Board. The Audit Committee continued its practice of closed sessions in the year under review. They allow the auditor and the committee during the meeting to have a discussion without the Board of Management being present.

In the reporting period, the **Human Resources Committee** met for a total of five meetings held on February 22, April 21, June 9, September 28, and December 16, 2022. Topics of particular importance in connection with long-term succession planning for the Board of Management in the past year also included the reappointment of the CEO, Dr. Markus Steilemann, and the extension of his contract as well as succession planning for the CTO. The CTO succession planning was on the agenda of the Human Resources Committee meetings in February, June, and September.

In its first meeting on February 22, the committee discussed the CTO succession planning, as well as target attainment by the members of the Board of Management, long-term variable compensation of the Board of Management, and adjustments to the description of the compensation system for the Board of Management. The meetings on April 21 and June 9 focused on the reappointment of the CEO and the extension of his contract.

In the fourth meeting held on September 28, the Human Resources Committee dealt in particular with the reappointment of Dr. Klaus Schäfer and the extension of his contract and the appointment of Dr. Thorsten Dreier as member of the Board of Management and successor to Dr. Schäfer as of July 1, 2023. It also approved Dr. Thomas Toepfer's membership of the Regional Advisory Council for the Central Region of Commerzbank AG.

The agenda of the meeting held on December 16 included the annual review of the appropriateness of Board of Management compensation, long-term variable compensation of the Board of Management, and short-term variable compensation for the current year.

The members of the **Nomination Committee** held a meeting on September 22 of the reporting year to discuss the skills profile and the qualification matrix of the Supervisory Board required by the GCGC. The Nomination Committee reviewed and added to the skills profile to meet the requirements of the new version of the GCGC. In this meeting, the Nomination Committee also prepared the qualification matrix required by the GCGC, which was subsequently processed further by the Presidial Committee.

The **Sustainability Committee** convened for a total of five meetings. In its first meeting on February 1, it dealt with Covestro's path to climate neutrality (Scope 1 and Scope 2 emissions) and related proposals on objectives and implementation measures. The committee also discussed the EU's chemicals strategy and the approach adopted by Covestro in response. In its second meeting on March 30, the focus was on Scope 3 emissions and how they relate to the circular economy. In the third meeting on June 7, the Scope 3/circular economy topic was raised again on the basis of examples from the market. In addition, discussions centered on ratings by external rating agencies on environmental, social, and governance (ESG) aspects, and the approach pursued by Covestro in this regard. Another topic at this meeting was the concept for the K plastics trade fair in October 2022, with a focus on sustainable solutions and the circular economy. In the fourth meeting on September 9, the committee discussed the key performance indicators (KPIs) for measuring performance against targets. It also considered the ESG aspect of "Compliance with human rights" and spent time on the topic of "Transparency of our reporting" (current forms of reporting at Covestro and future requirements, in particular in accordance with the EU Taxonomy Regulation and the Corporate Sustainability Reporting Directive). The topics focused on at the fifth meeting on November 25 included a progress update on ESG reporting, the 2022 materiality assessment, and the annual planning of the topics of the Sustainability Committee for the year 2023.

Financial Statements/Audit

The Financial Statements of Covestro AG were prepared in accordance with the requirements of the German Commercial Code (HGB) and German Stock Corporation Act (AktG). The Consolidated Financial Statements of the Covestro Group were prepared in accordance with the German Commercial Code and the International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU). The Combined Management Report including the Group's nonfinancial statement was prepared in accordance with the German Commercial Code. The auditor, KPMG AG Wirtschaftsprüfungsgesellschaft, Düsseldorf, audited the Financial Statements of Covestro AG, the Consolidated Financial Statements of the Covestro Group, and the Combined Management Report including the Group's nonfinancial statement. KPMG AG Wirtschaftsprüfungsgesellschaft has audited Covestro's Financial Statements since fiscal 2018. Marc Ufer and Dr. Kathryn Ackermann signed the Independent Auditor's Report for fiscal year 2022. Both of them signed the Independent Auditor's Report for first time on December 31, 2022. The conduct of the audit, key audit matters, and results of the audit are explained in the auditor's reports. The auditor finds that Covestro has complied, as appropriate, with the German Commercial Code, the German Stock Corporation Act and/or the IFRS regulations as adopted by the EU, and issues unqualified opinions on the Financial Statements of Covestro AG, the Consolidated Financial Statements of the Covestro Group, the Combined Management Report, including the nonfinancial Group statement, and the Compensation Report. The Financial Statements of Covestro AG, the Consolidated Financial Statements of the Covestro Group, the Combined Management Report including the Group's nonfinancial statement, and the audit reports were submitted to all members of the Supervisory Board. The Audit Committee and the Supervisory Board reviewed the financial statement documentation in depth after the auditor's report was presented. The auditor attended both meetings.

The Supervisory Board examined the Financial Statements of Covestro AG, the Consolidated Financial Statements of the Covestro Group, and the Combined Management Report including the Group's nonfinancial statement. It had no objections and thus concurred with the result of the audit.

The Supervisory Board approved the Financial Statements of Covestro AG and the Consolidated Financial Statements of the Covestro Group prepared by the Board of Management. The Financial Statements of Covestro AG are thus confirmed. Since no net income was generated, there is no proposal for the use of distributable profit. The Board of Management and Supervisory Board jointly prepared the annual compensation report.

Corporate Governance and Declaration of Conformity

During the reporting year, the Supervisory Board again extensively addressed Covestro's corporate governance, taking into account the German Corporate Governance Code and, together with the Board of Management, submitted an unqualified declaration of conformity in accordance with Section 161 of the German Stock Corporation Act in December 2022 based on the Code in the April 28, 2022, version. This declaration has been posted on Covestro's website.

Expression of Appreciation from the Supervisory Board

The Supervisory Board would like to thank the Board of Management and all of Covestro's employees for their unwavering dedication in the 2022 fiscal year. The Supervisory Board wishes all of them success in dealing with the current economic and geopolitical challenges.

The Supervisory Board would also like to thank Covestro's shareholders for the trust they have placed in the company.

Leverkusen, March 1, 2023

For the Supervisory Board

Dr. Richard Pott
Chairman

Covestro Shares

Performance of Covestro shares versus market in fiscal year 2022

€ (Covestro shares)



Xetra closing prices for Covestro; source: Deutsche Börse

Volatile Stock Markets in a Downward Spiral in a Recessionary Environment

Like the previous year, fiscal 2022 was affected by the global coronavirus pandemic and the Russian war against Ukraine, which has continued since February 2022. The Chinese government's restrictive zero-COVID policy led to massive constraints in the Chinese economy, especially in the first half of 2022, with a significant impact also on global logistics chains and therefore on global economic growth. The stock markets reacted with a sustained downward trend, which was broken in the last quarter of the year. The Russian war against Ukraine and the subsequent energy crisis weighed on economic performance, particularly in Europe, and led to negative economic growth. The European benchmark index EURO STOXX 50* had lost 31% by the time it reached its low at the end of September 2022, but recorded significant gains again in the course of the last quarter. The EURO STOXX 50 ended fiscal 2022 at 3,794 points, 12% down on the previous year. The DAX also finished the year lower, losing 12% year over year at 13,924 points.

European chemical stocks declined more sharply than the DAX and STOXX 50 benchmark indices, due to this industry's greater exposure to the energy crisis. As of December 31, 2022, the STOXX Europe 600 Chemicals** index was down 14.8% from its level at the beginning of the year. At a Xetra closing price of €36.55, Covestro's share price was also down considerably at the end of fiscal 2022, although by the end of the year the share price had recovered from its low, finishing down 32.6% from the previous year end. Covestro's share price marked its low for the reporting year on September 29, 2022, closing at €28.85. The high for the year was €57.48 on January 7, 2022.

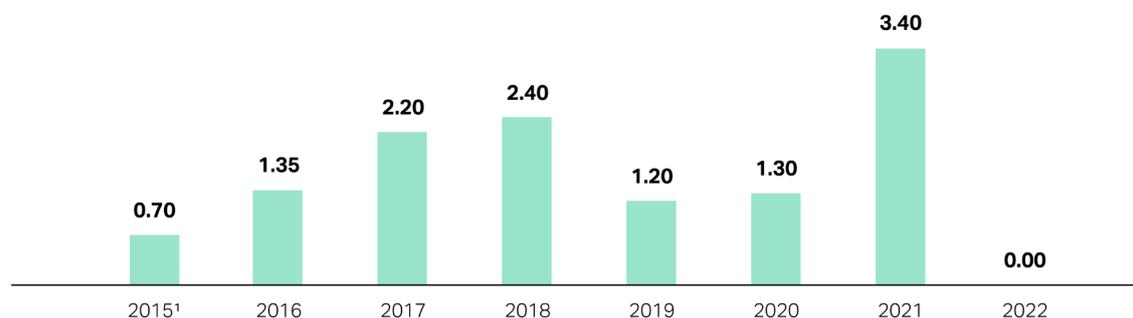
Including the fiscal year 2021 dividend of €3.40 per share paid out on April 26, 2022, Covestro's stock performance (with dividend reinvestment) for fiscal 2022 was -27.1% compared with the 2021 year-end closing price of €54.20.

* EURO STOXX 50: European stock index that reflects the share price performance of the 50 most important and highest-revenue companies in Europe.

** STOXX Europe 600 Chemicals: Sector index by index issuer STOXX; the STOXX Europe 600 comprises 600 European companies.

Dividend performance

Dividend per share carrying dividend rights (€)



¹ Short fiscal year of Covestro AG.

At the end of the reporting period, Covestro's market capitalization stood at €6.9 billion based on 189.9 million shares outstanding. The average daily Xetra trading volume was 1.3 million shares.

Covestro share at a glance

		2021	2022
Average daily turnover	million shares	0.9	1.3
Closing date (Dec. 31)	€	54.20	36.55
High	€	62.48	57.48
Low	€	49.84	28.85
Outstanding shares (closing date)	million shares	193.2	189.9
Market capitalization (closing date)	€ billion	10.5	6.9
Share price change	%	7.4	-32.6
Share price performance (with dividend reinvestment)	%	9.9	-27.1

Covestro closing prices on Xetra; source: Deutsche Börse

Dividend Policy

Since the 2020 Financial Statements, Covestro AG's dividend policy has been more closely linked to the Group's overall business situation. The current dividend policy specifies that Covestro AG should distribute between 35% and 55% of the Group's net income to shareholders of Covestro AG. The Group's net income was negative for the first time, showing a net loss of €272 million. Under the dividend policy this means that no dividend will be distributed to shareholders of Covestro AG for fiscal year 2022.

Moody's Confirms Covestro Rating

On May 10, 2022, Moody's Investors Service, London (United Kingdom), confirmed Covestro's Baa2 investment-grade rating with a stable outlook. Covestro intends to continue to maintain financing structures and financial ratios that support a solid investment-grade rating in the future.

Virtual Annual General Meeting Held on April 21, 2022

Covestro AG's 2022 Annual General Meeting (AGM) was held on April 21, 2022. Due to the ongoing coronavirus pandemic, the company had decided early on to hold a virtual AGM as in the previous year to avoid exposing those present to additional health risks.

The AGM approved the dividend of €3.40 per share for the fiscal year 2021 proposed by the Board of Management and Supervisory Board. With a total distribution of €651 million to shareholders of Covestro AG in April 2022, Covestro's payout ratio amounted to 40%.

Furthermore, Dr. Sven Schneider was elected by the AGM as a new member of the Supervisory Board. He succeeds Prof. Dr. Rolf Nonnenmacher, who resigned effective at the end of the 2022 AGM. Dr. Schneider is the CFO of Infineon Technologies AG. He brings with him extensive professional knowledge, and experience as a CFO and was elected as Chairman of the Audit Committee.

ADR Program Successful for Sixth Year

Since December 1, 2016, the American Depositary Receipt (ADR) program has granted global investors simplified access to Covestro shares. Covestro ADRs are traded over the counter in the United States under the COVTY ticker symbol. At the end of fiscal 2022, the total number of outstanding ADRs reached 6.7 million (previous year: 3.6 million).

Majority of Analysts Issue Buy Recommendation for Covestro Shares

At the end of the year 2022, Covestro was covered by 22 securities brokers. Of these, twelve analysts issued buy recommendations and ten were neutral. The average share price target was approximately €42 at the reporting date.

Basic Covestro share information

Capital stock	€193,200,000
Outstanding shares (year-end)	189,948,365
Share class	No-par ordinary bearer shares
ISIN	DE0006062144
WKN	606214
Ticker symbol	1COV
Reuters symbol	1COV.DE
Bloomberg symbol	1COV GY
Market segment	Regulated market
Transparency level	Prime standard
Sector	Chemicals
Index	DAX

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MANAGEMENT REPORT PROFILE

Combined Management Report of the Covestro Group and Covestro AG

The Combined Management Report pertains to both the Covestro Group and Covestro AG. This report covers the period from January 1 to December 31, 2022. The presentation of the results of operations, financial position, and net assets as well as the expected development, including the principal opportunities and risks, relate to the Covestro Group, unless otherwise noted. Information that applies to Covestro AG only is identified accordingly. The results of operations, financial position, and net assets of Covestro AG are presented in a separate chapter of the Report on Economic Position. In addition, the nonfinancial statement pursuant to Sections 315b and 315c in conjunction with Sections 289c through 289e of the HGB is integrated into the Group Management Report. This includes the statements in accordance with the European Union's Taxonomy Regulation (2020/852). A nonfinancial statement in accordance with Sections 289c through 289e of the HGB does not have to be provided for Covestro AG.

Nonfinancial Reporting

Covestro reports comprehensively and transparently about topics important from the company's perspective and for our stakeholders. We measure our sustainability performance using financial indicators as well as key nonfinancial indicators published in the Group Management Report. Our objective here is to highlight how closely linked environmental and societal factors are with responsible corporate governance and the long-term success of our business. The Group Management Report and the supplementary sustainability information together comprise our annual sustainability reporting. We supplement the nonfinancial information in the Group Management Report by reporting additional content, which meets the requirements of the "with reference to GRI" reporting option of the Global Reporting Initiative's (GRI) Sustainability Reporting Standards (SRS) and is identified separately.

For all reportable aspects, the nonfinancial statement includes the policies we pursue in addressing environmental matters, employee matters, and social matters as well as respect for human rights and anti-corruption and bribery matters, the due diligence processes followed, as well as the outcomes of these strategies. Nonfinancial performance indicators are reported only when these are important to the Covestro Group.

As an integral part of the Group Management Report, the nonfinancial statement was audited with reasonable assurance by our auditor, KPMG AG Wirtschaftsprüfungsgesellschaft, Düsseldorf (Germany). The supplementary sustainability information specifically identified as such additionally contributes to the transparency of our reporting, which meets the requirements of the "SRS-referenced" option of the Global Reporting Initiative's (GRI) Sustainability Reporting Standards (SRS). We voluntarily report the management approaches for material topics in accordance with GRI 3-3 (2021). The supplementary sustainability information that is not part of our statutory audit of the Consolidated Financial Statements was subjected to a separate review with limited assurance pursuant to the International Standard on Assurance Engagements (ISAE) 3000 by KPMG AG Wirtschaftsprüfungsgesellschaft, Düsseldorf (Germany).

Environmental Performance Indicators

Environmental protection performance indicators are reported for all fully consolidated companies. Since these figures are calculated only at the end of the year, they include the group of companies consolidated as it stands at year-end. In this process, we incorporate data from all environmentally relevant Covestro sites, i.e., all production sites and relevant administrative sites. This data is used in addition to the environmental reporting contained in this report to communicate with various stakeholders, e.g., associations, the press, and government agencies, as well as to continually improve our environmental performance. In order to comply with publication deadlines, the sites estimate the environmental data for the final weeks of the current fiscal year on the basis of established estimation methodologies that ensure accurate reporting of data as close as possible to the actual figures for the year. If, however, in the course of the following year, we become aware of material deviations based on internally defined thresholds, the figures in question are corrected retroactively. This was not required in fiscal 2022 for the preceding fiscal year 2021.

The reporting of direct greenhouse gas (GHG) emissions, e.g., from burning fossil energy sources and from our production processes (Scope 1), of indirect GHG emissions from the provision and use of energy produced outside the company (Scope 2), and of GHG emissions from upstream and downstream processes in the value chain (Scope 3), is based on the requirements of the Greenhouse Gas Protocol and includes all fully consolidated companies. If, in our efforts to achieve climate neutrality, measures are taken to offset emissions in relation to our Scope 1 and Scope 2 GHG emissions, they are disclosed in accordance with the Greenhouse Gas Protocol. The global warming potential (GWP) factors correspond to the Fifth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC).

Alternative Performance Measures

Throughout its financial reporting, Covestro uses alternative performance measures (APMs) to assess the business performance of the Group. These are not defined in the International Financial Reporting Standards (IFRSs) adopted by the European Union (EU). These non-IFRS indicators should be considered a supplement to, not a replacement for, the financial performance measures determined in accordance with IFRSs. The alternative performance measures of relevance to the Covestro Group include earnings before interest, taxes, depreciation, and amortization (EBITDA), return on capital employed (ROCE), free operating cash flow (FOCF), and net financial debt. The calculation methods for the APMs may vary from those of other companies, thus limiting the extent of the overall comparability. These alternative performance measures should not be viewed in isolation or employed as an alternative to the financial indicators determined in accordance with IFRSs and presented in the Consolidated Financial Statements for purposes of assessing Covestro's results of operations, financial position, and net assets.

→ [Explanations of the definition and calculation of these alternative performance measures can be found in the "Management" section.](#)

COVESTRO GROUP AT A GLANCE

Company Profile

Organization and Business Model

Organization

Covestro is one of the leading global suppliers of high-tech polymer materials and application solutions developed for these materials. Covestro AG, the parent company of the Covestro Group, is headquartered in Leverkusen (Germany). It is listed on the stock exchange in Germany and is included in the DAX, Germany's leading index. Covestro has two reportable segments, Performance Materials (PM) and Solutions & Specialties (S & S). The segments comprise seven business entities. These are set up according to their respective success factors. All mission-critical operations along the value chain are incorporated into these business entities. Covestro has thus focused its businesses perfectly on the requirements of individual markets and aligned them with its customers' needs.

→ See "Group Strategy" and note 4 "Segment and Regional Reporting" in the Notes to the Consolidated Financial Statements.

The Performance Materials segment forms a separate business entity comprising Covestro's standard urethane components, standard polycarbonates, and base chemicals businesses. The focus here is on reliably delivering standard products at competitive cost. The Solutions & Specialties segment comprises six business entities: Engineering Plastics, Coatings & Adhesives, Tailored Urethanes, Thermoplastic Polyurethanes, Specialty Films, and Elastomers. In this segment, Covestro combines sophisticated products with a high pace of innovation and application technology services.

→ See "Performance Materials Segment Strategy" and "Solutions & Specialties Segment Strategy."

In addition, the Group has established central corporate functions which work toward the further long-term development of Covestro (Build), for instance permanently ensuring the Group's competitiveness and supporting efficient corporate governance (Run).

Group structure

COVESTRO Board of Management	
Segments and business entities	Corporate functions
<p>Performance Materials</p> <ul style="list-style-type: none"> • Performance Materials 	<ul style="list-style-type: none"> • Strategy • Portfolio Development • Group Innovation • Sustainability & Public Affairs • Process Technology • Engineering • Information Technology & Digitalization • Group Health, Safety and Environment • Group Procurement • Central administrative functions (Accounting; Communications; Controlling; Corporate Audit; Finance & Insurance; Human Resources; Investor Relations; Law, Intellectual Property & Compliance, Taxes) • Supply Chain & Logistics EMLA, NA, APAC <p style="text-align: right;">↑ Build ↓ Run</p>
<p>Solutions & Specialties</p> <ul style="list-style-type: none"> • Engineering Plastics • Coatings & Adhesives • Tailored Urethanes • Thermoplastic Polyurethanes • Specialty Films • Elastomers 	

As of December 31, 2022, the Covestro Group comprised 60 consolidated companies in 21 countries in addition to Covestro AG, and employed 17,985 people*.

→ See note 5.1 "Scope of Consolidation and Investments" in the Notes to the Consolidated Financial Statements.

The Board of Management of Covestro AG runs the company on its own responsibility with the goal of sustainably increasing the company's enterprise value, and determines and pursues its corporate objectives. It defines the company's portfolio, allocates resources, and decides on both the financial and nonfinancial steering and reporting of the Covestro Group.

Covestro's Chief Executive Officer (CEO) is Dr. Markus Steilemann. His area of responsibility includes the corporate Strategy; Sustainability & Public Affairs; Group Innovation; Corporate Audit; Human Resources; and Communications functions.

Sucheta Govil is Covestro's Chief Commercial Officer (CCO). She is in charge of the seven business entities, including all business-related processes and areas of production, from procurement and application technology to sales. In addition, she is responsible for the three regional Supply Chain & Logistics units, which handle internal and external supply chains worldwide.

Dr. Klaus Schäfer is the company's Chief Technology Officer (CTO). He is responsible in that role for the corporate functions of Process Technology; Engineering; Group Health, Safety and Environment; and Group Procurement. He also coordinates the rollout of and compliance with global processes and standards and the rollout of initiatives in Covestro's production network. Dr. Klaus Schäfer will leave Covestro's Board of Management as of June 30, 2023, and hand the office of Chief Technology Officer (CTO) to Dr. Thorsten Dreier as of July 1, 2023.

Dr. Thomas Toepfer is Covestro's Chief Financial Officer (CFO) and additionally holds the position of Labor Director. His responsibilities comprise the corporate functions of Accounting; Controlling; Finance & Insurance; Information Technology & Digitalization; Investor Relations; Law, Intellectual Property & Compliance; Portfolio Development; and Taxes. Dr. Thomas Toepfer is also responsible for country-specific topics in the United States and China.

→ See "Composition of the Board of Management."

The Supervisory Board oversees and advises the Board of Management. The Supervisory Board has 12 members, half of whom are shareholder representatives and half employee representatives pursuant to the German Codetermination Act. Dr. Richard Pott is the Supervisory Board Chair and Petra Kronen is Vice Chair.

→ See "Declaration on Corporate Governance."

Business Model

In its core business, Covestro produces precursors for polyurethane foams and the high-performance plastic polycarbonate as well as precursors for coatings, adhesives, sealants, and specialty products, including films. Other noncore precursors in Covestro's product portfolio include chlorine and by-products like styrene.

The company's materials are used in many areas of modern life. Covestro offers its clientele innovative and sustainable solutions that enable improved performance on the one hand and help reduce carbon footprints on the other. The array of products ranges from insulation for refrigerators and entire buildings, laptop and smartphone cases, and medical technology to scratch-resistant and fast-drying vehicle coatings and film coverings for personal identification cards. Covestro therefore covers a wide variety of sectors: The company's main customers are from the automotive and transportation; construction; furniture and wood processing; and electrical, electronics, and household appliances industries. The products are also used in sectors such as sports and leisure, cosmetics and health, as well as in the chemical industry itself. In addition, materials by Covestro are used to manufacture medical equipment, safety barriers, and sneeze and splash guards used to combat and control the spread of the coronavirus pandemic.

* The number of permanent or temporary employees is stated in full-time equivalents (FTEs). Part-time employees are included on a pro-rated basis in line with their contractual working hours.

Global megatrends play a considerable role in this process: Advancing climate change, the growing global population, increasing urbanization, and new forms of transportation are changing the lives of billions of people. Consequently, the polymer industry will have to develop as well. Companies like Covestro are facing new challenges and playing a part in developing innovative solutions as a result. For this reason, Covestro fully aligns its entire production and product range – and ultimately the company itself – to the circular concept in the long term. As part of that, we intend to accelerate transformation to a climate-neutral and resource-conserving economy. The focus here is on alternative raw materials, renewable energy, innovative recycling, and joint solutions. Covestro's aim is to pave the way and support these trends with its materials. By replacing traditional materials with durable, light, environmentally compatible and cost-effective materials, Covestro makes significant contributions in areas such as lightweight construction in the automotive industry, increasing the energy efficiency of living spaces through the use of new insulating materials, promoting sustainable energy with specialty materials, and improving the shelf-life of food through better insulation along the entire refrigeration chain. Covestro is continually increasing its share of alternative raw materials in production to replace conventional materials, some of which require large amounts of raw materials from nonrenewable sources.

→ See "Circular Economy."

+ Additional information is available at: solutions.covestro.com/en/industries

Covestro monitors developments in its sales and consumer markets and orients its activities to support customers' growth. Together with customers as well as with business and scientific partners, the company works continuously to further advance products, technologies, and application solutions. Covestro's main competitors are BASF, Dow Chemical, Huntsman, Mitsubishi, Saudi Basic Industries Corporation (SABIC), and Wanhua Chemical.

+ Additional information is available at: solutions.covestro.com/en/brands

Segments

Performance Materials

The Performance Materials segment focuses on developing, producing, and reliably supplying high-performance materials such as standard polyurethanes and polycarbonates, as well as base chemicals. These include diphenylmethane diisocyanate (MDI), toluylene diisocyanate (TDI), long-chain polyols, and polycarbonate resins. Those materials are used in sectors such as the furniture and wood processing industry, the construction industry as well as the automotive and transportation industry. These materials are used in roof structures, insulation for buildings and refrigerators, mattresses, and car seats, among other applications.

Solutions & Specialties

The Solutions & Specialties segment consolidates Covestro's solutions and specialties businesses, and combines chemical products with application technology services. A fast pace of innovation is a key success factor since customer requirements change quickly. Covestro's Solutions & Specialties business comprises a variety of polymer products including polycarbonates, precursors for coatings and adhesives, MDI specialties and polyols, thermoplastic polyurethanes, specialty films, and elastomers. They are used in sectors such as the automotive and transportation industry; the electrical, electronics and household appliances industry; the construction industry; and the healthcare industry. These materials include composite resins for wind turbine rotor blades; precursors for coatings and adhesives; laptop cases; floodlights; and high-quality specialty films.

Procurement

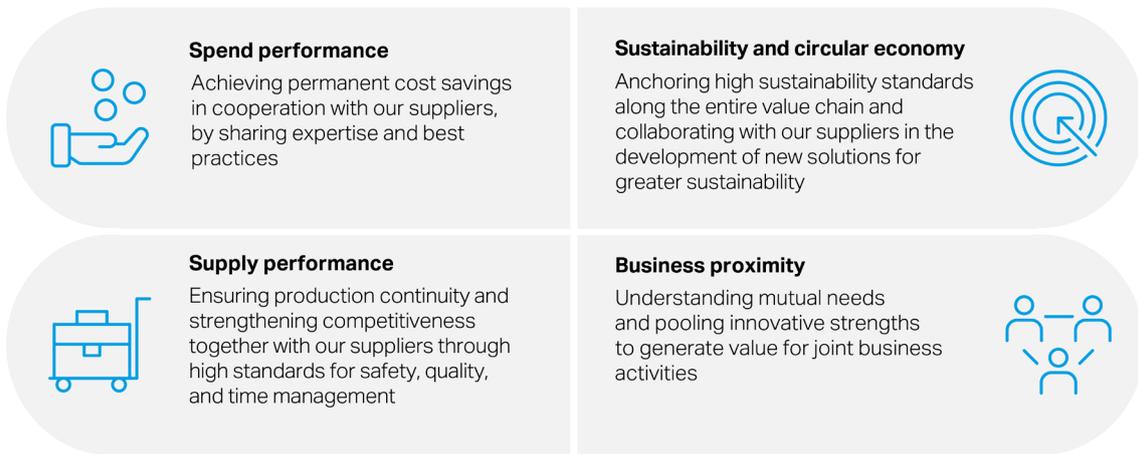
Purchasing at Covestro is handled by the corporate Group Procurement function. Group Procurement works with the business entities and regional hubs of the corporate Supply Chain & Logistics function to ensure the timely global supply of goods and services to all divisions of the company on the best possible terms and conditions. This ensures that the Group's high quality standards are met. Furthermore, Group Procurement is responsible for ensuring that Covestro's ethical and environmental principles are upheld throughout the entire procurement process. The basic tenets of our procurement policy are set forth in a directive that is binding on all employees throughout the Covestro Group.

→ See "Sustainability in the Supply Chain."

+ Additional information is available at: www.covestro.com/en/company/profile/procurement/sustainability-in-procurement/supplier-code-of-conduct

In the year 2022, Group Procurement defined details of the strategy and strategic principles (cost optimization, supply chain optimization, sustainability, circular economy, and business proximity). The objective is still to generate a competitive advantage for Covestro and make a decisive contribution to overall value. Group Procurement contributes to realizing Covestro's vision of becoming fully circular by, among other things, purchasing renewable energy and alternative raw materials.

Strategic principles in procurement



Covestro is an energy-intensive company and depends to a large extent on gas. It is predominantly used as a source of energy and as process gas in chemical reactions and there is no comprehensive short-term substitute for gas in the production processes. For this reason, in the procurement of sources of energy, Covestro, along with large parts of the chemical industry, is very majorly affected by the persistently high and volatile prices amid the Russian war against Ukraine. Given the nature of the energy markets, it will only be possible to influence this effect in future by switching to sources of energy other than gas. Group Procurement is planning to source alternative fuels, such as hydrogen, ammonia, biogas, or green methane, wherever the potential to switch to other fuels has been identified in production processes. In this way, Covestro will be able to reduce its current dependence on gas in the medium to long term. At the same time, the significant increase in energy prices in the year 2022 is increasingly driving up demand for circular solutions. We have for this reason redoubled our efforts to actively develop new long-term supply plans and signed purchase contracts for renewable energy (particularly electricity). This resulted in Procurement sourcing around 740 GWh of electricity (around 12% of total usage) from renewable sources in the year 2022.

→ See "Electricity from renewable sources."

GHG emissions in connection with the procurement of raw materials account for the majority of Covestro's Scope 3 emissions. Group Procurement therefore plays a key role in achieving any future Scope 3 reduction target. In addition, the corporate Group Procurement function promotes the digitalization of purchasing processes and systems in the interest of improving procurement efficiency and effectiveness for Covestro and its suppliers.

→ See "Sustainability in the Supply Chain."

In fiscal 2022, goods and services were procured from some 16,000 suppliers (previous year: some 13,000) in 61 countries (previous year: 66) for €14.5 billion (previous year: €11.3 billion)*. In fiscal 2022, the procurement spending of Covestro's main sites in Germany, the United States, and China accounted for 78% of Covestro's global spending. Most of this amount –81% – went to local suppliers in the individual countries.

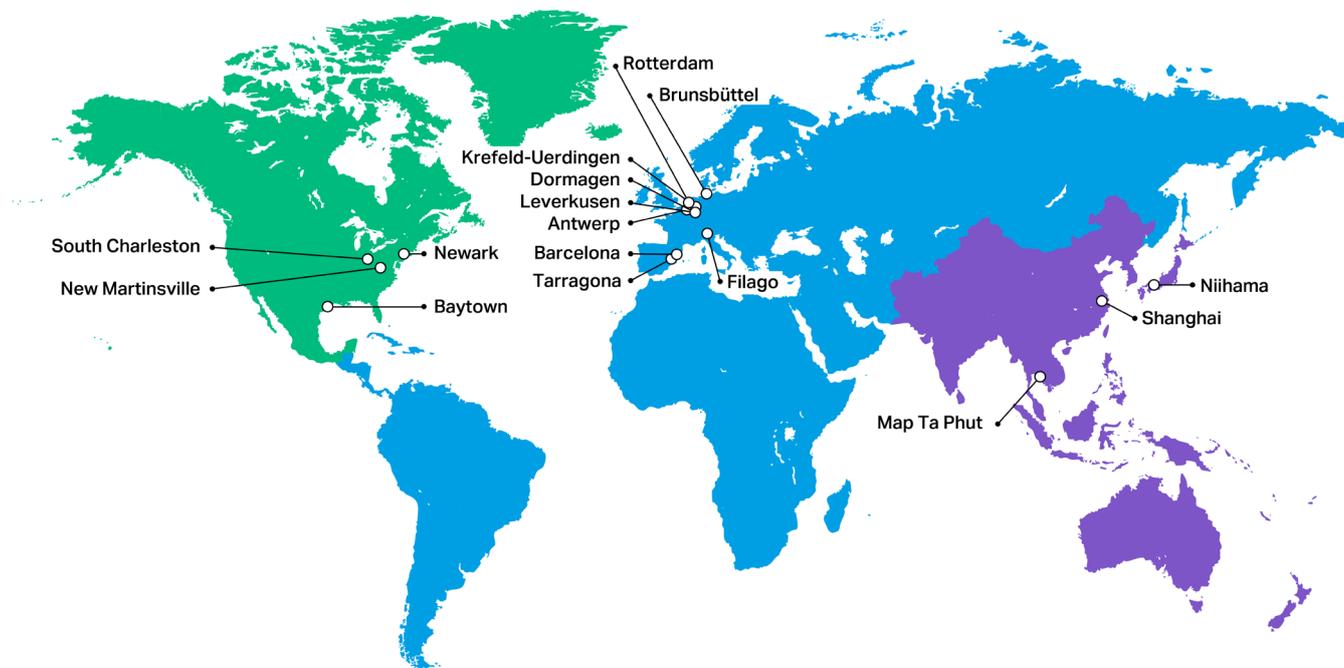
The most important raw materials for our products are petrochemical substances such as phenol, benzene, propylene/propylene oxide, toluene, and acetone – which collectively account for 40% of our purchasing value (previous year: 35%). Moreover, the operation of our production facilities requires large amounts of energy, which we primarily procure from external sources in the form of power and steam. We endeavor to procure raw materials essential for operations which are difficult for Covestro to obtain from external supply sources from within the Group or through joint ventures. To name just two examples: Covestro produces part of its chlorine in-house and procures propylene oxide through a joint venture. Operations, logistics, and investment projects require technical goods and services in addition to raw materials and energy. These activities are consolidated by the corporate Group Procurement and Supply Chain & Logistics functions. We also regularly monitor the sustainability and quality of our suppliers and ensure that they comply with internal and external standards.

* Due to the ongoing system integration of Resins & Functional Materials (RFM) acquired from Koninklijke DSM N.V., Heerlen (Netherlands), the RFM-related procurement volume was only partially included for fiscal 2021. Since fiscal 2022, RFM fully integrated.

Production Sites and R&D Sites

Covestro operates production and research and development (R&D) sites for various product groups throughout the world. The following chart shows the geographical distribution of Covestro's 50 production sites and 13 R&D sites in the EMLA, NA, and APAC regions.

Covestro's production and R&D sites



NA ¹		EMLA ²		APAC ³	
Mexico Santa Clara ● S & S	United States Baytown ● PM S & S New Martinsville ● S & S Newark ● S & S South Charleston ● S & S Augusta ● S & S Channelview ● PM East Providence ● S & S Elgin ● Frankfort ● S & S Pittsburgh ● South Deerfield ● S & S Wilmington ● S & S	Belgium Antwerp ● ● PM S & S France Fos-sur-Mer ● PM Romans-sur-Isère ● S & S Germany Brunsbüttel ● PM Dormagen ● ● PM S & S Krefeld-Uerdingen ● ● PM S & S Leverkusen ● ● S & S Bomlitz ● S & S Markt Bibart ● S & S Meppen ● S & S Italy Filago ● S & S	Netherlands Rotterdam ● PM Geleen ● ● S & S Hoek van Holland ● S & S Schoonebeek ● S & S Waalwijk ● ● S & S Zwolle ● Spain Barcelona ● S & S Tarragona ● PM Parets ● S & S Santa Margarida ● S & S United Kingdom Cheadle Hulme ● S & S	China Shanghai ● ● PM S & S Guangzhou ● S & S Kunshan ● S & S Qingdao ● S & S Shenzhen ● S & S Shunde (Foshan) ● S & S Tianjin ● S & S India Ankleshwar ● S & S Cuddalore ● S & S Greater Noida ● S & S	Japan Niihama ● PM S & S Amagasaki ● Sakai ● S & S Tsuchiura ● S & S Taiwan, Greater China Changhua ● S & S Linyuan ● PM Pingtung ● S & S Taoyuan City ● Zhangbin ● S & S Thailand Map Ta Phut ● PM S & S

SITES & FACILITIES: ○ Main production sites ● Production site ● R&D site

SEGMENTS: PM Performance Materials S & S Solutions & Specialties

¹ NA: North America region (Canada, Mexico, United States).

² EMLA: Europe, Middle East, Latin America (excluding Mexico), Africa region.

³ APAC: Asia and Pacific region.

In pursuit of our objective to supply customers reliably and efficiently, we make the Performance Materials segment's products at large-capacity production facilities in the respective regions. Additional plants in selected countries manufacture polyurethane precursors and products for the Solutions & Specialties segment. Moreover, we operate production plants in certain countries for customer-specific compounding of polycarbonate resins.

Thanks to the integration of upstream production stages (backward integration), e.g., in its own production of chlorine, Covestro has continually optimized the value chain. In addition, Covestro has put in place wide-ranging programs and initiatives to achieve and steadily improve performance in the areas of safety, costs, and plant availability.

We invest continuously in our global production network in order to maintain our production sites and their infrastructure, to optimize manufacturing processes, and to expand capacities in line with market developments. To do so, Covestro relies on advanced and environmentally friendly production processes and continually optimizes its technologies. Key growth projects in the year 2022 included the new production line for prepolymers of the Desmodur® 15 product group in Barcelona (Spain) and precursors of the Vulkollan® product group in Map Ta Phut (Thailand).

→ See "Cash Flows from Investing Activities."

Covestro primarily conducts research and development at three major centers in Germany, the United States, and China. Customer-oriented applications are generally developed in the relevant regions, while global, fundamental research and technology development are mainly conducted in Germany. Our global presence allows us to respond to regional trends and customer requirements in the best possible ways.

→ See "Innovation."

Marketing and Sales

Industry-specific marketing and sales teams are responsible for developing new business with prospective customers and expand business relationships with existing customers, as well as for continually analyzing markets and trends. Each business entity engages in sales and marketing activities for its own products through its own sales organization as well as through trading houses and local distributors. Major customers with global operations are an exception to this, as these are serviced directly by our key account managers. All activities are conducted in close cooperation between marketing, sales, and application development teams. At Covestro, marketing activities are comprehensively managed by the business entities.

In recent years, selected business entities transferred some of their sales activities to the Covestro Direct Store, our digital sales channel. In fiscal 2022, around 13,000 transactions (previous year: more than 13,000 transactions) with a total value in the mid- to upper three-digit million euro range (previous year: mid- to upper three-digit million euro range) were processed via this digital platform. Both the number of transactions and their total value were therefore almost at the prior-year level, despite the dynamic business environment. Besides selling products through the Covestro Direct Store, the company is also working on placing a selection of products on third-party digital sales platforms to align our range of offerings even more closely with our customers' needs and to give them a completely digital customer experience.

As part of our Sustainable Future strategy and the Customer Centricity concept described there, we use the Net Promoter Score (NPS) to measure customers' willingness to recommend Covestro (based on the question of how likely it is that customers would recommend the company to employees or business partners). Covestro uses the NPS score, which ranges between -100 and +100, as a measure of customer satisfaction. An NPS of +42 was measured for fiscal 2022. According to those surveyed, the main reasons for this high willingness to recommend Covestro are the company's customer service, the good business relationship, and product quality.

→ See "Group Strategy."

Our global marketing and sales activities continue to focus on progressive digitalization, the circular economy, and collaboration. We have significantly expanded the range of webinars and digital events we offer. We participate in trade fairs in hybrid form to supplement and enhance physical events with digital content. In this way, we reach out to more people and offer our customers a wider choice of ways to make contact and interact with us. The tool we use to manage hybrid trade fair participation is called Digital Event Space, a platform on which customers can, for example, prepare for their visits to physical events, make personal appointments, hold digital meetings, view the exhibition online in advance, and obtain a large range of additional information. In addition to the ability to digitalize events, we also scrutinize our marketing activities to establish to what extent they can make a contribution to sustainability. Our stand for this year's appearance at the K 2022 plastics trade

fair in Düsseldorf (Germany), was redesigned using, among other items, reusable furniture, which can be redeployed for future trade fair appearances.

In addition, we conducted marketing campaigns on a number of topics, such as the Sonnenwagen project, which involves a solar car developed by a team of students at RWTH Aachen University (Germany). Built using Covestro materials, it takes part in international races and world record attempts. The vehicle is continuously enhanced and demonstrates that the possibilities of zero-emission mobility have by no means been exhausted. The Sonnenwagen is only one example of how Covestro and its partners jointly develop advanced solutions and drive the creation of a better, more climate-friendly future. Another campaign that we have launched relates to the Circular Intelligence (CQ) label for products, a module on our path to becoming fully circular. As part of this campaign, a brand named Evocycle® CQ has been introduced for recycling programs within the company. The first initiative under this brand is the Evocycle® CQ mattress, for which chemical recycling is used to obtain recycling polyol as well as recycled toluylene diamine (TDA); these compounds are then returned to the value chain for high-quality polyurethane foam. In this initiative, we collaborate with partners at all stages of the value chain, such as taking back, recycling, and reusing materials.

→ See “Labeling of Circular Solutions in the Product Portfolio” and “Other Collaborative Projects.”

The corporate Supply Chain & Logistics function with its regional hubs in EMLA, NA, and APAC is primarily responsible for customer care and efficient order processing. Supply Chain & Logistics owns the entire process – from order acceptance to factory logistics, and from shipping planning to invoicing and complaints handling. Thanks to customer-oriented support in the individual regions, orders can be processed particularly quickly and smoothly. Covestro makes use of channels such as e-commerce platforms for order entry and processing. Our customers can place orders and check the status of their orders at any time in the Order@Covestro self-service portal. Order@Covestro is not used to initiate new business: Rather, the portal complements the services we provide to our existing customers and helps us handle routine inquiries during times outside our customer service and sales staff’s business hours. Covestro is working in all regions on a shipment tracking solution that is to give customers a transparent overview of their orders and deliveries.

Covestro operates a global production network and produces in the EMLA, NA and APAC regions, in particular for customers in the respective regions. Our products are transported to the customer by logistics service providers, which we select and evaluate based on strict safety, environmental, and quality criteria. In addition to protecting people and the environment, delivery reliability is particularly important to us. Our foremost quality goal is therefore to eliminate errors in all our processes to guarantee a high level of customer satisfaction. This is regularly determined worldwide in a global management system: We take into account customer satisfaction analyses in which we are rated as a supplier, as well as supplier assessments in which we evaluate our transport service providers on the basis of the responses from our customers. We use this data to derive corrective and preventive measures for the purpose of continually increasing quality and customer satisfaction and lowering the error rate and the incidence of complaints.

In the reporting year, we received 5.11 customer complaints per 1,000 deliveries. Complaints caused by logistical problems are included in Covestro’s assessment of the performance of the freight forwarders and are discussed in the regularly held review meetings. Overall, the year 2022 was characterized by a challenging transport environment, mainly due to the coronavirus pandemic and the Russian war against Ukraine. The preferred mode of transportation in the regions is rail or intermodal – a combination of different modes of transportation. When choosing the transport route, we pay particular attention to resource efficiency and the associated reduction in GHG emissions. Projects on drives with alternative sources of energy and the use of alternative fuels are the main focus of cooperation with our logistics partners. At the same time, we are driving further automation and digitalization of our business processes.

→ See “Sustainability in the Supply Chain.”

Strategy

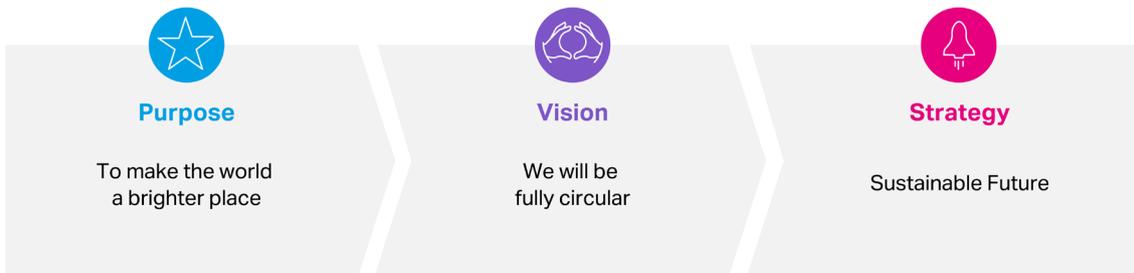
Purpose and Vision

Advancing climate change, the growing global population, increasing urbanization, and new forms of mobility are enormous global challenges. Covestro faces these challenges, thus bringing together economic success and sustainability. The goal is to realize Covestro's purpose: "to make the world a brighter place."

Our aim is to provide solutions to global challenges with our high-performance polymer materials. In pursuing it, we rely on technologies that reduce energy usage and emissions in our production processes. The products and solutions we develop are replacing traditional materials such as glass and metal, which are manufactured less sustainably or have a less sustainable life cycle. We are convinced that our long-term strategy of pursuing a circular economy will bring us closer to achieving our purpose.

Building on our purpose, the implementation of our vision of becoming fully circular forms the basis of our Group's Sustainable Future strategy. Our vision sets a clear direction for our company's future development.

Purpose, Vision, and Strategy



Our corporate values and corporate culture as embodied by our employees are major factors in putting our purpose, vision, and strategy into action.

→ See ["Corporate Values and Corporate Culture."](#)

Group Strategy

Strategic Goals and Activities

Our overarching goals derived from our purpose and our vision set the course for our Group's Sustainable Future strategy. This reflects the new influence of our vision and incorporates the changing external and internal dynamics, such as shifts in climate policy, in markets, and in digital transformation. Our Group strategy comprises three strategic chapters: We want to "Become the best of who we are," while we "Drive sustainable growth," and "Become fully circular." Our strategy is based on a solid foundation; its implementation is being enabled by the acceleration of Covestro's digital transformation and expansion of our "We Are 1" culture.

→ See ["Corporate Values and Corporate Culture."](#)

The Group's Sustainable Future strategy**"Become the Best of Who We Are"**

"Become the best of who we are" is the first strategic chapter to transform our company in the best possible way to exploit its full potential, thus creating the basis for sustainable and profitable growth. The first strategic chapter is driven by a clear understanding of our business: We deliver a broad portfolio of standard and specialty products and, at the same time, stand out with our strong innovation, research, and development capability. We want to focus even more on the factors that make our core business a success.

Our customers are our top priority in this process. We optimize processes that make our customers successful, improve workflows within our organization, and concentrate entirely on the needs of our customers. Depending on each customer's focus, we deliver high-quality standard products fast, or assist with our technical expertise in improving or developing (specialty) products.

We have launched a global transformation program to implement the first strategic chapter. This program realigns structures, processes, and control mechanisms to position our company to the best extent possible. The measures under the transformation program began in fiscal 2021 and implementation will be completed by the end of the year 2023. Our organization, workflows, and responsibilities were already restructured in the year 2021. This includes structuring our business into standard products (Performance Materials) and specialty products (Solutions & Specialties). Furthermore, the program aims to bundle central aspects of certain areas of competence, with the primary objective of profitably furthering our business with a view to sustainability and the circular economy.

Another important core element of the first strategic chapter is the Customer Centricity concept, with which we intend to focus even more on the needs of our customers. At Covestro, Customer Centricity is based on three pillars:

- **Knowing the Customer:** We need to know our customers so well that we understand exactly what added value we can provide for their business activities.
- **Thinking Customer First:** Every single function in our organization must be focused on what our customers need.
- **Co-Creating Customer Value:** We must join forces with our customers to create added value in the marketplace.

“Drive Sustainable Growth”

“Driving sustainable growth” – and therefore bringing together sustainability and economic success – is part of the second strategic chapter of our Group strategy. To ensure that our portfolio is fit for the future, we intend to invest in market segments that are attractive and sustainable for the long term. In the future, we will orient all activities that promote organic and inorganic growth, i.e., investments, acquisitions, research and development (R&D) activities, and our strategic venture capital initiative (Covestro Venture Capital, COVeC), even more strongly toward sustainability.

The most important elements for driving this development include managing and steering the product portfolio toward greater sustainability and circularity. A product sustainability assessment method is currently being developed to manage our portfolio.

→ See “Sustainable Products.”

In order to generate value with the capital invested, we are analyzing and managing our investment portfolio according to profitability and sustainability criteria. We support investment projects with a return on capital employed (ROCE) above certain thresholds that generate the lowest possible GHG emissions or even bring about a reduction.

→ See “Management” and Compensation Report, section “Long-Term Variable Compensation.”

We plan to build plants faster and more cost-effectively in future to increase the efficient use of our investment capital without sacrificing the reliability or safety of our facilities. For this reason, we continually expand our global network of partners specializing in plant construction, equipment, and services; optimize in-house processes and the use of resources; and increasingly apply a blueprint approach – i.e., we want to use completed construction projects as a template for future projects.

“Become Fully Circular”

The third strategic chapter comprises measures to allow Covestro to “become fully circular.” As part of that, we intend to accelerate transformation to a climate-neutral and resource-conserving economy. We see this orientation as an opportunity for Covestro to add solutions to global challenges – our circular products – along the entire value chain. Implementation of the third strategic chapter, and thus our vision, is driven by the Group’s structure established in fiscal 2021 and our global strategy program “Circular Economy.” This program has consolidated and driven the implementation of circular economy activities at Covestro in a comprehensive global structure since fiscal 2019. In addition to management of the implementation of activities aimed at achieving a circular economy, the program covers strategic issues such as alternative raw materials, marketing products based on these raw materials, and using recycling to develop sources for raw materials. Building on this foundation, in the reporting year, Covestro developed a program to transform the production sites to achieve climate neutrality and published sustainability targets for reducing CO₂ emissions.

→ See “Circular Economy” and “Climate Neutrality.”

We also want to drive the circular economy by developing and using innovative recycling options. In this context, we consider chemical recycling particularly promising as an effective tool for reclaiming considerable quantities of feedstocks for reuse. It is suitable primarily for materials and waste that cannot be mechanically recycled due to their properties or when the recycling process must produce like-new materials.

We are aware that shifting our production activities and our product portfolio to circular economy is a major, long-term undertaking that we cannot accomplish alone. For this reason, we will increasingly work on establishing collaborative partnerships and networks with our customers, suppliers, research institutes, and other solution providers throughout the value cycle.

→ For more information on our activities, see “Circular Economy.”

Digitalization and Corporate Culture

Our Sustainable Future strategy rests on a solid foundation, with digitalization and our “We Are 1” corporate culture as key elements. We are focused on tackling digital transformation and the associated opportunities by implementing an extensive range of measures along the entire value chain, in the corporate functions, and at all points of contact with our customers. This involves Covestro promoting the use of digital technologies and leveraging the potential of artificial intelligence. At the same time, Covestro encourages an open climate at work that spurs employees to question existing concepts and develop new approaches for our business.

The digital transformation of our business aims to generate competitive advantages for Covestro. This includes expanding our digital R&D activities and collaborations with major corporations such as Google. Insights provided by data science additionally support the corporate functions in profitably deploying algorithms and machine learning. We drive the development and implementation of our digital products and business models.

→ See “Digital Innovation.”

We have embedded our “We Are 1” culture firmly in our company to fully leverage internal potential and meet our corporate goals. The key here is our employees who bring this culture to life. We work consistently on developing our corporate culture and simplifying implementation by deriving specific measures from our four cultural dimensions.

→ See “Corporate Values and Corporate Culture.”

Segment Strategy

Performance Materials Segment Strategy

The Performance Materials segment comprises mainly polyurethanes and polycarbonates product groups. The segment’s standardized products are marketed to outside customers and also sold to the Solutions & Specialties segment at arm’s length prices. The Performance Materials segment exclusively manufactures standardized products, aiming mainly to increase efficiency through cost management as well as process innovations. There is an increasing focus on sustainable products in this regard, such as renewable toluylene diisocyanate (TDI) and climate-neutral diphenylmethane diisocyanate (MDI).

In the medium to long term, demand for polyurethanes is expected to grow sharply. This trend may benefit our company, as we manufacture the precursors for flexible and rigid foams required for the production of polyurethanes. Strategically important sectors include the construction industry and the furniture industry, where we already occupy a strong position, which we want to expand further. Global efforts to meet the United Nations Sustainable Development Goals (SDGs) are also reflected in short- and long-term demand for our products. For instance, growing calls for energy-efficient living space are expected to increase long-term demand for particularly effective insulation solutions in the construction industry.

The market for standardized polycarbonates is, however, anticipated to grow only minimally in the coming years because of a current lack of impetus for increased demand from sectors such as the construction and consumer goods industries. In the future, the majority of our polycarbonate volume will be passed on to the Solutions & Specialties segment for further processing and sale in high-growth markets, such as electromobility and 5G infrastructure.

The Performance Materials segment is home to most of our production facilities, and as such is key to implementing our circularity strategy. The focus here is on steps such as continually optimizing our production facilities, procuring alternative raw materials, and developing more sustainable product solutions, e.g., for MDI and TDI. The use of alternative raw materials enables us to produce these diisocyanates with a smaller carbon footprint, which is demonstrated and certified by way of mass balancing and the ISCC PLUS certification for end products.

Many of the products of the Performance Materials segment are further processed in the Solutions & Specialties segment or sold with additional, customer-focused services.

Intersegment transactions are conducted at arm’s length and reported separately as intersegment sales.

Solutions & Specialties Segment Strategy

The Solutions & Specialties segment covers a broad range of specialty products and customer-specific solutions in the following business entities: specialty polycarbonates (Engineering Plastics), precursors for coatings and adhesives (Coatings & Adhesives), polyurethane specialties and solutions (Tailored Urethanes), Thermoplastic Polyurethane, high-quality films (Specialty Films), and specialty elastomers (Elastomers). Covestro projects above-average growth in this area, above all in the Engineering Plastics and Specialty Films business entities.

We continually update our product portfolio to generate further growth in the Solutions & Specialties segment with a particular focus on sophisticated, sustainable solutions for which there is strong demand in promising applications. These include smart homes, medical technology, holography, and materials for electric vehicles and wind turbines.

The continual development of innovative products and applications with significant customer benefit is therefore a core element of the segment's strategy. Other crucial factors for the success of our growth strategy in this segment are the respect and appreciation of our customers for our strong technological competence, standing apart from the competition based on our global leadership in consulting on application technology and carrying out complicated projects for customers, our expertise in chemical formulations and compounding, the efficient expansion of our capacities, customer-focused product development, and the continual improvement of our customer-centric pull supply chain.

Management

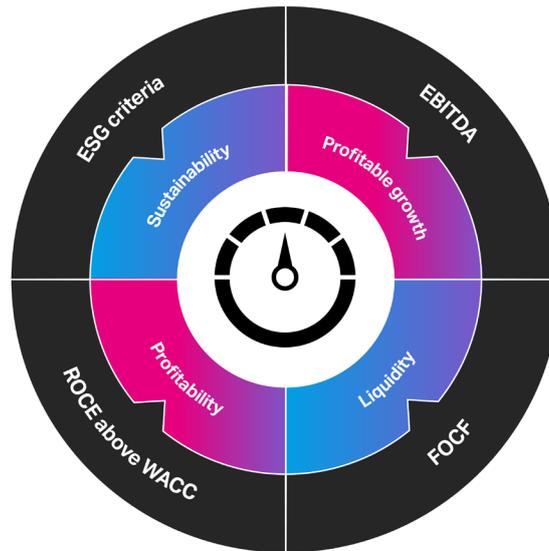
Management System

Covestro's management system is oriented toward long-term, profitable growth, continuous value creation, and sustainability. The Board of Management is the chief operating decision maker responsible for our global business and approving the planning derived from our Group strategy. In order to plan, manage, and monitor the development of our business, we use key management indicators, which enable the Group's business performance to be evaluated in a comprehensive and holistic manner, while driving its sustainable orientation. The Board of Management manages this orientation on the basis of defined sustainability goals and selected nonfinancial performance indicators.

Key Management Indicators

The Covestro Group assesses its performance using the following four elements: Profitable growth measured in terms of EBITDA (earnings before interest, taxes, depreciation and amortization), liquidity measured in terms of free operating cash flow (FOCF), profitability measured in terms of return on capital employed (ROCE) above the weighted average cost of capital (WACC), and sustainability measured in terms of selected environmental, social, and governance (ESG) criteria.

Key management indicators



These key management indicators are incorporated into Covestro's Group-wide bonus system (Covestro Profit Sharing Plan), which applies to almost all Covestro employees worldwide, including the Board of Management; any exceptions are essentially due to collective bargaining arrangements. The four areas of profitability, liquidity, profitable growth, and sustainability, each account for one quarter of the calculation formula used to measure target attainment. As a result, all employees can share in the company's success.

→ See "Overall Assessment of Business Performance and Target Attainment" and Compensation Report, section "Short-Term Variable Compensation."

EBITDA

EBITDA is used to assess profitable growth of Covestro and its reportable segments. EBITDA replaced core volume growth as a key management indicator in the reporting year. It represents EBIT plus amortization and impairment losses on intangible assets, and depreciation and impairment losses on property, plant and equipment, less impairment loss reversals.

→ See "EBIT" and "EBITDA."

FOCF

The ability to generate a cash surplus is measured by FOCF. FOCF is an indicator of the company's liquidity and ability to finance its activities. It corresponds to cash flows from operating activities less cash outflows for additions to property, plant and equipment and intangible assets. A positive FOCF allows dividends and interest to be paid and debt to be repaid.

ROCE above WACC

The ROCE above WACC key management indicator, which is used to assess profitability, measures the amount by which the return on the company's capital employed exceeds the weighted average cost of capital. If ROCE exceeds WACC, i.e., the minimum return expected by equity and debt capital providers, the company has created value. ROCE above WACC is calculated annually at the end of each fiscal year.

ROCE is calculated as the ratio of net operating profit after taxes* (NOPAT) to average capital employed. ROCE is also used as a standalone variable, in addition to ROCE above WACC, to measure Covestro's profitability.

Calculation of the Return on Capital Employed

$$\text{NOPAT} \quad / \quad \text{Avg. capital employed} \quad = \quad \text{ROCE}$$

The weighted average cost of capital (WACC) is relevant to the calculation of ROCE above WACC and reflects the expected return on the entire company's capital comprising both equity and debt. The cost of equity factors used in WACC is calculated by adding the risk-free interest rate to the risk premium for an equity investment. Covestro uses the returns on long-term German government bonds as the risk-free interest rate. We derive this risk premium from capital market information for comparable listed companies. The cost of debt factors is calculated by adding the risk-free interest rate to a risk premium on debt capital that Covestro calculates using the financing costs of comparable companies, and subtracting the tax benefit arising from the legal deductibility of interest on borrowed capital. Calculation of the cost of capital generally has a long-term perspective; short-term fluctuations are evened out. WACC is calculated at the end of the fiscal year for the subsequent fiscal year on the basis of historical capital market data.

→ See "Return on Capital Employed (ROCE) above Weighted Average Cost of Capital (WACC)."

ESG Criteria

Since the year 2022, a sustainability component, measured against selected ESG criteria, has been laid down in the management system. The sustainability component in relation to the environment is determined on the basis of direct and indirect GHG emissions (Scope 1 and Scope 2) of the main sites. Other criteria relating to social and corporate governance are also to be incorporated in the future.

→ See "Scope 1 and Scope 2 GHG Emissions."

* Since the year 2022, the imputed income taxes have been determined by multiplying the imputed tax rate of 25% (previously: effective tax rate) by the operating result (earnings before interest and taxes, EBIT).

Other Relevant Financial Performance Measures

Throughout its financial reporting, Covestro uses further indicators in addition to the key management indicators to assess the business performance of the Group; details are provided below.

EBIT

EBIT, which corresponds to income after income taxes plus financial result and income taxes, allows us to assess income without the influence of the income-dependent tax liability and/or various financing activities.

Capital Employed

Capital employed, which is relevant to the calculation of ROCE, is the interest-bearing capital required by the company for its operations. It is calculated from operating noncurrent and current assets less non-interest-bearing liabilities. Non-interest-bearing liabilities include, for example, trade accounts payable, and current provisions. The average capital employed is determined using the capital employed at the beginning and end of the relevant period.

→ See "Return on Capital Employed (ROCE) above Weighted Average Cost of Capital (WACC)."

Net Financial Debt

Net financial debt is used to assess the financial position and financing requirements. It equals the sum of all financial liabilities less cash and cash equivalents, current financial assets, and receivables from financial derivatives.

→ See "Cash Flows from Financing Activities."

Corporate Policies

We have laid down important basic principles for our actions in six policies applicable throughout the Group. The text of these guidelines is publicly available. They provide our employees with guidance, including in the areas of value creation; sustainability; innovation; employees; health, safety, environment, energy, and quality (HSEQ); and compliance. The standards outlined in these policies must be adhered to by all employees worldwide. Additional details are provided in directives. Local procedures are used to implement the directives in the country subsidiaries. Compliance with the directives and local instructions is verified using internal audits and other measures. In addition, issues and action plans as well as target attainment are monitored in a management review. Corporate policies, directives, and local procedures together make up the Group regulations.

→ [Additional information is available at: www.covestro.com/en/sustainability/service-downloads/policies-commitments](http://www.covestro.com/en/sustainability/service-downloads/policies-commitments)

[Supplementary information >](#)

Corporate Policies

Value Creation

Covestro's primary objective is to turn development activities and products into solutions that create value for customers, society, the environment, employees, and investors. We accomplish this, for instance, by manufacturing products with superior properties, environmental performance, usability, and cost effectiveness. At the same time, we aim to make the life cycle of our products as resource-efficient as possible to extract the greatest possible value from the resources used in them.

Sustainability

We want to bring economic success into alignment with environmental and societal goals. Doing business in this way conforms to Covestro's purpose to make the world a brighter place. In making decisions and taking actions, we therefore equally consider the three dimensions of sustainability – people, planet, profit – while trying to avoid a negative impact on any of them. Our corporate "Sustainability" policy underscores this intention. Special committees at Covestro are responsible for defining and managing important sustainability topics. These include the development and implementation of targets and packages of measures.

→ [See "Sustainability."](#)

Innovation

Innovation is an essential factor in mastering the challenges of a changing world, remaining competitive, and creating value for the long term – inspired by and consistent with sustainability. Accordingly, we continually develop new products, processes, applications, and technologies that offer new perspectives. It is particularly important to us that innovation be an issue of personal concern to each and every one of our employees.

→ [See "Innovation."](#)

Employees

Covestro's success is based on the outstanding skills and strong commitment of its employees. We therefore offer our employees a good and safe working environment and promote their professional and personal development. Covestro values a corporate culture that is curious, courageous, and colorful, and enables employees to successfully contribute their talents to the company. The core competencies and management skills that guide our employees' further development are also oriented to these values.

→ [See "Employees."](#)

Health, Safety, Environment, Energy, and Quality (HSEQ)

Health, safety, environment, energy, and quality are vitally important for achieving our goals. We set high standards and continually work toward improving our performance. Our integrated HSEQ management system ensures the implementation of the specifications in our HSEQ Group Regulation in orientation to or conformity with the internationally recognized standards ISO 45001, ISO 14001, ISO 50001, and ISO 9001.

→ See "Integrated Management System for Health, Safety, Environment, Energy, and Quality."

Compliance

Covestro's corporate governance is characterized by a strong sense of responsibility as well as adherence to ethical principles. This includes strict compliance with all statutory requirements and Covestro's voluntary commitments, which are anchored in our internal regulations and are applicable to all employees worldwide.

→ See "Compliance."

Corporate Commitments

As a company committed to operating sustainably, we take a clear stand on relevant issues. Like our corporate guidelines, the text of these commitments is publicly available. The minimum standards applicable to such efforts are governed by our voluntary corporate commitments. The corresponding Group regulations ensure that they are complied with. At present, Covestro has entered into voluntary commitments on the following: the UN Sustainable Development Goals, the Ten Principles of the UN Global Compact, Responsible Care™, human rights, slavery and human trafficking (UK Modern Slavery Act Statement), water, product stewardship, corporate compliance, responsible lobbying, responsible marketing and sales, tax transparency, and conflict minerals. In terms of lobbying in particular, we have laid down clear and binding rules for our engagement in the political arena. In combination with comprehensive Group regulations applicable worldwide, the voluntary commitments build on transparency and openness in the interaction with representatives of political institutions. In addition, Covestro has voluntarily joined the European transparency register in addition to publicly publishing its voluntary commitment. Covestro does not make any donations as a company to political parties, politicians, or candidates for a political office. The associations in which Covestro is a member make donations under their own responsibility and according to the respective relevant legislation, in particular taking account of laws related to donations to political parties.

+ Additional information is available at: www.covestro.com/en/sustainability/service-downloads/policies-commitments

[< Supplementary information](#)

Integrated Management System for Health, Safety, Environment, Energy, and Quality

Covestro's stated aims are to take preventive measures to protect employees, suppliers, and service providers; ensure uninterrupted operations; and continually improve quality. The Board of Management has tasked the management of the corporate Group Health, Safety and Environment (HSE) function with this responsibility directly. The integrated system implemented throughout the Group ensures that the requirements of the health, safety, environment, energy, and quality (HSEQ) directives are carried out. It is based on internationally recognized standards governing occupational health and safety (ISO 45001), the environment (ISO 14001), energy (ISO 50001), and quality (ISO 9001).

Adherence to processes and workflows is verified through regularly conducted internal audits, annual self-assessments, and external certifications. The insights we gain from these measures are incorporated into our annual management review. Every process is thus subject to ongoing monitoring and is updated as required.

Our existing HSEQ management system corresponds to the requirements of the current ISO 9001:2015, ISO 14001:2015, and ISO 45001:2018 standards. In fiscal 2022, based on these ISO standards, it was also successfully reviewed, audited, and had its certification upheld by an external certification body. Specific targets in line with the aforementioned ISO standards have been defined.

Last year's acquisition of the Resins & Functional Materials (RFM) business from Koninklijke DSM N.V., Heerlen (Netherlands), resulted in new sites being added to the Covestro Group. Covestro's regulations will be applied to the new sites gradually, since different HSEQ guidelines and standards have applied to some of these locations in the past. This process will still take some time and will run beyond the year 2023 in specific cases.

→ See "Health and Safety" and "Environmental Impact of Own Operations" for additional details on the aforementioned targets.

The corporate Group HSE function is responsible for the integrated HSEQ management system, which comprises the following three elements:

Health and Safety

In the area of occupational health and safety, globally applicable processes and workflows include detailed rules governing the safety of production facilities and manufacturing processes, the investigation of accidents and environmental as well as transportation incidents, health care and occupational safety, and emergency management at Covestro. The rules stipulated by international standards such as ISO 45001 comprise the minimum requirements applicable worldwide and are supplemented with additional regulations if needed. They are intended to prevent work-related health impacts and accidents and incidents at the workplace or on transportation routes that could have adverse consequences for people or the environment. In addition, we offer support to our customers, for example by providing training on the safe handling of our products in and outside of our facilities. We increasingly rely on the support of third-party databases to help us identify, review, and update our compliance with mandatory legal and other requirements.

→ See "Health and Safety."

Environment and Energy

Minimum environmental and energy standards applicable worldwide were specified to ensure that our high standards for resource conservation and emissions reduction are met. These requirements are based on internationally recognized standards and rules such as ISO 14001 (environmental management) and ISO 50001 (energy management). Each year we analyze and evaluate the effects of our activities on the environment. From our environmental performance assessment, we derive measures to reduce and minimize environmental impacts. Global process and workflow descriptions help us implement these measures throughout the Group. In the reporting year the energy efficiency system at the major German production sites introduced in the 2008 fiscal year was reviewed and audited by an independent certification body, and its certification to ISO 50001 upheld.

Quality

We have very high expectations of the raw material quality we use, and we set ourselves high standards for their processing into high-performance plastics and polyurethane precursors. Within the framework of our integrated HSEQ management system, our quality management activities meet the requirements of the current ISO 9001:2015 standard. Thanks to our quality management system, we can put in place the conditions necessary for incorporating our customers' requirements and their satisfaction into our products and services.

Audits and Certifications

Our binding Group regulations that serve to achieve HSEQ goals are available to all employees in the Group's in-house databases and are reviewed annually using internal audits and external certification companies. This may require the management system to be adjusted. Our business activities are covered by certified HSEQ management systems to the degree outlined below:

Certification of HSEQ management systems according to external standards¹

	2021	2022
	%	%
Certified according to various quality management standards such as ISO 9001	100	100
ISO 14001 certified/EMAS validated (environment)	95	95
ISO 45001 (formerly OHSAS 18001) certified (occupational safety)	87	87
ISO 50001 certified (energy)	48	44

¹ In % of business activity, measured according to energy usage.

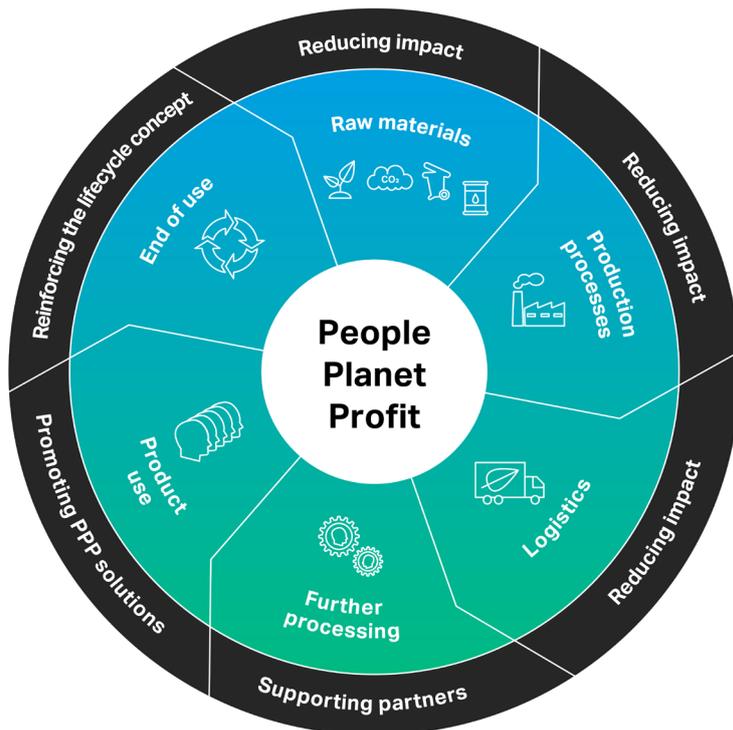
Sustainability

Covestro is fully committed to sustainability, as shown in our purpose “to make the world a brighter place.” This is underscored by our vision, “We will be fully circular,” as well as by the Group’s Sustainable Future strategy, which has “Drive Sustainable Growth” and “Become Fully Circular” as strategic chapters. We set sustainability targets as early as in fiscal 2016 and continually adapt these targets in line with our strategy and vision. We announced in the year 2022 that we would reach net-zero emissions* by the year 2035 in our own production and in the provision and use of energy produced outside the company at all environmentally relevant sites. Moreover, a sustainability component, measured against selected ESG criteria, was laid down in the management system in the reporting year.

→ See “Covestro’s Sustainability Targets” and “Management System.”

We integrate sustainability into our business activities, while at the same time ensuring that we deal with related topics and issues of greatest relevance to us and our stakeholders. In addition to our responsibility for the environment, we also want to fulfill our social responsibility within society in accordance with our purpose. This is why we strive to add value at the social, environmental, and economic levels. Our decisions and our actions take into account the three dimensions of sustainability: people, planet, and profit (PPP). This is to ensure that every decision, every action we take, and the resulting consequences are considered holistically, that is, throughout the entire value cycle.

Sustainability approach of people, planet, and profit in the value cycle



United Nations Sustainable Development Goals (SDGs)

Against the backdrop of our commitment to sustainability, the SDGs are critically important to us as a guideline for improving living conditions worldwide. The SDGs serve primarily as a source of direction and inspiration for innovation and as a guide for the future positioning of the company.

+ Additional information is available at: www.covestro.com/en/sustainability/service-downloads/policies-commitments

* Achievement of net-zero GHG emissions is defined as a balance between anthropogenic production of GHG emissions (caused by the company’s own production activities and by the provision and use of energy produced outside the company) and anthropogenic reduction of GHG emissions.

Covestro already makes positive contributions to all 17 SDGs and many sub-goals. The majority of these relate to products in our core business that, for example, help conserve large amounts of energy during their use phase or are used in other sustainable applications. Additional contributions stem from production activities, workflows, and our business practices, from our social engagement, and from solutions for underserved markets (the inclusive business segment). In addition to evaluating the positive contributions to the SDGs that Covestro is already making, we believe that any analysis of SDGs must also aim to identify potential additional requirements that Covestro could face. By this, we mean topics that, from the perspective of stakeholders, could potentially be seen as having a negative impact on individual SDGs if there was any inactivity or neglect. We are aligning our research and development (R&D) portfolio to the SDGs to increase our contributions further.

[Supplementary information >](#)

Covestro's contributions to the SDGs

		AREAS OF ACTIVITY ¹				
		R&D projects ²	Core business products	Production, workflows, business practices	Inclusive business	Social engagement
	No Poverty	●	●	●	●●	●
	Zero Hunger	●	●		●●	●
	Good Health and Well-Being	●●●	●●	●●	●	●●
	Quality Education			●	●	●●●
	Gender Equality			●●	●	●●
	Clean Water and Sanitation	●	●	●●●	●●	●●
	Affordable and Clean Energy	●●	●●●	●		●
	Decent Work and Economic Growth	●●●	●●	●●●	●	●●
	Industry, Innovation and Infrastructure	●●	●●	●●	●●	●●
	Reduced Inequalities	●		●	●	●
	Sustainable Cities and Communities	●●	●●	●	●●	●●
	Responsible Consumption and Production	●●●	●●●	●●●	●●	●
	Climate Action	●●●	●●●	●●	●	●
	Life Below Water	●		●		●
	Life on Land	●		●		
	Peace, Justice and Strong Institutions			●	●	●●
	Partnerships for the Goals	●	●●	●●	●●●	●●●

● Low ●● Medium ●●● High

Internal analysis from fiscal 2017; updated in fiscal 2022 with reference to R&D projects, core business products, production, workflows, business practices, inclusive business, and social engagement (abridged process).

¹ The impact of the contributions is comparable within individual areas of activity.

² Evaluation of R&D projects by project budget and estimated SDG contribution.

[< Supplementary information](#)

Materiality Assessment

We identify material sustainability topics to create a foundation for Covestro's worldwide sustainability efforts and define focal points for our sustainability management activities. Specific targets, measures, and management approaches for the respective material sustainability topics are specified in the detailed information of the relevant chapters of the Group Management Report.

Materiality Assessment Process

Regularly conducted materiality assessments help us to identify and prioritize the sustainability topics most important to the company. We perform both comprehensive materiality assessments every three to four years and annual reviews, an abridged process with reduced scope and effort. The most recent comprehensive materiality assessment was conducted in the fiscal year 2020. In fiscals 2021 and 2022, we reviewed all material topics and modified them as necessary in line with the latest developments. Both comprehensive and annual reviews are conducted in four steps: identify, assess, validate, implement. In the reporting year, we took account of the revised Global Reporting Initiative (GRI) Standards and from now on report "in accordance with GRI." The amendments to the GRI Standards led to stakeholder relevance, the third materiality dimension that was previously considered, being dropped from explicit consideration; it will instead be dealt with along with the remaining materiality dimensions. This did not affect the assessment of material sustainability topics.

Steps in the materiality assessment process



Identify

We complete a comprehensive analysis every three to four years to identify the material sustainability topics that could be significant for Covestro and compile an extensive list of topics from internal and external sources. At the annual review, we assess the previous year's material issues using an abridged process and adapt them or add new issues.

Assess

For both the comprehensive materiality assessment and annual reviews, an internal committee of experts assesses the material sustainability topics for their relevance to Covestro; this process takes feedback and opinions of external and internal stakeholders into account. To identify the material sustainability topics for Covestro, we apply the two dimensions of materiality: "business relevance" and "impact of Covestro's activities on the respective sustainability aspects." Rated on a scale from "not relevant" to "highly relevant," business relevance takes account not only of the possible or real financial impact of a sustainability aspect on the company, but also issues that receive a lot of attention from the Board of Management, strategic topics, or opportunities and risks. When assessing the "impact of Covestro's activities on the respective sustainability aspects," likewise rated on a scale from "not relevant" to "highly relevant," probability, scale and severity, duration and irremediability, and opportunities and risks for people and the environment are considered. Sustainability topics are considered material if they have at least medium relevance in one of the two materiality dimensions.

Validate

The internal committee of experts, which is involved in the review of the material sustainability topics, confirms the result of the materiality assessment. The material topics and their assessment are reviewed and acknowledged annually by the Chief Sustainability Officer (CSO) and the Board of Management.

Implement

The material sustainability topics are handled and managed by the topic owners from the respective expert functions according to the need for action identified. This includes a review of nonfinancial opportunities and risks as part of risk management.

→ See "Opportunities and Risks Report."

Details of the material sustainability topics and the corresponding management approaches are provided in the nonfinancial section of the Group Management Report.

→ See "Nonfinancial Group Statement."

In the reporting year, the annual review was conducted by a committee of experts consisting of employees from the corporate functions (including, but not limited to, Strategy; Portfolio Development; Investor Relations; Group Health, Safety and Environment; Sustainability & Public Affairs) and from Risk Management, as well as topic owners. This group was tasked with responsibilities including bringing in the views of stakeholders from inside and outside the company. In addition, a global network of employees whose work interfaces with the area of sustainability was surveyed on possible topics to be included for review in the materiality assessment. The feedback was taken into account by the committee of experts when it identified and evaluated the material sustainability topics.

Material Sustainability Topics in Fiscal 2022

The committee of experts confirmed the material sustainability topics identified in the previous year, also taking into account recent external developments, such as the energy crisis. Moreover, the material sustainability topics were aligned more closely with the Sustainable Future strategy.

Materiality matrix

Impact of our own activities on sustainability aspects

High			<ul style="list-style-type: none"> • Circular economy • Climate neutrality • Sustainable R&D based innovation portfolio • Sustainable product portfolio & product stewardship
Medium	<ul style="list-style-type: none"> • Air quality, water & waste • Biodiversity • Inclusive business • Sustainability in sourcing 	<ul style="list-style-type: none"> • Diversity, equity & inclusion • Human rights 	<ul style="list-style-type: none"> • Health & safety
Low	<ul style="list-style-type: none"> • Community engagement/donations 	<ul style="list-style-type: none"> • Compliance • Corporate governance • Sustainable finance 	<ul style="list-style-type: none"> • Employer attractiveness
	Low	Medium	High

Business relevance

The previous year's topics ("Recyclability & end-of-life solutions," "New business models," and "Alternative raw materials") were consolidated under the "Circular economy" topic. We devote our expertise in chemical processes to supporting the development of recycling processes for used materials for plastics production. Covestro aims to use alternative raw materials to switch the fossil raw materials we use in production to renewable. Through our activities in these areas, we develop innovative action areas for implementing our vision of becoming fully circular.

→ See ["Circular Economy" and "Innovation."](#)

The material sustainability topic of "Climate neutrality" combines the Scope 1, Scope 2, and Scope 3 "GHG emissions" and "Renewable energy," which reflect the aspects of the goal we published in the reporting year to become climate-neutral by the year 2035 in our own production (Scope 1 emissions) and in the provision and use of energy produced outside the company (Scope 2 emissions) at all environmentally relevant sites. In addition to energy efficiency measures for the manufacture of our products, renewable energy will continue to be used as part of our efforts. Innovative approaches will be required in particular for reducing our Scope 3 GHG emissions. We want to announce a reduction target for our Scope 3 GHG emissions in fiscal 2023.

→ See ["Climate Neutrality."](#)

The material sustainability topic of "Sustainable products and product stewardship" combines the previous year's topics of "Sustainable product portfolio" and "Product stewardship"; it is of particular importance for the implementation of our Sustainable Future strategy. For us, a sustainable product portfolio plays a key role in fulfilling our purpose of becoming fully circular and making our contribution to climate neutrality. To us, the safe handling of our products is the prerequisite to making our product portfolio sustainable.

→ See ["Sustainable Products and Product Stewardship."](#)

Our "Sustainable R&D-based innovation portfolio" forms the basis for a sustainable product portfolio. Since the year 2017, we have aligned innovation more closely with the SDGs as a way of driving sustainable product development. Covestro's goal is to devote 80% of its R&D costs by 2025 to projects that contribute to achieving the SDGs.

→ See ["Innovation."](#)

"Diversity, equity, and inclusion," which are elements of our "We Are 1" culture and therefore part of the foundation of our Group strategy, play an important role in the company's sustainability position. The topic's relevance to our business has increased year-on-year as a result. We therefore continue to pursue innovative solutions to topics that concern our employees.

→ See ["Promoting Diversity, Equity, and Inclusion."](#)

The business relevance of the material sustainability topic of "Health and safety" increased in the reporting year in view of our accident statistics. As a chemical company, we bear a special responsibility for the health and safety of our stakeholders. Safety is a fundamental principle of our actions. The topic, which combines the sub-topics of "Workplace health and safety" and "Process and plant safety," is an integral part of our integrated Health, Safety, Environment, Energy, and Quality (HSEQ) management system. We strive to eliminate workplace incidents and accidents and operate our plants safely to protect people and the environment.

→ See ["Health and Safety" and "Integrated Management System for Health, Safety, Environment, Energy, and Quality."](#)

For the material sustainability topic of "Human rights," we have likewise established an effective management system to contribute to respect for human rights in all the Covestro Group's activities and throughout global supply chains and value chains, and to prevent potential human rights violations. We expect the business relevance of this topic to continue to increase.

→ See ["Human Rights."](#)

Our commitment to sustainability also includes our suppliers. We promote "Sustainability in the supply chain" with social, ethical, and environmental standards for new and existing suppliers. We have set ourselves the goal of having 100% of our suppliers with regular purchasing volumes of more than €1 million comply with our sustainability requirements by the year 2025. The assessments of our suppliers in this regard are an integral part of our processes.

→ See ["Sustainability in the Supply Chain."](#)

We consolidate our activities around the sustainability topic of "Inclusive business" in a program under which we aim to meet needs in what are known as underserved markets. Although we continue to pursue the aim to have 10 million people in underserved markets benefit from our solutions by the year 2025, the topic's significance to us declined in the course of the fiscal year in relation to other material sustainability topics.

→ See ["Inclusive Business."](#)

The topic of "Air quality, water, and waste" is an integral part of our integrated HSEQ management system. Aspects associated with this topic (emissions into the air, waste, and wastewater) are integral to our management and business processes. Emissions are included in the collection of data throughout the Group and in environmental impact assessments. We strive to reduce waste streams by disposing of waste by type and implementing economically feasible recycling processes. We view water and wastewater holistically with regard to water usage and quality as well as wastewater volumes and possible plastic waste in the world's oceans.

→ See ["Environmental Impact of Own Operations"](#) and ["Integrated Management System for Health, Safety, Environment, Energy, and Quality."](#)

The material sustainability topic of "Employer attractiveness" is highly relevant to our business. Against the backdrop of growing skills shortages, we continue to drive our efforts to win qualified expert staff and retain them for the long term.

→ See ["Place to Be' Action Area."](#)

Our commitment to sustainability is also reflected in our financing activities. With our material sustainability topic of "Sustainability in finance," we firstly want to increase our attractiveness for investors interested in sustainability; secondly, financial instruments linked to sustainable performance offer attractive possibilities for obtaining sustainable capital. Already, important financial instruments are linked to the performance of relevant strategic sustainability rankings and have a direct impact on our cost of financing.

→ See ["Sustainable Finance"](#) and ["Financial Position."](#)

The material sustainability topics of "Corporate Governance" and "Compliance" form the foundation of our business practices. Both topics are embedded in our organization's processes and workflows.

→ See ["Compliance."](#)

We anticipate that the material sustainability topic of "Biodiversity" will gain in business relevance in the future. Contributing factors will be our commitment to a circular economy and environmental protection and the associated increase in the use of biobased raw materials. In connection with our alternative raw materials, we have begun to have sites certified under the ISCC PLUS system. International Sustainability and Carbon Certification (ISCC) is a recognized system for the sustainability certification of biomass and bioenergy. The standard, which covers all stages of the value chain, is recognized worldwide. It is a supply chain standard and therefore also includes requirements for producers of these alternative raw materials.

→ See ["Circular Economy."](#)

Although “Transparency and trust” was no longer explicitly considered a material sustainability topic in the fiscal year under review, internal and external stakeholder expectations were nevertheless addressed with different activities.

While we want to contribute to sustainable development through our “Social engagement and donations” activities, this topic has not been treated as a material sustainability topic since the reporting year. Our work continues, however, and we report on it on our website and through social media channels.

Sustainability Management

Covestro’s Sustainability Targets

We have already embedded sustainability-related factors in our management system in order to further drive the implementation of our Sustainable Future strategy. Since fiscal 2022, we have measured our business success partly on the basis of selected environmental criteria. In the year 2022, the direct and indirect GHG emissions, measured in terms of CO₂ equivalents, of the main sites were to this end integrated into the management system. In future, we also want to include social and governance criteria to cover all three of the environmental, social, and governance aspects. This sustainability component – one of a total of four – is relevant for the Covestro Profit Sharing Plan (Covestro PSP), our short-term variable compensation program, which as from the year 2022 applies to all Covestro employees worldwide, including the Board of Management; any exceptions are essentially due to collective bargaining arrangements.

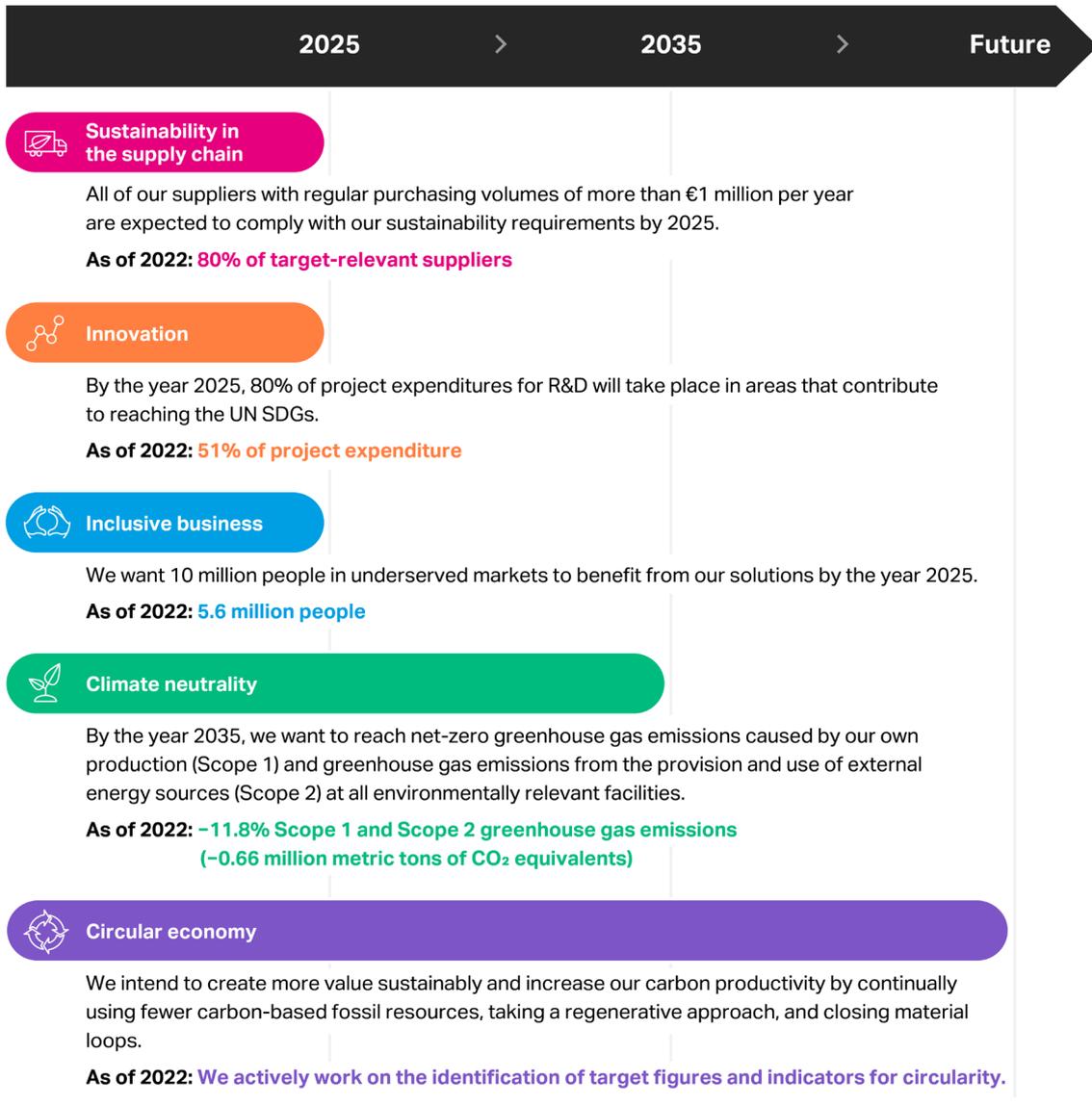
→ [See “Management System.”](#)

In addition, back in 2021, we introduced a sustainability component – one of a total of three – into Prisma, our long-term variable compensation system for the Board of Management and eligible senior management employees.

→ [See Compensation Report, section “Long-Term Variable Compensation.”](#)

The approach that we apply to our sustainability targets aims to cover the entire product life cycle, including social, environmental, and economic aspects. Our sustainability targets contribute to achieving the SDGs and reflect the aims of some of our material sustainability topics. We continually observe developments outside the company and develop our sustainability targets in line with our vision and corporate strategy. As a result, we announced our climate neutrality goal in the reporting year. We report on details of our sustainability targets and progress toward meeting them in the appropriate sections of the Group Management Report:

Covestro's sustainability targets



Apart from the above, we pursue other sustainability goals and ambitions:

- Our production processes are intended to use 100% alternative raw materials and thus contribute to our pursuit of a circular economy and to reducing our Scope 3 GHG emissions.
→ See “Circular Economy.”
- We aim to cut the specific primary energy usage by at least 50% at all environmentally relevant production sites by the year 2030. This is an important milestone of our energy efficiency measures. Meeting this target will therefore also make an important contribution to climate neutrality on our part.
→ See “Climate Neutrality.”
- By the year 2029, we want women to account for at least 40% of the workforce in all employee categories and in this way promote diversity and equity for all genders at all levels.
→ See “Employees.”
- The above ambition is underpinned further by the target for the proportion of women in the first two management levels below the Board of Management for the period through June 30, 2027. This target replaces our previous target to deploy at least 30% women in the first two management levels below the Board of Management by June 30, 2022. Due to the change in general conditions and the impact this had on the composition of our management structure, we did not meet this target, even though we increased the proportion of women in the Covestro Group by 2022.
→ See “Declaration on Corporate Governance.”

Monitoring

Sustainability is a core element of our Group strategy with an increasing impact on our business activities. Oversight of sustainability at Covestro begins with the company's highest governing body, the Supervisory Board, whose Sustainability Committee was established in the year 2021. It advises the Supervisory Board, some committees, and the Board of Management in particular on issues of sustainable corporate governance and on the company's activities relating to environmental, social, and governance criteria. Shareholders and employees are equally represented on the Sustainability Committee, with two representatives each. As of December 31, 2022, the proportion of women was 25%. The committee is chaired by Lise Kingo, a Supervisory Board member with proven expertise in the area of sustainability. As part of its function, the Sustainability Committee supports, monitors, and issues recommendations on the Board of Management's ESG strategies, targets, and initiatives, including the environmental, social, societal, ethical, and circular economy aspects of Covestro's business along the entire value chain. The Sustainability Committee helps the Audit Committee examine sustainability-related statements ahead of the audit of the Group's nonfinancial statement. Furthermore, it advises the Human Resources Committee on setting ESG targets for Board of Management compensation.

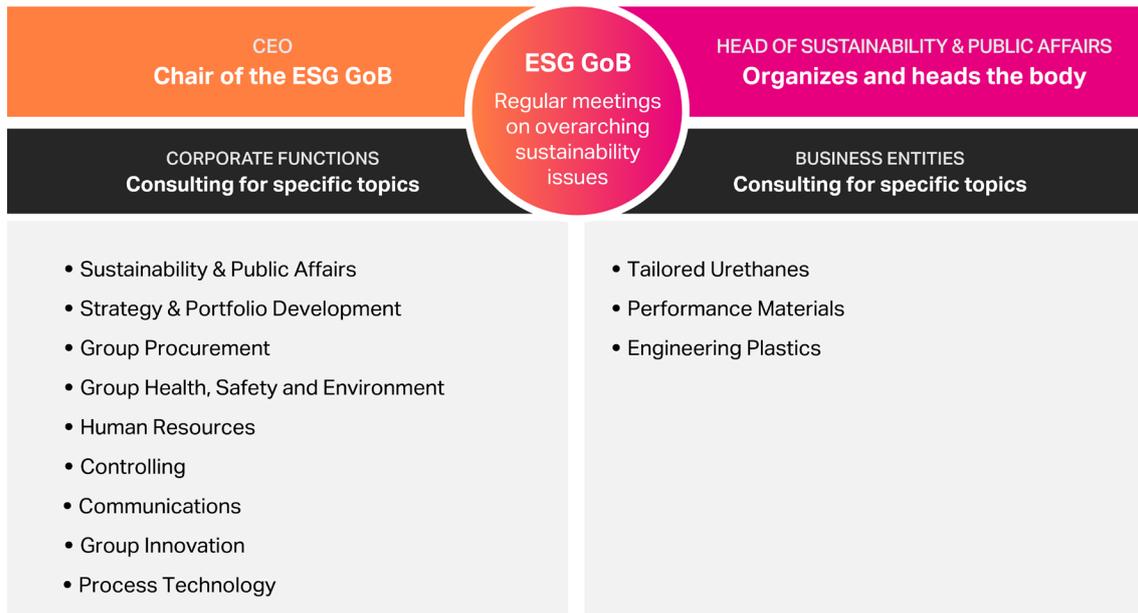
- + Additional information is available at: <https://www.covestro.com/en/company/management/supervisory-board>
- + See Capital Market, section “Report of the Supervisory Board.”

Even though responsibility for sustainability has been assigned to our CEO, this area is dealt with by the Board of Management as a whole. The management monitors progress, sets priorities, and, where necessary, adjusts the allocation of resources. The meetings of the Board of Management, which are regularly convened, addressed a number of different sustainability focus areas in the course of the fiscal year. The agenda included, for example, the targets to cut Scope 1 and Scope 2 GHG emissions announced at the beginning of 2022, progress in the drafting of reduction targets for Scope 3 GHG emissions, regulatory developments such as the EU Taxonomy Regulation, the German Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains, and the assessment of our investment portfolio according to sustainability criteria.

A central governance body for environmental, social, and governance (ESG) issues was set up in the year 2021 to ensure continual progress and the permanent integration of our sustainability-related activities into all corporate functions. The ESG Governance Body (ESG GoB) is staffed with top-level executives from the business entities and relevant corporate functions. Depending on the topic, additional internal and external guests may be invited to participate. The Chief Executive Officer (CEO) chairs the committee, and the Head of the corporate Sustainability and Public Affairs (S & PA) function is tasked with organization and management.

The committee is responsible for Group-wide sustainability issues, oversees mission-critical projects and activities related to sustainability, and possesses the corresponding decision-making powers. In addition, in-depth discussions are held throughout the Group to identify important issues and trends and to promote the implementation of sustainability-related activities in the corporate functions and business entities. The goal here is to manage sustainability issues consistently and holistically and to accelerate the implementation of the sustainability agenda. At regular meetings held in the reporting year, the issues discussed by the ESG GoB included the targets for Scope 1 and Scope 2 GHG emissions announced at the beginning of the year 2022, possible reduction targets in relation to Scope 3 GHG emissions and the circular economy, rating performance, and the strategic focus of ratings. Other topics of discussion were progress of the portfolio sustainability assessment, mass balancing, and donations in response to the humanitarian crisis in Ukraine.

Composition of the ESG Governance Body (ESG GoB)



The head of the corporate S & PA function, who also acts as Chief Sustainability Officer (CSO), reports to the CEO. As a corporate function, S & PA defines the sustainability strategy and spearheads general sustainability projects and programs in the company. In addition, S & PA coordinates Covestro's sustainability activities and supports the other corporate functions and business entities in implementing them in operations. Furthermore, it represents Covestro's interests outside the company.

The corporate function, which consists of several central departments, is responsible for circular economy, climate and energy, sustainable product portfolio management, stakeholder engagement, and social issues. The departments are supported by additional regional experts who pursue an integrated sustainability and interest agenda while taking into account regional requirements. The central departments report to the CSO.

[Supplementary information >](#)**Stakeholder Dialogue**

An open and continuous exchange with our regional, national, and global stakeholders is the foundation for mutual understanding and societal acceptance of Covestro's decisions. At the same time, these discussions provide new inspiration and important recommendations. We have a close and collaborative relationship with our stakeholders. They assess our company not only from a legal standpoint, but also according to whether we do business in a sustainable and ethical manner. In order to identify material sustainability topics, we continually analyze the interests, expectations, and needs of our major stakeholders and incorporate the results into our materiality analysis, our sustainability agenda, our human rights management system, and our opportunity and risk management activities throughout the Group.

→ See "Material Sustainability Topics in Fiscal 2022" and "Human Rights."

The following chart provides an overview of our key stakeholder groups and the relevant dialogue formats.

Covestro's transparent dialogue with important stakeholders

Stakeholder groups	Forms of dialogue
Customers	<ul style="list-style-type: none"> Regular in-person exchanges via Sales and Marketing employees Branding and market research, customer surveys Attendance at international industry trade shows Webinars and digital showrooms
Employees	<ul style="list-style-type: none"> Town hall meetings with members of the Board of Management and senior executives Ad-hoc mailings and presentations, company intranet, social media, internal campaigns Dialogue between managers and employees, regular discussions between the Board of Management and Works Council
Suppliers	<ul style="list-style-type: none"> Together for Sustainability initiative Sustainability events and workshops with suppliers Regular exchange via staff with procurement responsibilities
Associations	<ul style="list-style-type: none"> Active member in national and international associations, e.g. Association of the Chemical Industry e. V. (VCI), Plastics Europe, American Chemistry Council (ACC), and China Petroleum and Chemical Industry Federation (CPCIF)
Scientific community	<ul style="list-style-type: none"> Long-standing, collaborative relationships with leading German and international universities and public research institutions
Investors, lenders, and analysts	<ul style="list-style-type: none"> Annual General Meeting Annual report, half-yearly, and quarterly reporting Various events for investors and analysts with different focuses Online information offered on investor.covestro.com
Regulators	<ul style="list-style-type: none"> Regular exchange with government agencies, ministries, politicians
The public, neighbors, and NGOs	<ul style="list-style-type: none"> Ad-hoc dialogue, e.g., in the event of investment projects in the community Chempark neighborhood offices (Germany), community advisory panels (CAPs) (United States)
Media	<ul style="list-style-type: none"> Press releases, press conferences, background discussions, individual interviews Communication through social media channels such as LinkedIn, Twitter, Facebook, and YouTube Annual report, half-yearly, and quarterly reporting, as well as presentations and speeches from conferences and meetings (also available on our website)

Depending on the topic and its relevance, we identify and prioritize our stakeholders and select the appropriate dialogue format and frequency of contact in each case. We have a number of different channels available to facilitate our dialogue.

Our sales and procurement employees, for example, use various digital and personal channels to stay in touch with our customers and suppliers.

→ See ["Procurement" and "Marketing and Sales."](#)

In addition, site-specific functions look after the interests of local communities in the proximity of our sites. To report suspected or potential human rights violations in the supply chain, we also use our existing whistleblower tool, which consists of a worldwide hotline and an online tool.

→ See ["Human Rights" and "Compliance."](#)

Covestro has been using various digital dialogue formats (for example, for the Annual General Meeting as well as employee and customer events) to ensure that the company stays in touch with stakeholders during the ongoing coronavirus pandemic.

[< Supplementary information](#)

Sustainability in Finance

The issue of sustainability is gaining in importance for global financial markets and investors and is becoming increasingly relevant for investment decisions.

→ See ["Material Sustainability Topics in Fiscal 2022."](#)

This trend is boosted at the global level by specific legal requirements and initiatives relating to climate and environmental protection. The European Commission's Green Deal, for example, includes measures and instruments for the financial market. Since this means that sustainability is increasingly turning into a success factor for competitiveness on the capital market, our capital market communications regularly report on our strategy, goals, as well as concrete initiatives and progress in the area of sustainability.

→ See ["Stakeholder Dialogue."](#)

Sustainable Finance

We investigated innovative sustainable finance solutions at an early stage. As early as in the year 2020, we obtained a syndicated revolving credit facility. Some of the terms of this line of credit are linked to our performance in the ESG rating that is currently issued by Sustainalytics. In October 2022, we issued our first *Schuldschein* loan, whose financing costs are likewise based on the performance of an ESG rating.

We moreover extended our commitment in the reporting year by staking out a framework for sustainable finance. This Green Financing Framework enables green bonds to be issued where the funds raised are tied to sustainable investments that we can use, e.g., to (re)finance products or projects with a clear benefit for the environment. The framework's conformity to the Green Bond Principles of the International Capital Markets Association (ICMA) has been confirmed by the independent ESG rating agency ISS ESG. In November 2022, on the basis of the Green Financing Framework, we issued our first green euro bond with a total volume of €500 million on the capital markets. This step underscores our strong commitment to sustainability. All the proceeds from the bond issue are to be used to fund projects that contribute to the circular economy and originate in areas such as renewable energy, energy efficiency, and sustainable building.

→ See ["Material Sustainability Topics in Fiscal 2022" and "Financial Position."](#)

External Ratings

The recognition and assessment of our sustainability performance by rating agencies creates additional transparency and confirms that we are successfully implementing our strategic focus on sustainability. We recalibrated our rating strategy in the reporting year and now actively participate only in ratings that add significant value for our stakeholders and the company.

+ Additional information is available at: www.covestro.com/en/sustainability/what-drives-us/rating-and-indices

We took part in the following ESG ratings in the year under review: CDP Climate, EcoVadis, MSCI ESG, and Sustainalytics. Covestro was again part of the CDP Climate initiative to enhance climate protection transparency for investors and markets. As in the year 2021, the Group was awarded an "A–" rating. Since we are a member of the Together for Sustainability (TfS) initiative, our sustainability management was again assessed by the rating agency EcoVadis and given Gold status. At MSCI ESG, one of the global leading providers of sustainability analyses and ESG ratings, our rating improved to "AA," from "A" in the previous year. Covestro is one of the leading companies in the Sustainalytics ESG rating, where it was honored as an ESG Industry Top Rated Company.

Covestro was also included again in the FTSE4Good Index Series of the global index provider FTSE Russell.

Ratings by external ESG rating agencies

Rating	Rating scale	Covestro's score		Award
	A to D– (top score: A)	2022 2021	A– A–	"Leadership" status (since the year 2021)
	0–100 points (the higher the better)	2022 2019	72 80	
MSCI	AAA to CCC (top score: AAA)	2022 2021	AA A	
	0–100 points (the lower the better)	2022 2021	21.1 18.3	

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FTSE4Good

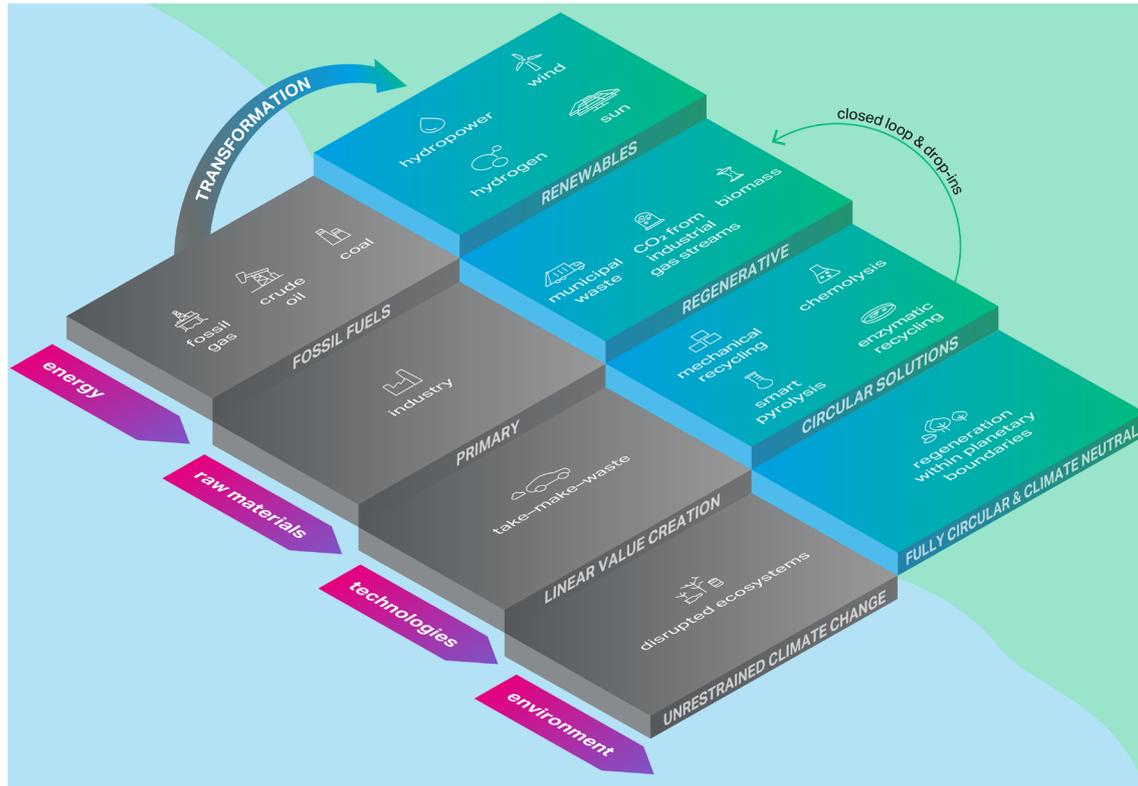
+ Additional information is available at: www.covestro.com/en/sustainability/what-drives-us/rating-and-indices

Circular Economy

Strategy, Management, and Implementation

A key component of Covestro's Group strategy is the aim to become fully circular. This helps us address the environment-related sustainability aspects of our activities in particular. This means moving away from the use of fossil-based raw materials and a holistic orientation toward regenerative production and business models in order to keep the environmental footprint of our business activities, such as the concentration of CO₂ in the atmosphere, within planetary boundaries.

Transformation to the circular economy



The aim is to return products and materials to the value cycle at the end of their life cycle – as a whole, in the form of polymers, or in molecular or other chemical forms. The use of other renewable sources of carbon and the intended full conversion to regenerative methods of production, e.g., with renewable energy, are supplementary measures Covestro will take. They are aimed at helping the company become fully circular in the future and on this basis achieve climate neutrality within the company and increasingly launch products with a more climate-friendly footprint. In the reporting year, Covestro took additional steps to meet these objectives.



OUR CIRCULAR ECONOMY GOAL



STATUS

We are actively working on identifying suitable circularity targets and indicators.

We intend to create more value sustainably and increase our carbon productivity by continually using fewer carbon-based fossil resources, taking a regenerative approach, and closing material loops. The goal is to decouple our value-generating activities from nonrenewable and noncircular raw materials such as fossil carbon.

Our global Circular Economy strategy program is our contribution to promoting and enhancing the circular economy. In fiscal 2022, a number of different initiatives were managed under this program, with a special focus on advocacy and market design, technological development, the identification of technology paths, and the development of appropriate nonfinancial indicators. New ways of cooperating in the technology and market development environments as part of research consortiums, and alliances such as the World Economic Forum (WEF) and the Alliance to End Plastic Waste, were investigated in the year 2022 and actively pursued and enhanced with different partners.

Key indicative findings and questions regarding the circular economy strategy are handled by the Group's top-level governance body on environmental, social and governance (ESG) issues.

→ See "Sustainability Management."

Measuring the Circular Economy and Trends in Relevant Indicators

Efforts toward building a circular economy in the company can be measured by verifying the degree to which we can replace fossil sources of carbon for production with alternative raw materials and create a closed loop for producing renewable inorganic compounds. We accomplish this for carbon sources by concentrating on products and processes that permit us to employ biomass, CO₂, and raw materials recycled from waste. Synthetic raw materials manufactured using green electricity, such as hydrogen, are also becoming increasingly important. In particular, Covestro can leverage procurement on the one hand and the development of our own innovative process technologies for biotechnology, and plastics recycling using chemical means on the other. We are counting on new strategic partnerships to promote recycling within the value chain to make alternative raw material use transparent and to ensure used plastics are recycled at the end of their life cycle.

→ See "Procurement."

We continued to work on identifying suitable circularity indicators in the year under review. We assessed the corresponding options in order to define appropriate nonfinancial indicators and targets for Covestro and use them to steer the company further in the direction specified by the corporate vision. The indicators considered include the proportion of alternative raw materials in production or the proportion of circular solutions in the overall product portfolio.

Recyclability and End-of-Life Solutions

Our core technical competence is the development and application of complex chemical procedures and processes. In particular, we want to use this expertise to establish innovative chemical and biochemical recycling and production processes for a circular economy. We want to establish specific processes that will allow us to focus on producing from plastic waste the raw materials that Covestro requires. The use of these recycled raw materials in our production processes will lead to products with a lower carbon footprint and increase the recycling ratio. In addition, we also want to use raw materials that were recycled in upstream stages of the value chain at Covestro. To this end, we use ISCC PLUS-certified raw materials and intermediates. On the whole, chemical recycling processes are an important tool to help Covestro in gradually replacing the use of fossil-based materials and in closing carbon loops. We therefore want to use the circular economy and our climate targets as a way to reduce the environmental footprint of our product portfolio and make it climate-neutral. These processes will continually be verified by means of a life cycle assessment (LCA), in other words, taking into account effects and contributions throughout the entire life cycle.

Covestro is currently researching recycling processes for its own products and materials in more than 20 projects. Of particular importance for Covestro are processes with which materials can be chemically or enzymatically transformed back into their molecules. The secondary raw materials obtained in this manner are of a comparable quality and have properties similar to conventionally manufactured raw materials, and can therefore be reused to manufacture products and materials.

→ See "Strategic Partnerships and Collaborations."

Covestro is already testing the thermal decomposition of chemical compounds at elevated temperatures (pyrolysis) in laboratories in Antwerp (Belgium) and Dormagen (Germany). These facilities can break down polycarbonate as well as rigid foam into high-quality molecules that can then be recycled and integrated into production processes as raw materials. Our low-temperature pyrolysis process enables us to eliminate several steps and therefore to considerably cut carbon emissions compared with conventional high-temperature pyrolysis.

Both pyrolysis and depolymerization are being investigated and enhanced as possible chemical recycling technologies for polycarbonates and rigid polyurethane foams. In depolymerization, polymers are turned back into materials such as monomers and intermediates using solvents, catalysts, and heat, and under pressure if necessary. CIRCULAR FOAM, an EU project to research circular solutions coordinated by Covestro, was launched to this end in October 2021.

→ See "Strategic Partnerships and Collaborations."

Another strategic option for Covestro is enzymatic recycling, which involves using enzymes to very selectively break down plastics into smaller fragments (monomers) at low temperatures. These monomers can then be reused to produce new, equally high-quality plastics. Enzymatic recycling is still in the early phase of development, but due its high selectivity (generating few to no by-products) and low processing temperatures, this technology is very promising. Covestro has identified this potential and, in addition to our own research, has entered into key partnerships to deploy this innovative technology in recycling and take it closer to an industrial scale.

→ See "Strategic Partnerships and Collaborations."

Furthermore, in the year 2022, Covestro made progress in the chemical recycling of flexible polyurethane foam from mattresses. After commissioning a pilot plant in Leverkusen (Germany) at the end of fiscal 2020, we continued to research detailed process parameters in the reporting year and were therefore able to confirm the laboratory results to date. This innovative technology enables us to supply high-purity recycling polyol that meets customer specifications and recycled toluylene diamine (TDA), which can in turn be processed into toluylene diisocyanate (TDI). We forge alliances along the entire value chain to close product loops on an industrial scale. The convergence of the chemical and recycling industries is aimed at creating new value cycles for the circular economy.

→ See "Strategic Partnerships and Collaborations."

Covestro also provides solutions to support the expansion of wind energy, which is a crucial technology for generating power from renewable sources and for decentralizing energy supplies. The recyclability of wind turbine rotor blades is currently one of the remaining challenges on the road to a more sustainable energy industry. We are working on developing a solution to this problem on the basis of a unique polyurethane structure.

Market Design for Alternative Raw Materials

We want to be a pioneer in the circular economy of plastics and play an active role in shaping the market transformation. A key aspect in this regard is to continuously expand our product portfolio by adding sustainable products based on the use of alternative raw materials.

In addition to Covestro's own production of recycled and biogenic raw materials, the strategic alignment of our raw material and energy procurement activities is vitally important to our corporate vision. We aim to continually increase the share of alternative raw materials used in production and reach 100% in the long term. Covestro defines alternative raw materials as all raw materials made from biomass, CO₂, or waste, or manufactured on a nonfossil basis using renewable energy.

In the fiscal year 2022, Covestro further stepped up the procurement of alternative raw materials. In total, we purchased over 55,000 metric tons of alternative raw materials (previous year: over 20,000 metric tons) for use in production activities in Antwerp (Belgium), Changhua (Taiwan, Greater China), Dormagen (Germany), Filago (Italy), Leverkusen (Germany), Krefeld-Uerdingen (Germany), Map Ta Phut (Thailand), and Shanghai (China). The goal here is to be able to offer a broad market a steadily growing portfolio of sustainably manufactured materials.

We have begun to have our production sites audited and certified to the ISCC PLUS process to reflect the certification of these raw materials for further use along the entire value chain. International Sustainability and Carbon Certification (ISCC) is a recognized system for certifying the sustainability of biomass and bioenergy. The standard, which covers all stages of the value chain, is widely used worldwide.

Labeling of Circular Solutions in the Product Portfolio

To enhance the transparency of circular solutions in the market, Covestro introduced a new product label, Circular Intelligence (CQ), in the reporting year. The purpose of the CQ label is to identify new products, for example, that have minimum alternative or recycled raw material content. The minimum threshold is 25%, although some products receive the cradle-to-gate* assessment on the path to climate neutrality. The "climate neutral" label is the result of an assessment of a segment of the product's entire life cycle based on ISO standard 14040.

In the reporting period, the business entities identified various products to be established under the CQ label.

Global and Regional Promotion and Advocacy of the Circular Economy

We also promote the circular economy by participating in regional and global initiatives. When we engage in dialogue with politicians and the public, we advocate for structuring the required regulatory environment for establishing a circular economy with room for innovation and, in addition to established recycling methods such as mechanical recycling, also recognizing chemical recycling processes as complementary methods. Another aim is to remove other regulatory hurdles to the integration of alternative raw materials and the gradual substitution of fossil-based raw materials.

As a founding member of the Alliance to End Plastic Waste, Covestro actively campaigns for regulated systems for disposing of and recycling plastic waste to stop it from entering the environment. The Alliance to End Plastic Waste is a global, nongovernmental, nonprofit organization established by companies representing the entire plastic value cycle. The Alliance supports specific, sustainable, and scalable collaborative projects that prevent plastic waste from entering the environment, collect and recycle plastic waste, and use it as a raw material. The projects focus in particular on locations and waste streams that are majorly impacted by incorrect plastic waste disposal. They comprise the creation of local infrastructure, piloting and scaling of innovative solutions, partnership development, and training, as well as local cleanup campaigns. The Alliance provides financial support to these projects and shares with them the expertise of the entire value chain of its more than 75 sponsoring members. According to data provided by the Alliance, projects supported by the Alliance channeled 33,670 metric tons of plastic waste to a new regulated waste management process and recycled

* The "climate neutral" label is the result of an assessment of a segment of the product's entire life cycle. In this case, we analyzed the period from resource extraction (cradle) to the factory gate based on ISO standard 14040. The analysis was then critically evaluated for plausibility by TÜV Rheinland AG, Cologne (Germany). The analysis takes into account biogenic carbon sequestration on the basis of provisional data from the supply chain and the use of renewable electricity in the production process. Electricity usage was allocated based on what are known as guarantee-of-origin certificates. Carbon offset credits were not used.

20,370 metric tons of plastic waste in the year 2022, while gradually increasing the relevant capacities for future years. Its members had undertaken to invest USD 1.2 billion (around €1.1 billion) in the Alliance and their own waste-related projects by the end of the year 2022; the Alliance is moreover using these activities and investments to mobilize additional private and institutional capital to promote a circular economy and reduce the amount of plastic entering the environment. The Alliance therefore entered into a new partnership with Lombard Odier Investment Managers in the year 2022 with the aim of launching an investment fund with a volume of USD 500 million (around €465 billion).

Covestro provides financial support to the Alliance and its mission through active involvement in different projects and working groups as well as through our own partnerships and internal projects accepted by the Alliance, which are aimed at gradually reducing the amount of plastic entering the environment.

Under the Low-Carbon Emitting Technologies initiative led by the World Economic Forum and the various Chief Executive Officers (CEOs) of a number of global chemical companies, Covestro is committed to finding solutions jointly with industry partners. For example, in a collaborative approach with other partners from the chemical industry, the industrial-scale use of waste streams as a raw material for the chemical industry is being investigated and research projects to facilitate plastic waste processing are in the planning.

Europe

In addition to various research & development (R&D) projects on the circular economy, Covestro participates in other circular economy projects at the sociopolitical level in Europe. Covestro is a founding member of the Circular Plastics Alliance, whose goal is for European industry to use at least 10 million metric tons of recycled plastics annually from the year 2025 onward. Recommendations for value-chain-specific action items are developed here in individual working groups. Covestro is an active member in the automotive, packaging, construction, electronics, and monitoring groups.

In Germany, Covestro is a member of organizations such as the Circular Economy initiative of the Federation of German Industry, which is working on a political framework for the transition to the circular economy. The CEO of Covestro is himself an active member of the board of this initiative.

China

In China, we were involved in circular economy topics through various associations such as the China Petroleum and Chemical Industry Federation (CPCIF), the China Plastics Reuse and Recycling Association (CPRRA), and the China Circular Economy Association (CCEA). By participating in these associations, Covestro wants to contribute to advancing the closed loop principle for plastics in China and to raising awareness among politicians and citizens of circular options along the entire value chain. As one of the world's most important producers of plastics, China is taking steps to further domestic plastic recycling and, at the same time, to prohibit or limit the use of single-use plastics.

In the reporting period, Covestro invested in its first own plant for mechanical recycling of polycarbonates at the site in Shanghai (China); the plant has a capacity of 25,000 metric tons per year. In addition, Covestro, together with the China Automotive Technology & Research Center (CATARC), worked on developing the standard for recycled plastics in automobiles and on creating the China Industrial Carbon Emission Information System (CICES).

United States

Covestro and the University of Pittsburgh, Pennsylvania (United States) have launched a new postgraduate academic program, the Covestro Circular Economy Program, in the United States. The research and innovation program teaches students wanting to engage in sustainability issues methods focused on the circular economy to manage global waste streams. The Covestro Circular Economy Program, which is located at the Mascaro Center for Sustainable Innovation and at the Swanson School of Engineering of the University of Pittsburgh, deals with the need to integrate circular design principles into innovation projects – thus closing a gap in academic teaching. The program was launched with a group of doctoral students in the year 2022.

Covestro LLC, Pittsburgh, Pennsylvania (United States), and the Mattress Recycling Council, Alexandria, Virginia (United States), have entered into a long-term research agreement to improve and expand mattress recycling in the United States. The cooperation supports Covestro's vision of becoming fully circular and promotes innovation in end-of-life processes for mattresses, and in particular for polyurethane foam.

Climate Neutrality

Strategy, Management, and Implementation

Strategy

Covestro's business activities are energy-intensive. In addition to focusing on the circular economy, our strategic alignment toward sustainability in particular therefore also comprises a consistent commitment to climate neutrality. Our long-term corporate vision of becoming fully circular can only be successful if, at the same time, total greenhouse gas (GHG) emissions are continually reduced in order to contribute to achieving a climate-neutral economy.

In accordance with the Intergovernmental Panel on Climate Change (IPCC) and the United Nations Framework Convention on Climate Change (UNFCCC), we understand and support climate neutrality as society's collective goal of attaining net zero GHG emissions by the year 2050. This means that anthropogenic emissions can be removed by the planet through its natural ability to absorb them and as a result no longer impact on the climate.

For this reason, Covestro has set itself the goal of reaching net-zero GHG emissions* by the year 2035 in its own production activities and from the provision and use of energy produced outside the company at all environmentally relevant sites, while working on solutions to reduce emissions along the value chain. In addition to reducing emissions by implementing energy efficiency measures, steps to achieve this goal include the use of sustainable production processes and climate-neutral sources of energy in the supply of electricity from renewable sources and steam.



¹ GHG emissions (Scope 1 and Scope 2), measured as millions of metric tons of CO₂ equivalents and portfolio-adjusted based on the GHG Protocol financial control approach; global warming potential (GWP) factors correspond to the IPCC's Fifth Assessment Report.

Against the political backdrop of the "Fit for 55" package currently being negotiated in the European Union and the Inflation Reduction Act passed into law in the United States in the reporting year, we are confident that the rapid creation of climate-neutral and circular business models in line with our goals can be expected and will receive the relevant support.

* Achievement of net-zero GHG emissions is defined as a balance between anthropogenic production of GHG emissions (caused by the company's own production activities and by the provision and use of energy produced outside the company) and anthropogenic reduction of GHG emissions.

Management

Covestro's climate ambition is strategically rooted in its climate program. Under this program, which is led by the corporate Sustainability & Public Affairs function, the measures for reaching net-zero emissions are formulated in the form of a CO₂ roadmap; progress is assessed and regularly reported to the Board of Management. Fiscal 2020 is used as the base year. The CO₂ roadmap was compiled in the year 2021 and approved by the Board of Management in the reporting year in order to align Covestro's existing target for reducing GHG emissions with the corporate vision and regulatory requirements. The CO₂ roadmap forms the basis for prioritizing specific GHG reduction measures and will fundamentally be used to address and analyze direct and indirect sources of emissions in accordance with the Greenhouse Gas Protocol (GHG Protocol). Measures to reduce emissions are identified in close collaboration between our sites and the relevant corporate functions.

Since the year 2022, a sustainability component, measured against selected ESG criteria, has been laid down in the management system to create incentives for meeting our climate neutrality goal. In the year 2022, the sustainability component was determined by direct and indirect GHG emissions (Scope 1 and Scope 2) of the main sites.

→ See "Management System."

Implementation

Since Covestro pursues a growth strategy, we expect Scope 1 and Scope 2 GHG emissions to increase by 1.0 million metric tons of CO₂ equivalents per year by the year 2035. This will be offset by external factors, which are anticipated to have a positive impact of 0.7 million metric tons of CO₂ equivalents per year on our climate neutrality. This includes, for example, Germany's target to reach a renewable energy share of 80% in the German power mix by the year 2030 and Germany's plans to phase out coal.

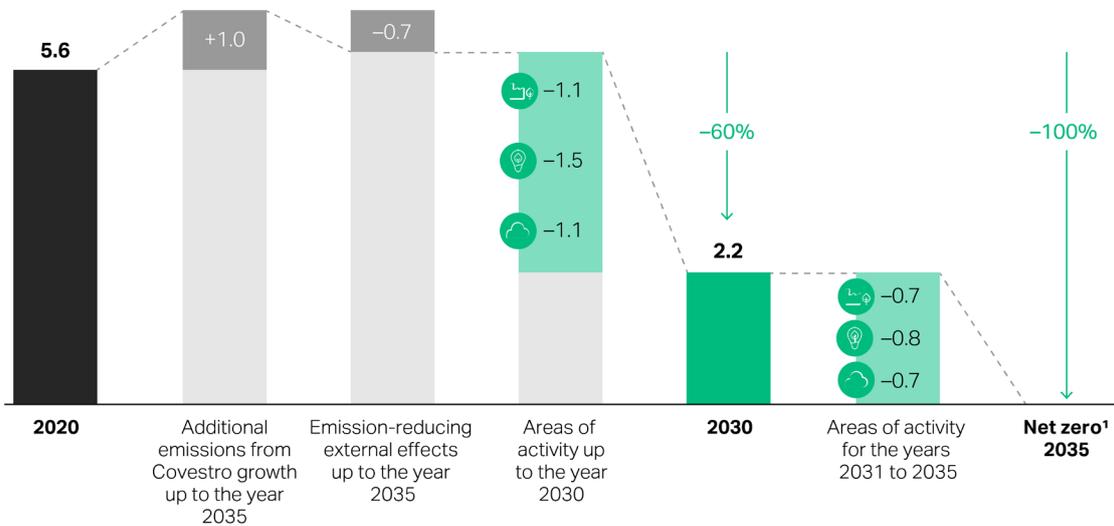
We have defined three action areas to reach our net-zero goal. We are planning to optimize our production processes to facilitate the sustainable and energy-efficient manufacture of our products. We also intend to raise significantly the proportion of electricity from renewable sources we procure and will in future make greater use of steam as a renewable source of energy. With a view to reducing the GHG emissions of purchased raw materials, measures such as transitioning to alternative raw materials are being investigated. In terms of possible residual emissions in the future, i.e., those that are technically unavoidable, the use of technical and natural CO₂ sinks, or compensatory measures to potentially balance all GHG emissions (Scope 1, Scope 2, and Scope 3) are currently being evaluated.

To enable the company to reach net-zero emissions, Covestro anticipates investments of between €250 million and €600 million by the year 2030. Greater energy efficiency is expected to cut operating expenses by €50 million to €100 million a year. Conversely, on the road to net-zero emissions, Covestro is anticipating higher annual operating costs in a low three-digit million euro amount. These cost assumptions are based on past experience that prices for fossil-based sources of energy are lower than for renewable energy. A matrix for assessing profitability of new investment projects and their effects on Scope 1 and Scope 2 GHG emissions is used to make decisions.

We are actively committed, in all regions in which Covestro operates, to driving political activities to accelerate the industrial transformation toward climate neutrality. On the basis of an analysis of the political support for transforming the chemical industry, we believe that the current political framework will not have any negative effect on reaching our reduction targets. The analysis was published in 2022 by the Low-Carbon Emitting Technologies initiative of the World Economic Forum (WEF), in which Covestro actively participates. The Russian war against Ukraine is not expected to have any impact on target attainment either.

Action areas toward reaching the net-zero goal

million metric tons of CO₂ equivalents per year; apart from the figures for the year 2020, all figures are expected values



Our areas of activity

- More sustainable manufacturing
- Renewable electricity
- Renewable steam

By the year 2030:
Capex of €250–600m; opex savings of around €50–100m p.a.

¹ Achievement of net-zero GHG emissions is defined as a balance between anthropogenic production of GHG emissions (caused by the company's own production activities and by the provision and use of energy produced outside the company) and anthropogenic reduction of GHG emissions.

Along with governments, nongovernmental organizations, and other private-sector companies, Covestro supports the implementation of the results of the 21st UN Climate Change Conference, which took place in Paris in the year 2015. For instance, Covestro participates in the German Chemical Industry Association's (Verband der Chemischen Industrie, VCI) NRW Energy4Climate and Chemistry4Climate initiatives to proactively develop solutions to master the challenges posed by climate change and bring about the industrial transformation necessary to do so.

More Sustainable Production Processes

We will continue to invest in expanding existing and building new production capacities in the future, while committing to using state-of-the-art climate-friendly technologies in accordance with our vision. At the same time, we make transparent the impact of our investment projects on our carbon footprint and also incorporate it into profitability analyses that are submitted to the Board of Management as a basis for decisions. The projects of our long-term investment planning have already been included in formulating the climate targets and the associated roadmap.

For example, we use innovative catalyst technologies in isocyanate production to reduce GHG emissions.

Alongside that, a separate capital expenditure (CapEx) category for emission reduction projects was established as part of capital allocation to ensure adequate prioritization. Proprietary Covestro software was integrated into our systems in the reporting year to allow us to predict our GHG emissions. This tool supplements our regular reporting under the GHG Protocol on Scope 1 and Scope 2 GHG emissions. In the year 2023, this function is to be expanded to include Scope 3 GHG emissions.

Electricity from Renewable Sources

In addition to more efficient energy usage in our production processes, the transition to renewable energy is an important lever on the road to climate neutrality. In the future, Covestro therefore intends to meet all of its energy needs with renewable energy. Actions we have taken toward this goal include developing new supply plans and signing purchase contracts for renewable energy, particularly electricity. Alongside existing agreements to procure electricity from renewable sources for our sites in Antwerp (Belgium) and in the German state of North Rhine-Westphalia, we entered into additional agreements worldwide in the reporting year. In fiscal 2022, Covestro purchased around 740 GWh of electricity from renewable sources, making use of special power purchase agreements and power certificates (e.g., certificates of origin in Europe) as a way to underpin our strategic alignment toward sustainability. Likewise, this is intended to contribute to shrinking the carbon footprint of production, our products, and our customers' applications.

Climate-Neutral Steam

To further drive the shift toward more sustainable sources of energy (in relation to Scope 2 emissions), we will above all apply innovative collaborative models and technologies. The signing of a joint declaration of intent with the operator of the production sites in the German state of North Rhine-Westphalia – Currenta GmbH & Co. OHG, Leverkusen (Germany) (Currenta) – in the reporting year marks the first step along this path. Currenta and Covestro want to complete a feasibility study by June 30, 2023 to investigate more closely two potential locations for installing heat pumps: the chlorine electrolysis facility, which was expanded in the year 2021, and the MDI facility at Covestro's Krefeld-Uerdingen (Germany) site. Both facilities make important precursors.

Furthermore, we are evaluating options for using biogenic and renewable sources of energy to supply process heat to our sites. These technologies can contribute substantially to reducing GHG emissions in the future, e.g., by using hydrogen and its derivatives for generating energy and as a production input in CO₂ conversion in the chemical industry.

Greenhouse Gas Emissions

Covestro calculates GHG emissions according to the internationally recognized standards of the GHG Protocol. Direct emissions, e.g., from burning fossil energy sources and from our production processes (Scope 1), as well as indirect emissions from the provision and use of energy produced outside the company (Scope 2) at all environmentally relevant sites, i.e., all production sites and relevant administrative sites with a significant impact on the environment, are included in the calculations. In addition to CO₂, Scope 1 emissions comprise all relevant GHGs, including nitrous oxide (N₂O), methane (CH₄), partly fluorinated hydrocarbons, and sulfur hexafluoride (SF₆).

Scope 2 emissions are reported using the location-based and market-based methods. Location-based emissions factors from generally accepted sources (e.g., International Energy Agency* [IEA] emissions factors) were used when calculating location-based Scope 2 GHG emissions. Market-based emissions factors were used when calculating market-based Scope 2 GHG emissions; where these were not available, location-based emissions factors were used. For Covestro, the market-based method is the leading calculation method for Scope 2 GHG emissions.

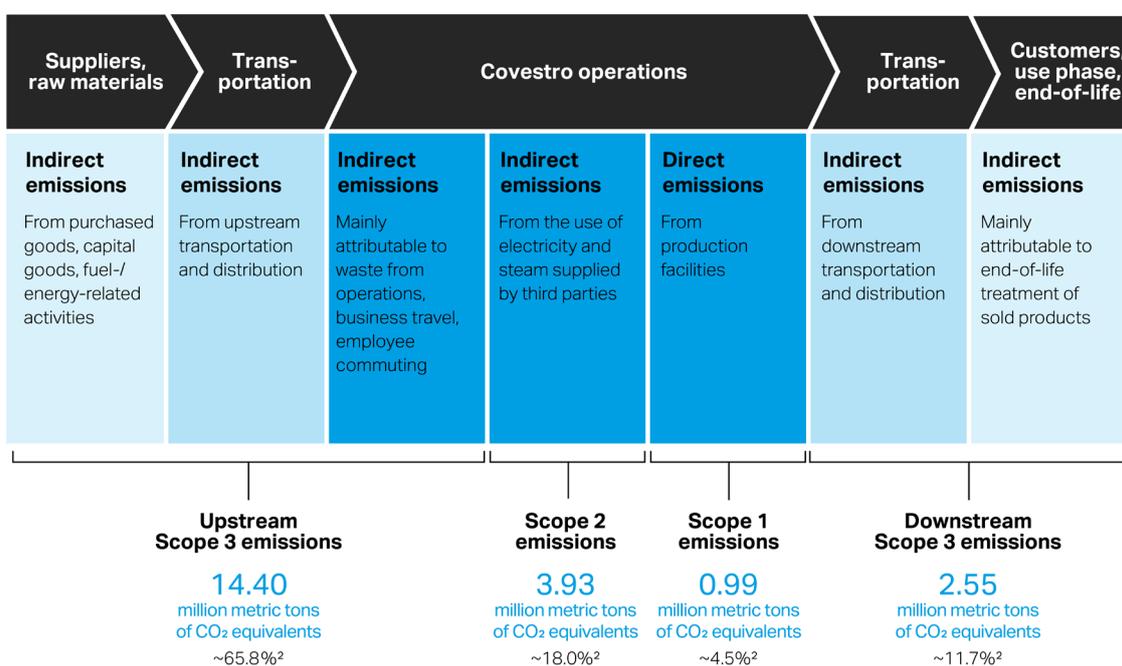
At Covestro, upstream and downstream GHG emissions data along the value chain (Scope 3 emissions) is determined for all sites and business activities that indirectly cause relevant GHG emissions according to the categories and methods of the GHG Protocol and the Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain by the World Business Council for Sustainable Development (WBCSD).

* International Energy Agency (IEA), document entitled "IEA Emission Factors 2022." All rights to this document reserved to the IEA.

Covestro has been able to reduce specific GHG emissions (Scope 1 and Scope 2) since the year 2005. In the year 2021, Covestro had already reduced its specific GHG emissions by 53.9% compared with the base year of 2005, thus outperforming the previous sustainability target of halving specific GHG emissions at its main production sites. For this reason, new absolute reduction targets were published in March 2022 for reducing our Scope 1 and Scope 2 emissions at all environmentally relevant sites. Net zero Scope 1 and Scope 2 GHG emissions are to be attained at all environmentally relevant sites by the year 2035. On the way to meeting this target, the company plans to reduce direct and indirect GHG emissions by 60% compared with the base year of 2020, to 2.2 million metric tons of CO₂ equivalents by the year 2030. In addition, indirect GHG emissions from upstream and downstream processes in the value chain (Scope 3) are to be reduced further. A Scope 3 reduction target will be published in the year 2023.

Total Scope 1, Scope 2, and Scope 3 emissions amounted to 21.87 million metric tons of CO₂ equivalents in the reporting year (previous year: 27.26 million metric tons of CO₂ equivalents).

Covestro's GHG emissions¹ along the value chain

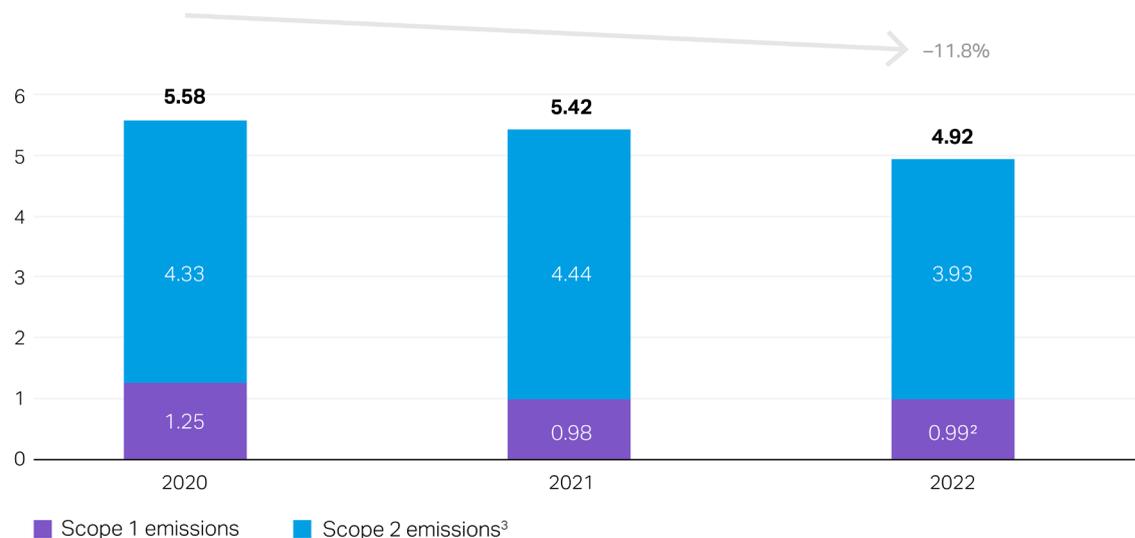


¹ Portfolio-adjusted based on the GHG Protocol; financial control approach; global warming potential (GWP) factors correspond to the IPCC's Fifth Assessment Report.

² Share of total GHG emissions (sum of Covestro's Scope 1, Scope 2, and Scope 3 emissions).

Scope 1 and Scope 2 GHG Emissions

Absolute Scope 1 and Scope 2 GHG emissions at all environmentally relevant sites declined by 9.2% compared with the previous year. Direct GHG emissions increased by 1.3% and indirect GHG emissions contracted by 11.5%. This was mainly caused by the reduction in production activity and the resulting drop in energy demand, especially for electricity and steam. The associated emissions were also affected by changes in local emissions factors and the purchase of electricity from renewable sources. For example, the Shanghai (China) site met over 30% of its electricity demand from renewable sources in the year 2022, thus reducing its Scope 2 emissions from electricity. In total, this led to decrease in the calculated GHG volumes.

Scope 1 and Scope 2 GHG emissions¹ in the Groupmillion metric tons of CO₂ equivalents

¹ Portfolio-adjusted based on the GHG Protocol; financial control approach; global warming potential (GWP) factors correspond to the IPCC's Fifth Assessment Report.

² In the year 2022, 78.6% of emissions were CO₂ emissions, 20.5% were N₂O emissions, 0.7% consisted of partly fluorinated hydrocarbons, and 0.1% each were attributable to CH₄ and SF₆.

³ In combustion processes, CO₂ typically makes up more than 99% of all GHG emissions; this is why we restrict ourselves to CO₂ when calculating indirect emissions. Location-based emissions amounted to 3.82 million metric tons of CO₂ equivalents in the year 2022 (previous year: 4.40 million metric tons of CO₂ equivalents).

In addition to absolute GHG emissions, we also continue to monitor changes in specific emissions at our main production sites*. Specific emissions are determined on the basis of direct emissions of 0.93 million metric tons of CO₂ equivalents and indirect emissions of 3.79 million metric tons of CO₂ equivalents, as well as a production volume** of 14.13 million metric tons. This means that in the year 2022 specific emissions stood at 0.3342 million metric tons of CO₂ equivalents per metric ton of product (previous year: 0.3338 metric tons of CO₂ equivalents per metric ton of product), similar to the prior-year level.

Scope 3 GHG Emissions

Upstream and downstream GHG emission data along the entire value chain (Scope 3) has been collected and reported at Covestro since the year 2021. All categories as defined in the GHG Protocol were reviewed for relevance in order to quantify all emissions associated with Covestro's business activities as completely as possible. Out of the total of 15 categories, 9 are relevant for Covestro and we report the appropriate emission values for them. The basis for calculating the other indirect GHG emissions (Scope 3) are internal activity data and emission factors from commercially and publicly available sources, or sources recommended by the GHG Protocol. The emissions for each Scope 3 category are based on individual calculations, which are described in detail in our latest Carbon Disclosure Project (CDP) questionnaire. By continually improving the data basis and calculation methods used, we will further advance the accuracy of our Scope 3 emissions reporting on an ongoing basis.

The other indirect GHG emissions (Scope 3) represent 77.5% of the Group's total GHG emissions (previous year: 80.1%).

Scope 3 emissions calculated in fiscal 2022 amounted to 16.95 million metric tons of CO₂ equivalents (previous year: 21.84 million metric tons of CO₂ equivalents). Most of our Scope 3 emissions are attributable to categories upstream in our value chain. Categories 1 "Purchased goods and services," 12 "End-of-life treatment of sold products," and 3 "Fuel- and energy-related activities" are the main contributors to our other indirect GHG

* Our main production sites are those responsible for more than 95% of our energy usage.

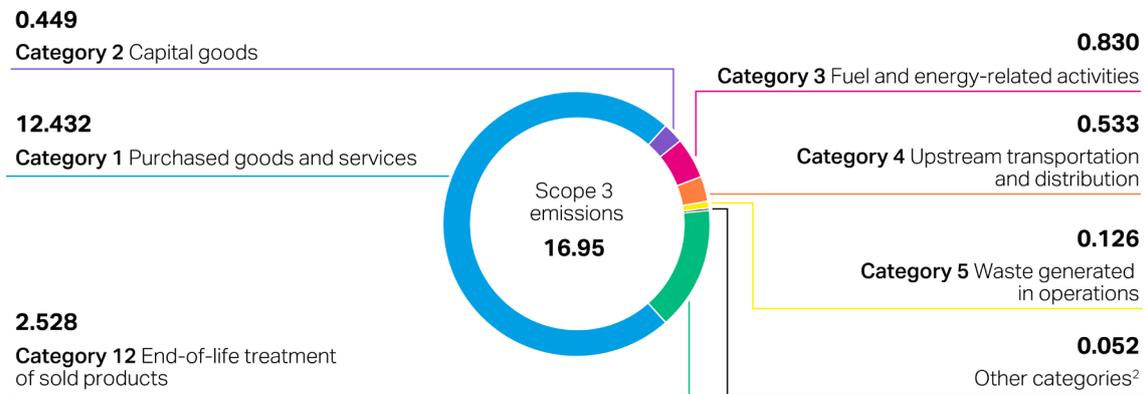
** All in-spec key products – which, in addition to our core products, also include precursors and by-products – manufactured at main production sites, which are responsible for more than 95% of our energy usage.

emissions. Biogenic CO₂ emission equivalents stemming indirectly from the value chain totaled 118,659 metric tons of CO₂ equivalents (previous year: 99,052 metric tons of CO₂ equivalents) in the reporting period in absolute terms and are disclosed separately from the total volume of Scope 3 emissions in accordance with the GHG Protocol and the WBCSD. The 20% year-over-year rise in climate-neutral balanced biogenic emissions reflects the increased use of biobased raw materials.

Compared with the previous year, total Scope 3 emissions declined by 22% in fiscal 2022. This change is primarily attributable to the lower production volume, which has a direct effect on the two largest Scope 3 categories, 1 "Purchased goods and services" and 12 "End-of-life treatment of sold products." Additional, sometimes opposing, effects were attributable to a further improvement in calculation methods, an adjustment to measures taken, and the increased use of supplier-specific emissions factors. The Scope 3 category 2, "Capital goods," rose by 31% year-over-year. In the context of the spend-based calculation method in this category, this is mainly due to the sharp increase in material prices and inflation effects.

Composition of Scope 3 emissions categories¹

million metric tons of CO₂ equivalents



¹ Portfolio-adjusted based on the financial control approach of the GHG Protocol; global warming potential (GWP) factors according to the IPCC's Fifth Assessment Report.

Nonrelevant emissions categories: 8 "Upstream leased assets"; 11 "Use of sold products"; 15 "Investments." Estimates indicate that these categories account for <1% of Covestro's total Scope 3 emissions. Their levels are therefore insignificant according to the definition in the GHG Protocol.

Nonapplicable emissions categories: 13 "Downstream leased assets"; 14 "Franchises." Covestro does not operate any plants that are leased to third parties and whose emissions are not already included in Scope 1 and Scope 2 emissions reporting. Moreover, Covestro does not own or operate any franchises.

Unreported emissions category: 10 "Processing of sold products." Since data could not always be obtained and there are numerous applications for Covestro's products, calculating these emissions would require disproportionate effort. In this case, Covestro refers to the WBCSD guidance, according to which a chemical company whose product portfolio contains a broad range of intermediates is not required to report Scope 3, category 10 "Processing of sold products."

The calculation of emissions categories 2 "Capital goods" and 1 "Purchased goods and services," in relation to the share that is not attributable to raw materials, is based on spend-based emissions factors of the Department of Energy & Climate Change (DECC) from the year 2014, which have been updated using inflation rates according to the German consumer price index.

² "Other categories" includes the following: 6 "Business travel"; 7 "Employee commuting"; 9 "Downstream transportation and distribution."

Energy Usage

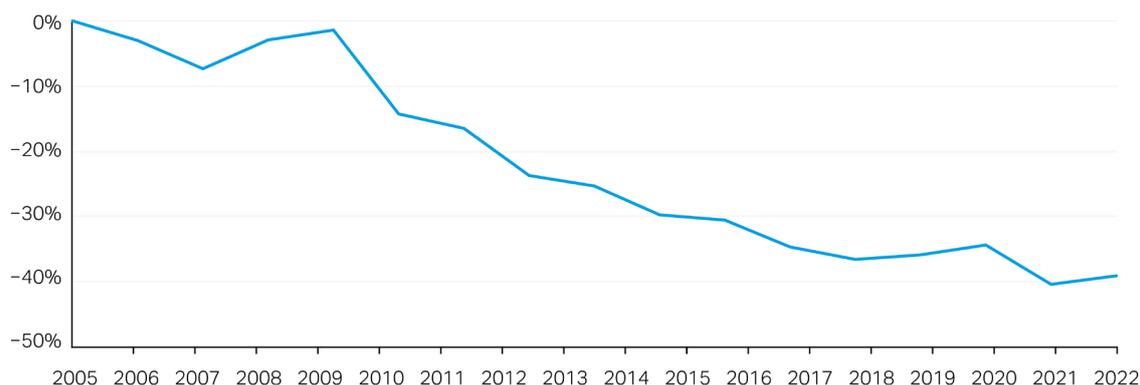
For an energy-intensive company like ours, the reduction in the amount of energy we use plays a key role in efforts to reduce our Scope 1 and Scope 2 emissions. Covestro's energy usage includes the primary energy used in production and during electricity and steam generation by the company as well as additionally acquired quantities of electricity, steam, refrigeration energy, and process heat (secondary energy). The secondary energy is calculated back to arrive at the equivalent primary energy usage required to generate them. This takes into account the energy lost while distributing these forms of energy. All told, these figures make up Covestro's equivalent primary energy consumption.

The use of energy and materials is closely related to our production volume. Unlike for GHG emissions, our target-setting process focuses in particular on the specific energy usage of the sites we define as main production sites. These are responsible for more than 95% of our total energy usage. In support of our climate neutrality goal, we want to halve specific energy usage at our production sites by the year 2030 compared with the 2005 base year and in this way make a contribution to our absolute GHG reduction target.

Our continued long-term positive trend indicates an overall 38.9% improvement in energy efficiency compared to the 2005 base year as shown in the following figure.

Changes in specific energy usage at main production sites

(annual change in specific primary energy usage per metric ton of product compared with the 2005 base year – presented in %)¹



¹ $(\text{Equivalent primary energy usage}/\text{production volume})/(\text{equivalent primary energy usage 2005}/\text{production volume 2005})$.

Compared to the previous year, equivalent primary energy usage at these sites decreased by 7.7% and the production volume by 9.6%. This means that the equivalent primary energy usage for a given production volume (energy efficiency) was up 2.3% from the previous year due to production utilization.

Energy usage in the Covestro Group at main production sites

		2021	2022
Equivalent primary energy usage ¹	Megawatt hours [MWh]	20,516,545	18,933,868
Production volume ²	Million metric tons	15.63	14.13
Specific energy usage (energy efficiency)³	MWh per metric ton	1.31	1.34

¹ Sum of all individual energies used at our main production sites (responsible for more than 95% of our energy usage), converted into primary energy; equivalent to 68,162 terajoule (TJ) in the reporting year (previous year: 73,860 TJ).

² All in-spec key products – which, in addition to our core products, also include precursors and by-products – manufactured at main production sites, which are responsible for more than 95% of our energy usage.

³ Ratio of equivalent primary energy usage to production volume.

Covestro's STRUCTese® (Structured Efficiency System for Energy) system played a key role in permanently improving our specific energy usage. The energy efficiency system developed by Covestro compares actual energy usage in production with the realistic potential optimum. Eliminating inefficiencies results in permanent energy savings. STRUCTese® includes various steps that enable the identification of improvement measures – from analysis to monitoring to benchmarking. These measures are known at Covestro as STRUCTese® projects. The system is already being used in many of our energy-intensive production facilities around the world and will be implemented in other facilities going forward.

For example, in the reporting year, we reused considerable volumes of low-pressure steam in our polyurethane production processes at the site in Baytown, Texas (United States). Primary energy usage was therefore cut by more than 64,600 MWh, which is the equivalent of reducing emissions by some 12,800 metric tons of CO₂.

Moreover, Covestro carried out various other projects in fiscal 2022, resulting in annual savings of 113,300 MWh of primary energy, or 29,900 metric tons of CO₂ emissions. In addition, pro-rated savings from projects completed in the previous year amounted to 32,300 MWh of primary energy, and 8,300 metric tons of CO₂ and were realized in fiscal 2022. Combined, all the projects implemented since the introduction of STRUCTese® have resulted in lasting reductions totaling 2.6 million MWh of primary energy and around 770,000 metric tons of CO₂ per year.

We also collect data on our total energy usage at all environmentally relevant production sites. In the year 2022, total energy usage in the Group was down 6.7% year-over-year.

Energy usage by energy type in the Group

	2021	2022
	in TJ	in TJ
Natural gas	9,059	8,885
Coal	–	–
Liquid fuels	165	186
Waste	750	32
Other energy sources ¹	(1,123)	(117)
Primary energy usage for the in-house generation of electricity and steam (net, TJ)	8,851	8,986
Electricity purchased	25,842	23,650
Less electricity sold to third parties	1,879	1,723
Electricity usage	23,963	21,927
of which renewable energies	–	2,667
Steam purchased	22,732	20,489
Less steam sold to third parties	574	529
Steam usage	22,158	19,960
Steam from waste heat (process heat) purchased	3,331	3,382
Less steam from waste heat (process heat) sold to third parties	1,856	1,484
Steam from waste heat (process heat) usage	1,475	1,898
Refrigeration energy purchased	526	400
Refrigeration energy sold to third parties	76	69
Refrigeration energy usage	450	331
Secondary energy usage (net, TJ)	48,046	44,116
Total energy usage (TJ)	56,897	53,102

¹ E.g., hydrogen.

Sustainable Products and Product Stewardship

Strategy, Management, and Implementation

A sustainable product portfolio plays a key role for us in implementing our Sustainable Future strategy. The continued expansion of such a portfolio is supported by our research- and development-based innovation portfolio. In accordance with our sustainability goals, 80% of project costs for research and development are to be allocated to areas that contribute to reaching the United Nations Sustainable Development Goals (SDGs) by the year 2025. Support will go particularly to product innovations whose contribution to the SDGs drives sustainable development, taking account of our circular and climate neutrality goals.

→ See ["Sustainable R&D-Based Innovation Portfolio."](#)

At the same time, we are revising our methodology to assess also the sustainability of our existing products, especially in relation to the circular economy and climate neutrality, and are aligning our product portfolio even more closely in this direction, while taking legal requirements into account. We also report on how and the extent to which our activities are associated with economic activities which qualify as environmentally sustainable economic activities under the European Union's Taxonomy Regulation.

→ See ["EU Taxonomy."](#)

It goes without saying that our products can only be sustainable if handling them is safe for people and the environment. For this reason, our sustainable product portfolio, too, reflects product stewardship requirements. We have an established management system for our activities in this area to ensure that our requirements and standards are met.

→ See ["Product Stewardship."](#)

While the business entities manage their product portfolios independently, the ESG Governance Body on environmental, social and governance (ESG) issues dealt with matters in the reporting year such as progress in revising the sustainability assessment methodology for our product portfolio.

→ See ["Sustainability Management."](#)

Sustainable Products

Our work is focused on aligning our product portfolio even more closely with sustainability and circular economy targets. Covestro is building a future-proof, innovative, and sustainable product portfolio using the Product Sustainability Assessment (PSA) based on the methodology developed by the World Business Council for Sustainable Development (WBCSD). This process entails identifying changes in the regulatory and market environment early on with the help of the PSA and considering these as part of the decision-making processes. The results of the PSA are to be integrated in decisions about the product portfolio and in relation to corporate governance. The findings of the pilot project on the evaluation method conducted in the year 2021 were used in the reporting year to review the method in collaboration with an external provider and, for example, to integrate more deeply aspects of the circular economy and climate neutrality. The review of the method is expected to be completed in the year 2023 and will be followed by another pilot using the updated method in the same year. The majority of our new products are already aligned with the SDGs. To drive the development of our circular product portfolio, we announced in the reporting year our long-term intention to offer all products in a climate-neutral version that pursues the principles of the circular economy. Our Circular Intelligence (CQ) solutions are based on alternative raw materials and sources of energy as well as chemical recycling; they contain at least 25% alternative or recycled raw materials.

→ See ["Strategy," "Marketing and Sales," and "Labeling of Circular Solutions in the Product Portfolio."](#)

Product Stewardship

To Covestro, product stewardship means comprehensively evaluating health, safety, and environmental risks in connection with the use and handling of our products. We want our products to be safe throughout their entire life cycle – from research to production and marketing to their intended use by customers and all the way to disposal. Product stewardship is also a focus of our human rights due diligence activities.

→ See “Human Rights.”

Monitoring the quality of our products and their suitability for particular applications is anchored in our corporate functions and segments. Safe transportation, qualification for specifically regulated applications, and marketability are centrally managed at Covestro, as is the obligation to report to the Board of Management on these matters.

The safe use and application of our products have high priority. It is very important to us to communicate product safety information transparently and comprehensively. In addition to the legally required documentation, we also provide further information and offer training in line with the Global Product Strategy of the International Council of Chemical Associations (ICCA). Furthermore, specially trained employees throughout the company work closely with suppliers, customers, industry associations, and the public. Covestro thus aims to ensure the effective communication and observance of health, safety, and environmental information along the entire supply chain.

Management of Product Stewardship

Product stewardship involves both compliance with statutory requirements and voluntary commitments. Here we also take into account the so-called precautionary principle as explained in Principle 15 of the Rio Declaration of the United Nations and communication COM(2000) 1 of the European Commission. This important means of protecting consumers and the environment within the context of general risk management may be used in special situations in which, according to an objective and comprehensive scientific evaluation, material or irreversible harm to people and the environment may occur, but the risk of this cannot be determined with sufficient certainty. In this regard, we follow the corresponding principles of the European Commission when applying the precautionary principle. These include especially the proportionality of the protective measures taken, an examination of the benefits and the disadvantages of all relevant options, as well as the review of the measures taken in light of new scientific developments. Arbitrary decisions cannot be justified by invoking the precautionary principle.

As a contribution to the safe handling and use of chemicals, risk assessments are carried out applying recognized scientific principles such as those described by the European Chemicals Agency (ECHA) in its Guidance on Information Requirements and Chemical Safety Assessment. A determination is made based on a hazard assessment and exposure estimation as to which additional information is required for the risk characterization of a product.

All product groups at Covestro undergo a multiple-step product assessment process. At first, we identify chemicals that are subject to statutory regulations and document the corresponding regulations. We then examine the risk potential of our products. During this process, we also identify substances for which only limited use or marketing are permitted based on the applicable laws and regulations. These include, for example, substances of very high concern (SVHCs) as classified in accordance with the European Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and substances covered by European regulation on GHGs. Substance compositions in all regions are checked with the help of IT systems against lists of regulated substances so that noncompliance with regulatory requirements would be identified reliably. Should the assessment or new findings reveal that it is not safe to use a certain chemical, we take the necessary risk mitigation measures. Those can range from technical measures such as protective gear and revised application recommendations to the withdrawal of support for a certain application or the substitution of a substance. In this case, an adequate replacement must be sought which can be produced in an economical and technically feasible way. Finally, we produce safety data sheets and labeling for all chemicals in up to 40 different languages, including chemicals that are not subject to any legal obligation. In this respect Covestro also exceeds the statutory requirements by making these safety data sheets publicly available.

We collect, document, and analyze all information about the safe and compliant use of our products in a global information system, which provides the basis for further improvements. This includes product surveillance and reporting on product-related and compliance incidents. Our global regulations for the Group contain rules and guidance on when and how this information is to be used. For example, this has helped us improve the information on the safe handling of our products and provide customers with specific training. Furthermore, workshops, and online training sessions for our employees contribute to solidifying the understanding and importance of product stewardship in the company.

For fiscal 2022, we know of no material incidents of noncompliance with regulations or voluntary codes – either concerning the health and safety impacts of products and services, or relating to product information and labeling.

The optimization of products and processes is a continuous task of the chemical industry and is integral to our commitments as part of the Responsible Care™ initiative. This is an initiative by the chemical industry that aims for continual improvement by companies in the areas of environment, safety, and health, regardless of the legal requirements. We also participate in the further development of scientific risk assessments through our involvement in associations and initiatives. International associations such as the European Chemical Industry Council (Cefic) and the International Council of Chemical Associations (ICCA) are working to improve the scientific assessment of chemicals and research new testing methods. Moreover, they monitor implementation of legal regulations. Covestro is actively involved in industry association activities. Furthermore, we endorse the initiatives of the World Health Organization (WHO) and the European Union (EU) to improve health and the environment, for example with the further development of human biomonitoring through an alliance with the German Chemical Industry Association (VCI) and the German Federal Ministry of the Environment.

Implementation of Regulations and Voluntary Programs Pertaining to Chemicals

Covestro adheres to the applicable regulations pertaining to chemicals, such as REACH in Europe and the Toxic Substances Control Act (TSCA) in the United States. These regulations are aimed at protecting human health and the environment from the risks posed by chemicals, and thus shape our activities as a manufacturer, importer, and user of chemicals. We have established internal regulations to adequately address the range and complexity of the relevant requirements. They guide our employees in how to fulfill regulatory requirements.

Substances registered according to REACH are assessed by regulators. This can result, for example, in additional testing requirements, new risk management measures, or inclusion in the REACH authorization or restriction procedure. A number of Covestro substances are also affected by this procedure, which restricts the use of particularly hazardous substances or can lead to their substitution or prohibition. The restriction on diisocyanates published in the Official Journal of the EU in August 2020 is one example of a restriction. In this case, labeling of diisocyanates had to be modified by February 2022, but this will not affect their availability. However, all users of products containing diisocyanates at a concentration of more than 0.1% of the residual monomer must be trained in their use by August 2023. Covestro supports this process and advocates for the practical and effective implementation of this requirement, for instance in the preparation of training materials. As part of the European chemical industry, we furthermore made a voluntary commitment to review and improve the REACH registration dossiers by the year 2026.

We ensure that substance assessments comparable to those meeting the high standards of REACH or the TSCA will also be applied at Covestro sites that are not subject to these regulations. The relevant procedure is established in the directive on "Product Stewardship" in the attachment entitled "Substance Information and its Availability." When it comes to purchased substances, we are dependent on information provided by our suppliers.

Another example of our commitment to Responsible Care™ is the worldwide support we provide for customers for safely handling large quantities of reactive products through tank-farm safety assessments.

Covestro has also committed to compliance with animal welfare policies during toxicological and ecotoxicological testing.

+ Additional information is available at: www.covestro.com/statement-on-animal-studies

We support the Global Product Strategy (GPS), a voluntary commitment by the chemical industry initiated by the ICCA. Its objective is to improve knowledge about chemical products, especially in emerging countries and countries of the Global South, and thus increase safety in the handling of these products. GPS is accessible at Covestro through the Product Safety First internet portal and is available worldwide. On this website, we inform our customers and other interest groups about safety-relevant properties and the safe handling of our products.

Substances That Are the Subject of Public Debate

Covestro is following the scientific discussion about the chemical bisphenol A (BPA), an important raw material for various plastics, e.g., polycarbonate. Critics, but also some authorities, are concerned that risks could result for people and the environment if traces of BPA are released from products.

Based on numerous scientifically valid and high-quality studies, Covestro is confident that BPA can be safely used in all areas of application supported to date. By participating in regulatory processes, Covestro works actively to dispel uncertainties and answer open questions. In addition, we continue to advocate for more objective discussions based on all of the scientific data in cooperation with the Plastics Europe association, the American Chemistry Council (ACC), and the China Petroleum and Chemical Industry Federation (CPCIF). Covestro is involved in the discussions and provides information to customers and the public on this issue through associations, on the Covestro website, and through direct contacts.

Per- and polyfluoroalkyl substances (PFAS) are a subject of public discussion due to possible undesirable effects on people and the environment. PFAS are essential chemicals in a number of mainly industrial products, including many high-tech applications, often on account of their ability to resist heat and chemicals. PFAS are a challenge for all segments of industry, including chemicals, because various regulatory initiatives intend to limit the use of PFAS.

As a user of PFAS, we monitor the regulatory debate and support proportionate, implementable, and enforceable regulations based on robust scientific results and a reliable assessment of risks. We already include in our safety data sheets in the EU any PFAS that are classified as SVHC by REACH and are contained in our products at a concentration of more than 0.1% by weight.

Innovation

For Covestro, innovation as a driver of greater sustainability in line with our corporate vision of becoming fully circular is a core element of our strategy and an integral part of our identity. Our understanding of innovation is broadly defined: We do not rely on traditional research and development (R&D) alone, but rather also on the great potential for creativity throughout the company. We encourage all employees to promote innovation at Covestro.

In order to maintain and reinforce our position in the global arena, we work at all levels in close partnership with the Chief Executive Officer (CEO), who is responsible for Innovation, to develop new products, refine established ones, and optimize manufacturing and processing procedures. Likewise, application areas, business models, and business processes are subject to ongoing review.

Covestro has split innovation activities into three core areas. For one, we conduct business-related R&D in the business entities, focusing on specific, short- and medium-term R&D issues. For the second area, the corporate Group Innovation function mainly deals with medium- and long-term sustainability, circular economy, and digital transformation issues. Issues of strategic importance, such as chemical recycling or applications of alternative raw materials for our product portfolio, are promoted on what we refer to as innovation platforms. Group Innovation is also responsible for providing a globally harmonized R&D infrastructure as well as providing the business entities with support for research and development. In addition, the corporate Process Technology function is responsible for short-, medium-, and long-term developments. It acts firstly by improving existing production processes with R&D projects that have a short or medium-term focus and secondly by promoting process developments related to sustainability, the circular economy, and digitalization, many of which are medium- to long-term in nature. Group-wide steering committees chaired by the CEO network and coordinate the three innovation areas. To ensure that innovation is coordinated with sustainability and digitalization issues, the head of the corporate Group Innovation function is a member of the relevant cross-functional steering committees, such as the ESG Governance Body (ESG GoB).

→ See ["Product Innovations"](#) and ["Process Technology Innovations."](#)

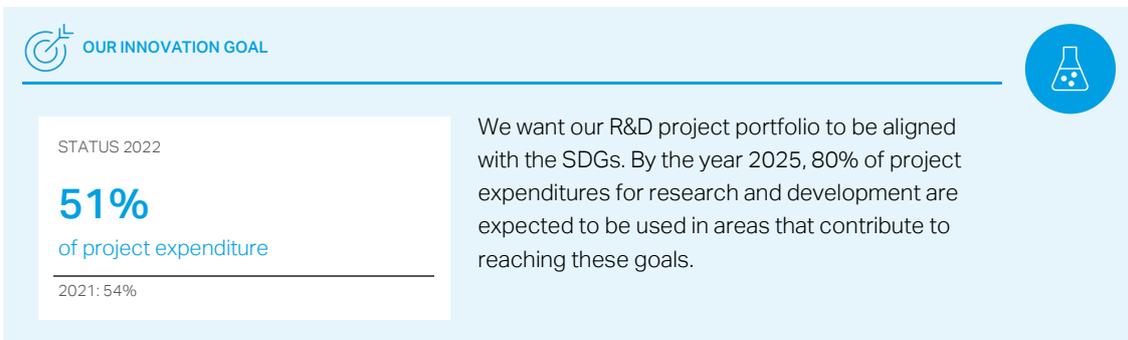
Innovation Management

By managing innovation across functions throughout the Group, we ensure that our ongoing and planned activities and our project pipeline always satisfy the needs of our user and consumer industries. Covestro uses a wide variety of tools to achieve this: For example, we use a standardized method to assess every R&D project and incorporate the resulting findings into ongoing and future projects. The global, digital platform "idea.lounge" is available for discussing and working on new, creative ideas from all parts of the company. Apart from that platform, an additional digital platform called "Covestro Ideenmanagement" (Idea Management) is available to employees in Germany and is used to manage all suggestions for improvement throughout the company. For example, at Innovation Celebrations (innovation events held in the regions), we recognize employee projects from around the world that reflect our broad understanding of innovation. The awards serve to recognize innovative ideas in the "Products and Applications," "Process and Manufacturing," "Business Model and Commercial," "Business Processes," and "Intellectual Property Strategy" categories. Furthermore, innovation management covers the systematic establishment and control of local and global alliances for acquiring skills that are strategically relevant and complementary to Covestro.

→ See ["Strategic Partnerships and Collaborations."](#)

Sustainable R&D-Based Innovation Portfolio

Covestro already has many different sustainable solutions on the market and, going forward, aims to develop and market products even more closely aligned with the United Nations Sustainable Development Goals (SDGs). Attaining this goal means continually changing over our product range to sustainable solutions. For instance, in R&D we have already begun our pursuit of a much more sustainable project portfolio. This focus enables us to identify, research, and test unconventional and unique approaches early on, thus contributing to meeting the SDGs with our R&D products and technologies.



We set high standards for evaluating our projects in line with our ambitious goal of committing 80% of R&D project expenditure to areas that contribute to meeting the SDGs and therefore only consider projects that make an additional contribution to the SDGs when measuring our progress. Since fiscal 2020, we have incorporated a Group-wide assessment process into the existing innovation process that measures our progress on projects to quantify this additional contribution. This involves subjecting all R&D projects to an assessment based on internal interviews with experts in which we ask specific questions to evaluate the impact of a project and its results on all 17 SDGs. Only projects adding specifically measurable value to the SDGs over and above that of solutions currently on the market are included. This assessment matrix was again applied to Covestro's R&D portfolio in the reporting year 2022. In this portfolio, 51% and therefore €39 million (previous year: 54% and €40 million) of R&D project expenditure now exceeds our defined threshold. A change in the project portfolio can be identified since more projects can be attributed to the indicator, although the costs they generated in fiscal 2022 were lower than in the previous year. Many of the R&D projects of the Resins & Functional Materials (RFM) business acquired from Koninklijke DSM N.V., Heerlen (Netherlands), in the year 2021 were already evaluated in accordance with the above assessment process in fiscal 2022. It was, however, not possible to capture the RFM-specific R&D project costs in the system for the full reporting year 2022, with the result that these projects were not yet included in determining target attainment for the reporting year.

In fiscal 2022, our total R&D expenditure amounted to €361 million (previous year: €341 million). This mainly went toward developing new application solutions for our products and refining products and process technologies. As of December 31, 2022, 1,477 employees* worked in research and development around the world (previous year: 1,477), most of them at the three major R&D sites in Leverkusen (Germany), Pittsburgh, Pennsylvania (United States), and Shanghai (China).

Strategic Partnerships and Collaborations

Research and Teaching

Covestro wants to increase the efficiency of its research with in-house activities and strategic collaboration with industrial and scientific partners. Alliances and collaboration in large, publicly funded consortia characterize our partnerships with research facilities and universities as well as with companies along the value chain.

* The number of permanent or temporary employees is stated in full-time equivalents (FTEs). Part-time employees are included on a pro-rated basis in line with their contractual working hours. The figures do not include employees in vocational training.

Covestro maintains long-standing and strategic partnerships with various universities. These include RWTH Aachen University (Germany), Tongji University in Shanghai (China), or the University of Pittsburgh, Pennsylvania (United States). On our path to becoming fully circular, we need cooperation partners that pursue this goal in terms of content and technology. RWTH Aachen University, for example, is above all known for its work in chemical process development. This benefits especially our collaboration in the CAT Catalytic Center, a cooperative research organization that allows us to combine catalysis and process research and use it as a basis to develop new chemical processes that can be implemented on an industrial scale. Our cooperation with Tongji University involves in particular materials for sustainable building and city planning. At the University of Pittsburgh, Covestro's involvement in the Covestro Circular Economy Program is in turn centered on (further) training on the circular economy. In addition, we are expanding our expertise in the chemical recycling of polymers. To this end, we cooperate with the Shanghai Institute for Organic Chemistry (SIOC) of the Chinese Academy of Sciences in Shanghai (China) and Tohoku University in Tokyo (Japan).

The QuinCAT – Quick Incubation in Catalysis incubator, which is subsidized by the German state of North Rhine-Westphalia and supported by Covestro, is under construction at RWTH Aachen University; it is expected to begin operating in the year 2023. The incubator will be a place for developing ideas involving chemicals to enable the founding of a start-up company as a second step. Covestro provides consulting on this process, and will be represented by our CEO on the steering committee when it convenes.

To establish the circular economy in the plastics industry, various recycling technologies have to be developed in parallel to make better processes available. Here, Covestro cooperates with RWTH Aachen University in the area of enzyme and biotechnology, focusing on three topics. The first is to develop enzymatic polymer recycling to convert plastics into usable monomers at the end of the lifecycle without effort or side effects. The second is to achieve a manageable breakdown of plastics released into the environment so that they decompose fully in a natural environment (programmed biodegradation). The third topic involves enzymatic methods for processing wastewater from plastics production to allow materials to be recovered and returned to the production cycle. For the next five years, the partnership will be subsidized by the German Federal Ministry of Education and Research.

Other Collaborative Projects

As part of the collaborative PUReSmart project, Covestro has developed an innovative process for chemical recycling of flexible polyurethane foam from used mattresses. This new technology can be used to make both recycling polyol, which allows reuse at the customer, and recycled toluylene diamine (TDA), which can in turn be processed into toluylene diisocyanate (TDI). Both materials are used to make flexible foams such as those in mattresses. In this way, we want to substitute fossil-based resources in production, reduce the carbon footprint of our materials, and create new solutions for handling plastic waste. Covestro operates a pilot plant in Leverkusen (Germany) for recycling flexible polyurethane foams to confirm laboratory results and gain findings to increase the scale further. These activities are taking place under the banner of Evocycle® CQ Mattress.

→ See ["Furniture and Wood Processing Industry"](#) and ["Marketing and Sales."](#)

Our alliances cover the entire value chain, linking the chemical and recycling industries. For example, we collaborate with environmental services provider Interzero Circular Solutions GmbH, Cologne (Germany), on innovative plastic waste recycling, and together with the French environmental organization Éco-mobilier – SAS, Paris (France), we are engaged in efforts to improve the recycling of waste from mattresses and upholstered furniture so that it can be reused in production.

Covestro is also working on ways to close the material loop for rigid polyurethane foams, which help to increase energy efficiency when used as insulation material in refrigerators and buildings. Along with 22 partners from nine countries, the collaborative CIRCULAR FOAM project was launched in fiscal 2021 with Covestro as its coordinator. In the next four years, experts from science, business, and society are expected to come up with comprehensive solutions for coordinated waste management and develop suitable methods for recycling these types of foams. The aim here is also to reclaim the raw materials used originally – polyols and an amine that is used as a precursor for diphenylmethane diisocyanate (MDI). Two official meetings were held in the reporting year already, giving all partners regular opportunities to discuss the research findings and project progress.

Covestro continued its cooperation with Circularise, The Hague (Netherlands), DOMO Chemicals, Leuna (Germany), and Asahi Kasei, Tokyo (Japan) in the reporting year to develop an open blockchain standard for establishing a data exchange protocol. The aim is to allow materials to be tracked along the value chain while protecting sensitive product information. Covestro expanded pilot projects in the reporting year to allow the traceability, determination of the origin of materials, and calculation of the carbon footprint and other sustainability metrics to be tested along the entire value chain. Covestro is currently working with the ISCC sustainability certification system and Circularise on rolling out ISCC PLUS certifications along complex supply chains. In addition to Covestro, other suppliers of materials, original equipment manufacturers (OEMs), and the trading company Itochu, Tokyo (Japan), are taking part in the ISCC pilot project.

→ See "Strategic Partnerships and Collaborations."

Digital Innovation

We are committed to pursuing digitalization along with the associated new opportunities for the entire chemical and plastics industry value chain. Covestro utilizes the opportunities arising from digitalization with a comprehensive strategic program and especially the intelligent use of data, thus setting new standards in cooperation with customers. We increasingly anchor digital technologies and work methods in production, along the supply chain, in R&D, in administrative functions, and at all points of contact with customers as well as in the development of new business models. One focus in the reporting year was on migrating all key applications to a cloud-based environment.

Cooperation with customers resulted in an example of how digital technologies can be used. By digitalizing the prototyping process for one of our business entities and using virtual copies of physical materials, the process from design to production can be accelerated at our customers. This also facilitates cooperation among members of cross-site teams. These digital components allow product designs to be realistically visualized at the early stages of development. They are also intended to make the existing product portfolio more accessible to customers.

Moreover, we use machine learning and artificial intelligence to obtain insights from data available in the company. Based on a Group-wide data analytics platform introduced in fiscal 2021, application cases are developed, operationalized, and scaled up. One example of successful application is the polyester production facility in Dormagen (Germany), where artificial intelligence was used in processing large volumes of process data of the facility, resulting in an estimated increase of 2% in the quantity of usable product.

Data science approaches used in the R&D departments of our business entities are also advancing our efforts to achieve full digitalization of these departments. Our high-performance computing cluster at the Leverkusen (Germany) site provides successful support to R&D in solving application cases. Computing capacity is also used, for example, to train complex machine learning models, develop algorithms and techniques in the area of quantum computing, and create photorealistic 3D renderings of materials made by Covestro. Here, we continued our cooperation with Google Ireland Ltd., Dublin (Ireland), as well as startups and universities. Covestro and its research partners have jointly published several important contributions on the development of quantum algorithms.

Computer simulations continue to be used on a comprehensive scale at all levels in R&D – from chemical quantum mechanics to the macroscopic level. A new digital simulation tool allows us to conduct large-scale analyses for different properties and scenarios, such as for catalyst performance, solvent-based properties, or polymer solubility. Examples include a newly developed digital tool that helps our customers detect the effects of changes in the formulation on foam properties or to obtain formulation suggestions that depend on the properties required. Initial application cases have also been conducted with the aim of becoming fully circular.

In an effort to fully digitalize the R&D processes in our laboratories we combine different complementary concepts. For example, the first fully digitalized research laboratories are already in use; they use a high degree of automation to generate detailed R&D data, which can in turn be stored on our global R&D knowledge platform. In this way, for example, properties and formulations can be forecast based on machine learning, which help our employees to develop products faster and more efficiently. In addition, we offer our R&D employees around the world digital collaboration opportunities as well as training programs that use augmented or virtual reality technology. By guiding them realistically through the scenarios to be taught, we can achieve higher safety standards in laboratories and production facilities.

In addition, a data-based centralized standard system (Covestro Monitoring Platform) was created to analyze on a permanent basis the condition of our production facilities and provide support, including for cost-efficient and predictive maintenance of machinery and plants. We moreover make large-scale use of our own process models, e.g., for the design of new plants and to train our employees with training simulators to ensure our plant operations are optimized.

Process Technology Innovations

Another key driver of innovation at Covestro is process technology. The designated corporate function is responsible for process technology in Covestro's production activities and supports operations in the segments. The key objectives are to optimize existing production processes, develop new process technologies, implement leading technologies in the process design for new production facilities, and take the production processes of newly developed products to industrial scale.

The optimization of existing production processes is a key element for meeting our sustainability target of becoming climate-neutral by the year 2035. For Covestro, this means reducing greenhouse gas (GHG) emissions in its own production (Scope 1) and from the provision and use of energy produced outside the company (Scope 2) and to reach net-zero GHG emissions* at all environmentally relevant sites by the year 2035. One focus is on reducing laughing gas emissions in the production of nitric acid by using innovative catalysts, which are currently being implemented in relevant projects at our sites in Baytown, Texas (United States), and Shanghai (China), with commissioning intended for fiscal 2024. In addition, the use of hot phosgene generation is intended to increase energy efficiency. Covestro already uses this technology, e.g., in isocyanate production in Shanghai (China), where it leads to a significant reduction in the amount of external steam required. Use of this process is also planned at other sites in Europe. At the new chlor-alkali production facility in Tarragona (Spain), Covestro's oxygen depolarized cathode technology is used on a large industrial scale for the first time; this plant's electricity needs are significantly lower than those of a conventional plant, thus making another contribution to reducing our CO₂ emissions.

At the same time, we are working on cutting emissions by increasing production output and reducing waste streams in the process. For example, waste volumes in TDI production in Dormagen (Germany) was reduced significantly by using new technology to process production residues. This technology is also in use at our site in Shanghai (China). We are simultaneously working on a process for reactivating a spent catalyst in making bisphenol A, which plays an important role as a basic building block for polycarbonate. The process is being tested at our site in Map Ta Phut (Thailand).

* Achievement of net-zero GHG emissions is defined as a balance between anthropogenic production of GHG emissions (caused by the company's own production activities and by the provision and use of energy produced outside the company) and anthropogenic reduction of GHG emissions.

On the road to climate neutrality by the year 2035, Covestro also aims to switch its production processes completely to renewable energy. A particular focus in this context is on the production of precursors and byproducts in the area of base chemicals (chlorine, caustic soda, hydrogen), which are the basic building blocks for many products in the chemical industry. To make them from saline solution using chlor-alkali electrolysis consumes a lot of energy. Covestro produces these three precursors and byproducts at its sites in Leverkusen, Krefeld-Uerdingen, and Dormagen in Germany. To switch these production processes to renewable energy, Leverkusen and Krefeld-Uerdingen have already been certified to the ISCC PLUS process* for producing chlorine as a precursor.

→ See "Climate Neutrality."

Thanks to digitalization, production facilities can be controlled more predictively, while processes can be optimized on an ongoing basis using digital simulations. In polycarbonate production in Antwerp (Belgium), the volume of rejects during the process was significantly reduced by returning them to the process, thus supporting circular production with maximum resource conservation.

→ See "Digital Innovation."

The development of new production processes to help us become fully circular also brought success in other respects. As a result, we managed for the first time in fiscal 2022 to produce bulk quantities of aminobenzoate, a biobased aniline precursor produced through fermentation. Covestro is currently working with other partners to take the process to commercial maturity as part of a publicly subsidized project. Success was also achieved in producing initial quantities of biobased hexamethylenediamine (HMDA), an important precursor for manufacturing coating raw materials. The project undertaken in cooperation with the US-based Genomatica, San Diego, California (United States), produced the compound on a pilot scale and thus achieved process development milestones.

→ See "Strategic Partnerships and Collaborations."

Product Innovations

In Covestro's two segments, Performance Materials and Solutions & Specialties, product innovations are under way for a number of industries, in particular our main customer industries.

Automotive and Transportation Industry

The automotive and transportation industry continues to transition to an electrified and autonomous future. We want to be actively involved in shaping and driving this transition with customer-centric innovations. We have developed our concepts for next-generation electric vehicles into technologies and solutions that can be made in standard production processes and presented them at K, the world's leading plastics trade fair, in Düsseldorf (Germany) in October 2022.

The exterior concept consists of a vehicle front into which functions, such as heat management, lighting, electronics, and new surface decoration, have been fully integrated and implemented on a modular basis. With our transparent near-infrared polycarbonate film from the Makrofol® product family, we additionally support the development of embedded sensors, which are indispensable for autonomous and assisted driving technologies. We therefore supply tinted film for optically measuring distance and speed (light detection and ranging, LiDAR, applications), e.g., for the front modules of electric vehicles. The interior concept is likewise built on modularity – with concealed, nonilluminated displays and seamless multi-material surfaces with touch-activated functions that are embedded in a scaled interior prototype. This allows the development of novel interior designs to meet the needs of passengers in autonomous vehicles. Based on full polycarbonate, both concepts are designed to have closed-loop potential; they are based on Makrolon® RE, a material with a reduced carbon footprint compared with conventional Makrolon®.

Polyurethane applications for the interiors of passenger and commercial vehicles are subjected to continuously increasing requirements to reduce the emissions of all materials used in the process. We drive the requisite improvements with continual enhancements in the different polyurethane product groups, Bayfill®, Bayfit®, Baynat®, and Baypreg®. Covestro provides other sustainable polyurethane products for this sales market as part

* While for mass-balanced raw materials (TDI and MDI), the use of raw materials is certified to the ISCC PLUS process, the certification in chlorine production relates to the use of renewable energy.

of the Desmodur® product group, which are assessed according to the mass balance approach. We are moreover investigating the possibility of using chemical recycling on car seat foams to make the polyurethane precursors and their components reusable. Together with external partners, we have also started to look into the recyclability of seat upholstery as a way to obtain raw materials that can in turn be used to make polyurethane products.

The transition from combustion engines to electric drives is also opening up new sales opportunities for Covestro. The introduction of the portfolio of flame-retardant products, including the Makrolon®, Bayblend®, Makroblend®, and Apec® product groups, allows batteries to be charged quickly and safely as a result of versatile housing solutions for batteries.

With the new Docket® capsule system, customers can manufacture two-component (2C) clearcoats for vehicle repairs within a matter of seconds. The capsule system contains clearcoat and hardener in the required proportions. It is ready for use at the press of a button and can be applied with a spray gun. Previously, car workshops first had to measure, weigh, and mix the raw ingredients for 2C clearcoats. The new system saves time, reduces the probability of error, and is easy and safe to use. What is more, for multi-layer paint protection films, our Desmopan® range provides weather resistance, transparency, and resistance to protect the car paint from environmental influences such as chippings, dust, scratches, and chemical substances. The life of these types of multi-layer films is extended by the physical properties and chemical resistance of our Desmopan® range. Conventionally produced films last one to two years, while Desmopan® can help extend their life to five to ten years. Another development is a new process for producing films with reduced thickness from the Makrofol® product group. These films are used in ultra-thin materials such as membranes, e.g., those found in laboratory diagnostics, at automotive and electronics suppliers, in ventilation systems in industry and the automotive sector, in interior and exterior vehicle lighting, in insulating films, or in loudspeakers.

Furniture and Wood Processing Industry

Our activities for the furniture and wood processing industry are also focused on sustainability. For example, as part of the publicly subsidized PReSmart project of the European Union (EU), an innovative process is being developed for chemical recycling of flexible polyurethane foam from used mattresses.

→ See ["Strategic Partnerships and Collaborations."](#)

The Desmodur® CQ product group already has products available that have been made with a proportion of alternative raw materials of at least 25%. These more sustainable TDI products, which are assessed according to the mass balance approach, reduce CO₂ emissions and the use of fossil-based resources; they are used, e.g., in upholstered furniture, mattresses, and thermal insulation.

→ See ["Labeling of Circular Solutions in the Product Portfolio."](#)

Arfinio® injection molding technology combines liquid high-performance polymers with minerals, enabling manufacturers of solid surface and injection molding applications to produce extremely light yet durable materials. This combination allows the production of seamless shapes without requiring sheets, while achieving mechanical strength, light stability, reparability, as well as low product weight, rapid production, and improved freedom of design. The molded bodies can be used to make a number of different products, ranging from device housings through interior trims down to building facades.

Construction Industry

For the construction industry, our work is centered on our core application – rigid polyurethane foams. Used as an insulation material, it makes an important contribution to energy efficiency. To make the insulating material itself more sustainable, two climate-neutral* products have been added to the Desmodur® product range, each of which is a main component in the production of polyurethane insulating materials. Sustainable recycling solutions for rigid foams are being developed as part of the EU-subsidized CIRCULAR FOAM project, which develops above all chemical recycling to recover the raw materials for Covestro's production processes.

→ See ["Strategic Partnerships and Collaborations."](#)

* Climate-neutral (from cradle to Covestro's gate) according to internal calculations in accordance with the methodology for ascertaining our ecological footprint, which has been critically reviewed by TÜV Rheinland based on ISO standards 14040 and 14044.

Another new solution developed in the reporting year allows mining sieves with inserts to be mechanically recycled rather than the previous practice of burning or taking them to landfill. Substitution with an insert made in a novel way allows the sieve to be mechanically recycled and turned into fine pellets in the process. In a plant developed by us, these pellets can then be processed in a second step and added to a formulation for making new sieves. Another benefit is that mass-balanced products can be used in these formulations.

Electrical, Electronics, and Household Appliances Industry

In our activities for the electrical, electronics and household appliances industry, new materials were developed in the reporting year, again with a focus on sustainability. For example, new compounding products with a high post-consumer recyclate (PCR) content have been developed, which supplement the PCR portfolio by adding a broad range of applications. A climate-neutral* portfolio has also been created with the Makrolon® RE product group, which provides solutions for all key areas of the electrical and electronics industry. In addition, a portfolio of products with improved flame retardance has been developed, combining improved properties in relation to rigidity and tenacity with easy processing. These products are used for low-voltage applications, such as circuit breakers for switching high currents and smart electricity meters. In the area of heat management solutions, the portfolio has been expanded by adding flame-retardant materials frequently deployed in home automation, power supply, and lighting applications.

Our range of offerings also includes more sustainable thermoplastic elastomers, e.g., for consumer electronics. These materials boast properties comparable to those of purely fossil-based thermoplastic elastomers, but have an improved environmental footprint. Since the introduction of partly biobased products in the Desmopan® CQ product group, we have combined alternative raw materials obtained directly from biomass with raw materials with a renewable share allocated via the mass balance approach. In the products made with renewable energy, the mass certified as sustainable accounts for up to 80%, while allowing CO₂ emissions to be reduced by up to 52%.

→ See ["Labeling of Circular Solutions in the Product Portfolio."](#)

Other Industries

To further boost our offering for the wind industry, a new Wind Technology Center was established in Leverkusen (Germany). At this center, Covestro carries out research into material solutions for sustainable energy generation, such as developing new and optimizing existing polyurethane resins for manufacturing rotor blades for wind turbines. This is done in close cooperation with our customers to ensure that industry-relevant and robust solutions are developed. Another area of application for our products relating to wind energy involves cable protection solutions made of polyurethane elastomers for offshore wind turbines. To reduce the size of the cable protection, Covestro has developed a new formulation with which the material required can be reduced by up to 30% without impairing the properties of the application. This formulation will, moreover, be one of the first to be available in a mass-balanced version.

For the health industry, Covestro has developed an innovative concept for administering medicines, using the Makrolon® or Bayblend® product groups with different properties, such as low frictional resistance or glazing. This polycarbonate-based concept simplifies sorting for recycling compared to conventional devices for administering medicines. Another innovation is a material with a low carbon footprint in the Makrolon® product group for respiratory and medication applications. Since hospital-acquired infections present a problem in the health sector, we are developing materials that can withstand aggressive disinfectants. To this end, new flame-retardant Makrolon® and Makroblend® materials have been developed and introduced for use in durable medical equipment.

* Climate-neutral (from cradle to Covestro's gate) according to internal calculations in accordance with the methodology for ascertaining our ecological footprint, which has been critically reviewed by TÜV Rheinland based on ISO standards 14040 and 14044.

Employees

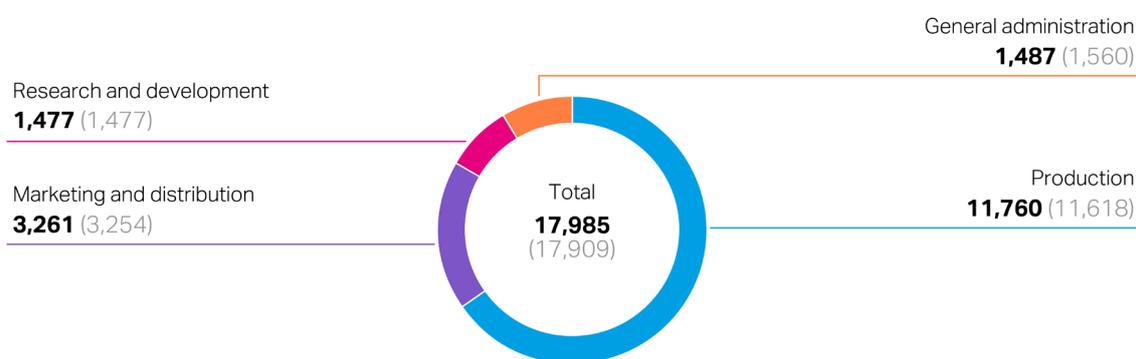
The multifaceted abilities and personal efforts of all employees contribute materially to Covestro's success. All employees have both the freedom and the mandate to act and contribute in line with the company's goals, values, and culture. Covestro thus promotes a working environment that is shaped by unconventional thinking, the effective exchange of knowledge, creative problem-solving, constructive feedback, and collegial cooperation. We aim to empower each of our employees to work to their full potential and expand their expertise. Our managers are responsible for facilitating and supporting these goals in close collaboration with our employees. In this way, we can work together to make an ongoing contribution to the company's success. Our social responsibility as a company and an employer is based on our unreserved commitment to supporting and fostering human rights in our sphere of influence. In the interest of encouraging a transparent exchange of information within the company, e.g., employee questions and comments are collected – anonymous or not – and regularly addressed and answered by the Board of Management in video messages and virtual global meetings (e.g., WeAre1 talks and town halls meetings). Until June 2022, the questions were collated using the Slido software, which, from July 2022 onward, was replaced by the newly introduced Yammer networking platform.

Organizationally, the corporate Human Resources (HR) function reports to the Chief Executive Officer (CEO). All human resources activities are the responsibility of the management of the corporate HR function.

As of December 31, 2022, Covestro had 17,985 employees worldwide (previous year: 17,909). At the reporting date, the Group also had 575 employees in vocational training worldwide (previous year: 581), 566 of whom were based in Germany (previous year: 568).

→ See note 9 "Personnel Expenses and Employee Numbers" in the Notes to the Consolidated Financial Statements.

Employees by division¹



¹ The number of permanent or temporary employees is stated in full-time equivalents (FTEs). Part-time employees are included on a pro-rated basis in line with their contractual working hours. The figures do not include employees in vocational training.

Corporate Values and Corporate Culture

Covestro is proud of its corporate values, summarized as C³: curious, courageous, and colorful. Curiosity drives us to think beyond the horizon and allows us to create innovative and unexpected solutions for our customers. Courage helps us identify opportunities where others see limitations. Diversity promotes employee engagement and creativity; multiple viewpoints make us successful. These values guide all the Group's employees and are reflected in their daily thoughts and actions.

Our corporate “We Are 1” culture is based on Covestro’s values and behaviors, and is an integral part of our strategy. Our employees influence and shape this corporate culture. A culture filled with life by our employees enables us to pursue our strategy and therefore contributes to Covestro’s success now and far into the future. Our corporate culture empowers all employees to always act responsibly, to strive for continual improvement, to nurture collaborative teamwork, and to be outstanding leaders.

→ See “Proud to Belong” Action Area.”

Human Resources Guiding Principles and Strategy

The major trends, such as digital transformation, demographic change, or continuous transformation in all areas of life and work, and the trend toward individualization – freedom of choice and self-determination – are changing our work and the ways we do it. The corporate HR function therefore focuses on the development and implementation of initiatives that sustainably support our business success in view of these changes, while at the same time encouraging professional development and engagement across the board. In keeping with a holistic people strategy, Covestro’s Board of Management is dedicated to promoting diversity, equity, and inclusion as well as ensuring our employees are appropriately qualified. Workplace health and safety is a fundamental requirement for our work.

These issues and the Group’s Sustainable Future strategy are reflected in our people strategy, which provides guidance for all activities and priorities of the corporate HR function. It breaks down into five action areas: “Place to be,” “committed to perform,” “ready to grow,” “enabled to perform,” and “proud to belong.”

Covestro’s People Strategy and its Action Areas



“Place to Be” Action Area

The “place to be” action area of Covestro’s people strategy guides the activities of the corporate HR function toward maintaining and enhancing Covestro’s attractiveness as an employer through various initiatives and making our current and future employees passionate about their work and our company.

Work-Life Balance

We support work-life balance for our employees. For instance, partnerships with daycare centers and financial support for vacation care for school-age children are among the solutions we offer to make combining work with family responsibilities easier. The programs offered can differ, depending on the particular Covestro site.

Provided it is compatible with operational requirements, Covestro allows employees to take extended leave from work for personal projects such as scientific research, university studies, or other personal reasons. Employees around the world take advantage of this offer.

New, Flexible Working Environments for Improved Contact and Communication

Work environments, work content, and working methods are undergoing constant changes due to digital transformation and the increasing speed of change and complexity at our workplace. In order to meet these ever-changing requirements, Covestro provides a modern, stimulating working environment that promotes flexible ways of working.

Open-plan office environments combined with flexible work concepts encourage contact and the exchanges across team and departmental boundaries and thus encourage more communication and interdisciplinary cooperation. We call this work environment our C³ way of working based on our C³ values. At the heart of this philosophy is our conviction that all our employees, regardless of their status in the hierarchy, need working environments suitable to their duties to be able to work effectively. In this way, we want to enable changes in perspective and drive creativity in the company. Our philosophy applies particularly to cases such as moving into or creating new workspaces. An example of these new workspaces is the corporate headquarters in Leverkusen (Germany), which opened for business in the year 2020. Active change management prepared employees for and involved them in shaping new work environments. To achieve this, we provide not only the appropriate facilities, but also easy-to-use IT infrastructure and media technology. For the design of the corporate headquarters and the integration of our C³ values into an architectural concept, Covestro received a design award, the German Brand Award in gold. The award is presented by the German Design Council, a nonprofit foundation based in Frankfurt am Main (Germany), and the German Brand Institute.

The mobile working concept, which allows working from home and on the move, gives employees, teams, and our organization a wide variety of new options. However, we continue to believe that personal interaction on site is very important for ensuring lasting collaboration and maintaining our innovation capability in line with our "We Are 1" culture. We have developed different measures at our sites around the world to assist managers and employees in returning to the office and successfully manage the transition to a hybrid form of working, i.e., the collaboration of employees from different locations, such as home, production, or the office. Our managers play a special role in this system. In addition to implementing established leadership standards and modern work methods, they increasingly collaborate with their employees to develop agile and customized solutions to support Covestro's efforts to exploit the potential of this new work environment.

Employer Attractiveness

Covestro aims to recruit qualified employees for the company, ensure their professional and personal development, and retain talent for the long term. We strive to be perceived as an attractive employer worldwide and to reinforce our employer brand, especially through diversity in the workforce, and raise awareness of our company among our target groups.

We take responsibility worldwide for students entering the workplace and maintain close contacts with leading universities like RWTH Aachen University (Germany), the University of Pittsburgh, Pennsylvania (United States), or Tongji University in Shanghai (China). We bring in university students to take part in professional internships worldwide each year. This gives them insight into our company's operations as well as personal experience with Covestro as an attractive employer. In fiscal 2022, we offered 394 internships around the globe.

In addition to opportunities to join the company after studying, Covestro offers alternative routes into working life. In Germany, for example, 183 young people were able to start their careers with Covestro in the year 2022. We offer vocational training in a number of scientific and technical professions. If the vocational training is completed successfully, trainees are guaranteed a position with the company. Our particular interest in schools is aimed at raising awareness of STEM professions and making them more attractive to young people. The abbreviation STEM stands for science, technology, engineering, and mathematics in paths of study and careers. For example, in the year 2022, we presented career opportunities available at Covestro to a number of different (partner) schools in Germany and invited interested learners on tours of the plant.

To help meet our need for qualified personnel, we engage in HR marketing campaigns around the world, in particular by maintaining a social media presence. In the United States, we actively use the LinkedIn platform to mark events such as the International Day of Women and Girls in Science. In Belgium and the Netherlands, we post videos on Facebook to give an insight into our plants and the work of our employees in production, while in China we use virtual reality technology to show off the company's premises in Shanghai (China). Alongside participation in traditional career fairs, the recruiting teams from Germany and China also explained our career opportunities at two trade fairs, the plastics trade fair K 2022 in Düsseldorf (Germany) and the China International Import Expo (CIIE) in Shanghai in the year 2022.

Covestro received several major employer awards and accreditations in the reporting period. The Top Employers Institute certified Covestro in Germany, the United States, and China. In Spain, the company received an award from Forbes Magazine, ranking us among the top 75 most attractive companies in the country. In Mexico, it was also ranked second among the country's top 100 companies with fewer than 500 employees.

[Supplementary information >](#)

We welcome applications from all candidates, irrespective of their ethnic origin, nationality, religion, ideology, gender, age, disability, and/or sexual identity. We are committed to the principle of treating all candidates fairly and avoiding discrimination of any kind.

In the reporting year, we hired a total of 1,330 new employees worldwide. The number of new hires was considerably lower than in the previous year, as in 2021 the new hires resulting from the acquisition of the RFM business were included in this key performance indicator (KPI).

New hires¹ by age group, gender, and region in fiscal 2022

	EMLA		NA		APAC		Total	
	FTE	%	FTE	%	FTE	%	FTE	%
Women	192	14.4	41	3.1	120	9.0	353	26.5
< 30 years	94	7.1	16	1.2	42	3.1	152	11.4
30 to 49 years	87	6.5	18	1.4	74	5.6	179	13.5
≥ 50 years	11	0.8	7	0.5	4	0.3	22	1.6
Men	548	41.3	177	13.3	251	18.9	976	73.5
< 30 years	272	20.5	70	5.2	92	6.9	434	32.6
30 to 49 years	249	18.8	90	6.8	153	11.5	492	37.1
≥ 50 years	27	2.0	17	1.3	6	0.5	50	3.8
Total	740	55.7	218	16.4	371	27.9	1329	100.0

¹ The number and percentage of permanent or temporary employees is stated in full-time equivalents (FTEs). Part-time employees are included on a pro-rated basis in line with their contractual working hours. Percentages represent the distribution of new hires. The figures do not include employees in vocational training.

One newly hired individual did not state their gender. This information was not included in the presentation above for data protection reasons.

A total of 1,192 employees worldwide left the Group in fiscal 2022. Employee attritions in the different regions and age groups varied widely in some cases.

Attritions¹ by age group, gender, and region in fiscal 2022

	EMLA		NA		APAC		Total	
	FTE	%	FTE	%	FTE	%	FTE	%
Women	103	4.7	55	8.9	130	9.5	288	6.9
< 30 years	28	9.1	11	18.0	14	12.5	53	11.0
30 to 49 years	43	3.6	22	6.9	100	8.9	165	6.3
≥ 50 years	32	4.5	22	9.1	16	11.9	70	6.5
Men	408	5.1	216	9.7	280	7.9	904	6.5
< 30 years	62	6.3	23	10.3	32	9.2	117	7.5
30 to 49 years	118	3.3	74	7.1	203	7.7	395	5.4
≥ 50 years	228	6.5	119	12.6	45	8.2	392	7.8
Total	511	5.0	271	9.5	410	8.3	1,192	6.6

¹ The number and percentage of employees are calculated on the basis of full-time equivalents (FTEs). The attrition rate is calculated as the ratio of the total of all employer- and employee-initiated terminations, the end of fixed-term contracts, retirements, and deaths to the average number of employees (FTEs). The figures do not include employees in vocational training. There were no attritions of employees who did not provide gender information.

[< Supplementary information](#)

Employee Engagement

A key aspect of attaining our goal of becoming a place to be is to get a better understanding of the factors that our existing employees consider important to increase their engagement. To identify these factors and keep track of trends, we use the global ENGAGE survey to measure and improve employee engagement; the survey was continued in the year 2022. All employees worldwide can provide feedback several times a year by filling out a voluntary, anonymous online survey on key issues in their work environment. The results are then shared transparently with the employees and appropriate improvement measures are agreed jointly by employees and line managers. Three survey rounds were conducted in the year 2022, each with a participation rate of around 70%, similar to the previous year.

“Committed to Perform” Action Area

We offer competitive and fair working conditions, compensation, and additional benefits in accordance with market conditions and our social responsibility. This is an essential prerequisite for recruiting, retaining, and motivating qualified employees. This is what our people strategy efforts in the “committed to perform” action area are aimed at. Covestro combines a base salary reflecting the duties of a position with performance-related compensation components and extensive additional benefits to create an internationally competitive pay package, about which employees are informed transparently. Tasks and responsibilities are classified on the basis of a job evaluation conducted without considering the individuals in the positions. For management functions, a standardized evaluation method is used if the job evaluation has not already been stipulated by a local collective agreement. Based on this classification, the amount of the base salary in all countries is aligned with standard compensation levels in the respective region. Regular compensation benchmarking is conducted to ensure this is maintained for the long term.

In accordance with our corporate “We Are 1” culture, the compensation structure is standardized for all Covestro employees. The variable compensation is based on a uniform system with identical criteria; differences exist only in the target percentages related to fixed compensation. The Covestro Profit Sharing Plan (Covestro PSP), a short-term variable compensation program in force throughout the Group, applies – with few exceptions, essentially due to collective bargaining arrangements – for all Covestro employees worldwide, including the Board of Management. It makes it possible for our employees to participate in the company’s performance each year with a uniformly calculated bonus payment. Since the year 2022, the four areas of profitability, liquidity, profitable growth, and sustainability have each accounted for one quarter of the calculation formula used to measure target attainment. In addition, employees in management functions, as well as members of the Board of Management, participate in Prisma, the global stock-based compensation program for long-term variable compensation. Payments are based on the Covestro share price, including comparisons with our competitors, and in this way the program rewards the long-term changes in the company’s share price. Since the tranche launched in the year 2021, this program has included a sustainability component comprising a reduction target for carbon emissions and other greenhouse gases such as nitrous oxide.

→ [See Compensation Report, section “Short-Term Variable Compensation” and section “Long-Term Variable Compensation.”](#)

Furthermore, a global budget is available from which management-level staff can promptly grant individual performance awards to recognize outstanding conduct, commitment, and the performance of their employees in regard to our corporate values.

→ See note 21 "Other Provisions" in the Notes to the Consolidated Financial Statements.

As in previous years, the Covestment share participation program was offered once again in fiscal 2022 and provided employees with the opportunity to purchase Covestro shares at a discount. In the year 2022, 99% of Covestro's global workforce was thus able to purchase Covestro shares at discounted prices. Around 38% of all eligible employees worldwide took advantage of this offer.

→ See note 21 "Other Provisions" in the Notes to the Consolidated Financial Statements.

[Supplementary information >](#)

In the year under review, 69% of our employees worldwide (mainly in Central Europe, Brazil and most of our employees in China) were subject to collective bargaining or works agreements. At various country subsidiaries, the interests of the workforce are represented by elected employee representatives who have a right to be consulted on certain managerial decisions affecting the workforce.

As of December 31, 2022, 77% of the workforce had access to a company pension plan. At all locations, personnel policy is aligned with the statutory requirements, such as those for severance, pre-retirement, and support to pursue alternative career paths. For instance, in Germany employees are able to transfer salary and time components (converted into money) into a long-term account. The accumulated balance can then be used at a later date for certain legally defined purposes such as pre-retirement leave.

[< Supplementary information](#)

"Ready to Grow" Action Area

Well educated and trained staff is crucial for our company's continuing development and success. This is reflected in the "ready to grow" action area of Covestro's people strategy. We want to promote talent and encourage employees to try out new possibilities for personal development.

We believe in lifelong learning and therefore continued to support in particular self-directed learning in fiscal 2022. To this end, we expanded our digital content and optimized the personal and professional further training options for management, innovation, project management, and digitalization. A new program for learning languages was also introduced, which is available to employees wishing to develop their linguistic skills in nine languages. To assist our internal training staff, we have implemented a learning toolbox, which covers all key elements of the learning process, from analysis to quality control. For new internal training staff, this concept includes the appropriate qualifications for conceptualizing, designing, and implementing internal training. These measures are intended to provide optimal support to our employees for personal and professional development in all phases of their careers.

Our people development activities include working on an updated, more agile approach to performance, development, careers, and our talent portfolio. For instance, we intend to introduce new initiatives in line with our "We Are 1" culture that are streamlined, transparent, and intuitive. The aim is for management staff, other employees, and the company to grow, deliver high performance, develop, and be successful now and in the future. This requires all of our employees, especially our management staff, to approach their work from a development perspective and be ready to learn new skills and approaches.

“Enabled to Transform” Action Area

We continually lead, inspire, and train our employees to enable them to master future challenges.

In the year 2022, a new HR information portal (InfoHub) was created; it provides information on the return to the office following the pandemic and on hybrid working. Specific information events were held initially to support management staff in dealing with these new circumstances. The events addressed specific issues affecting shared understanding of the framework of mobile and hybrid working. Moreover, the corporate HR function collated information and developed training content to make the transition easier for employees. This was supplemented by training events, examples of best practice of how to deal with challenges, educational videos, and specific materials for managers. In addition, recommendations were given on IT and media issues and on how to choose and use the available technology and facilities most efficiently. All this is to harness the opportunities of a generally mobile and flexible way of working.

Digital inclusion and transparency in communications are critical success factors in the new normal of working. Regardless of whether or not they work simultaneously from the same location, all employees have to have the same information and possibilities available to them. This applies in particular to access to information and prompt exchanges with line managers and other team members. This is how we integrate Covestro’s “We Are 1” culture into the world of hybrid working.

“Proud to Belong” Action Area

The “proud to belong” action area of Covestro’s people strategy is centered around our corporate values and our corporate culture, with a focus on diversity, equity, and inclusion, as well as safe and healthy working conditions for our employees.

→ See [“Corporate Values and Corporate Culture.”](#)

Constructive cooperation with the employee representative body on a basis of trust is an integral part of our corporate culture. It allows us jointly to come to important decisions, some of which can be difficult for the company, after considering all perspectives and to put them on a broad foundation. The interests of employees and the company can in this way be balanced, even in difficult situations. Employees at all sites around the world have the right to elect their own employee representatives. Matters affecting several European countries are dealt with in the Covestro European Forum.

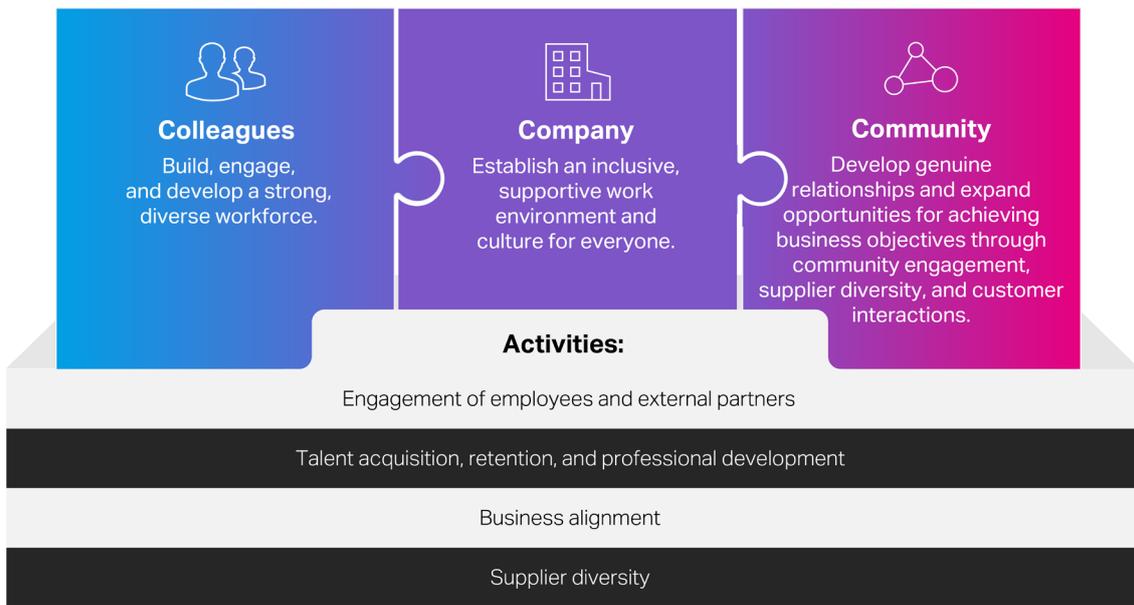
Promoting Diversity, Equity, and Inclusion

We work to make the world a brighter place. Diversity, equity, and inclusion (DEI) are key components of our corporate culture. We advocate for an environment in which various skills, talents, experiences, and points of view are welcome, and everyone is treated with dignity and respect, both within and outside of our company. We also believe that a diverse workforce and inclusive environment are important drivers of innovation, sustainability, employee engagement, and business success. Our goal is to create an environment at Covestro in which all employees can give their best each and every day.

+ More information can be found in our [Diversity & Inclusion Report, which was published in 2021, at:
\[www.covestro.com/en/company/strategy/people-and-culture\]\(http://www.covestro.com/en/company/strategy/people-and-culture\)](#)

Covestro’s DEI strategy is derived from our values and based on three core principles: Colleagues, Company, and Community. These are three essential factors for building a strong, diverse, equitable, inclusive, and innovative work culture at our sites. Our corporate objectives and the culture we need for diversity, equity, and inclusion are driven by our employee networks and councils and supported by management and all members of Covestro’s Board of Management.

Our diversity, equity, and inclusion strategy



The first principle, “Colleagues – build, engage and develop a strong, diverse workforce” of our DEI strategy encompasses all activities that aim to make Covestro’s workforce more diverse. Employee networks are a key factor in involving our staff even more in driving diversity. We want to bring people together in these networks, and promote an exchange of inspiration and ideas. Covestro has many global and regional employee networks with different focus areas worldwide. The global UNITE network focuses on all issues of concern to the LGBTIQ (lesbian, gay, bi, trans, intersex, queer) community, and the Compass network is for employees interested in gender equity. These networks organized activities around the world in the year 2022. As part of a gender equity campaign in Germany, Compass discussed actions that each individual can establish under their own initiative to promote equity in day-to-day operations. During Pride Month, our LGBTIQ networks took part in Christopher Street Day Parades in Mexico City (Mexico), Houston, Texas (United States), and Pittsburgh, Pennsylvania (United States). In addition to the employee networks, some sites also have DEI Councils, which provide support for implementing the strategy and for the activities of the employee networks.

Under the “Company – establish an inclusive, supportive work environment and culture for everyone” principle, we have bundled all efforts and initiatives aimed at promoting inclusion. Covestro is aware that companies are more successful if they encourage diversity in their workforce. We strive to promote diversity and equity for all employees at all levels. For example, Covestro is committed to gender equity worldwide and the Board of Management has therefore undertaken to reach a proportion of 40% women in Covestro’s total workforce by the year 2029. At the end of the reporting year, women made up 23.4% of our worldwide headcount (previous year: 23.1%).

→ See [“Promotion of Equal Participation of Women and Men in Leadership Positions.”](#)

To mark the 10th German Diversity Day, we addressed the issue of people with disabilities and presented our inclusion agreement, which was entered into with the Representative Body for Severely Disabled Employees in the year 2022. Moreover, our Chief Commercial Officer, Sucheta Govil, together with female Board members of other industrial companies, took part in a panel discussion on how employers can contribute to a supportive environment for women that offers equal opportunities and is free from prejudice. The first themed week was also held in the APAC region in June 2022 during which various events on diversity issues were presented.

As part of the “Menstruation is everyone’s issue” initiative in Mexico, Covestro provides female hygiene articles free of charge in restrooms in all plants and offices and grants paid leave in cases of severe menstrual pain. In an information campaign conducted alongside this initiative, Covestro provides guidance on when women with menstrual problems should consult the company doctor.

In the United States, our CEO Dr. Markus Steilemann chaired an expert panel discussion organized by our employee network to mark Black History Month. Black History Month originated to recognize the contribution of people with Afro-American roots in the United States. It honors all people of color from all periods of US history, from the first slaves who arrived from Africa in the early 17th century to the people with Afro-American roots living in the United States today.

Our efforts are showing success: Particularly notable is our participation in the Disability Equality Index, a US benchmark supporting inclusion and equality for people with disabilities. Covestro was recognized as one of the best employers for people with disabilities in this rating. In Germany, Covestro was ranked 12th in the German Diversity Index in 2022, which measures the diversity commitment of DAX-listed companies. In China, we received the DEI Best Practice Award.

The “Community – achieving business objectives through community engagement, supplier diversity, and customer interaction” principle summarizes how we, together with our partners, intend to create the basis for greater diversity in society. Covestro actively promotes diversity, equity, and inclusion in pursuing its own activities and by working shoulder-to-shoulder with outside parties. This is the only way these objectives will be permanently integrated into the company as well as society. For this reason, we are further expanding our cooperation with various partners.

In a joint campaign with our logistics service provider Maersk during Pride Month in June 2022, we installed a rainbow container outside our corporate headquarters in Leverkusen (Germany) and started discussions on LGBTIQ issues with neighbors and employees. In the year 2022, Covestro entered into a partnership with the World Organization for Sustainability Leadership (WOSL) in China and launched the Covestro Cup 2022 “I Speak, I Act, I Impact – China Student Orator and Illustrator Contest.” Together with the WOSL, we focus on promoting the development of fair and inclusive quality education, raise awareness of goals and create a sense of responsibility among the young generation, and inspire young people to shape a sustainable future together.

[Supplementary information >](#)

Employee Metrics on Diversity and Internationality

As of December 31, 2022, Covestro had 17,985 employees worldwide comprising 88 different nationalities, 76.6% of whom were male and 23.4% were female. Members of the Board of Management and of the Executive Leadership Team (executives at the two highest contract levels below the Board of Management) represented eight different nationalities.

The majority of Covestro's employees (57.1%) worked in the EMLA region. The APAC region accounted for 27.2% of our employees, while 15.7% of the workforce was based in the NA region.

Employees¹ by employment status, region, and gender in fiscal 2022

	EMLA		NA		APAC		Total
	Women	Men	Women	Men	Women	Men	
	FTE	FTE	FTE	FTE	in FTE	FTE	
Employees with permanent contracts	2,162	7,955	621	2,187	1,347	3,503	17,780
Employees with temporary contracts	50	104	1	7	24	19	205
Total	2,212	8,059	622	2,194	1,371	3,522	17,985

¹ The number of permanent or temporary employees is stated in full-time equivalents (FTEs). Part-time employees are included on a pro-rated basis in line with their contractual working hours. The figures do not include employees in vocational training. Five employees worldwide did not state their gender. This information was not included in the presentation above, which results in deviations in the total number of employees.

Permanent employees¹ by type of employment and gender in fiscal 2022

	Women	Men	Total
Part-time	854	2,312	3,167
Full-time	3,486	11,584	15,074
Total	4,340	13,896	18,241

¹ The number of employees (headcount) is stated irrespective of their degree of employment. The figures do not include employees in vocational training. Five employees worldwide did not state their gender. In the presentation above, this information was included only in the total; as a result, the total number of employees differs from the sum of the individual numbers by gender.

The percentages of male and female employees by employee group have remained largely constant.

Employees¹ by employee group and gender in fiscal 2022

	Women	Men	Total
	%	%	%
Board of Management and Executive Leadership Team	0.1	0.2	0.3
Middle management	2.7	8.9	11.6
Junior management	7.0	17.1	24.1
Skilled workers	13.6	50.4	64.0
Total	23.4	76.6	100.0
Employees in vocational training	21.7	77.7	100.0

¹ The information was determined from the number of permanent or temporary employees, stated in full-time equivalents (FTEs). Part-time employees were included on a pro-rated basis in line with their contractual working hours. Employees in vocational training are disclosed separately in this KPI. Five employees and three trainees worldwide did not state their gender. In the presentation above, this information was included only in the total; as a result, the total number of employees differs from the sum of the individual numbers by gender.

Employees¹ by employee group and age group in fiscal 2022

	< 30 years	30 to 49 years	≥ 50 years	Total
	%	%	%	%
Board of Management and Executive Leadership Team	0.0	0.1	0.2	0.3
Middle management	0.0	5.5	6.1	11.6
Junior management	0.8	15.5	7.8	24.1
Skilled workers	10.4	34.0	19.6	64.0
Total	11.2	55.1	33.7	100.0

¹ The information was determined from the number of permanent or temporary employees, stated in full-time equivalents (FTEs). Part-time employees were included on a pro-rated basis in line with their contractual working hours. The figures do not include employees in vocational training.

[< Supplementary information](#)

Designing Healthy Working Conditions and Work Models

Covestro is aware that the company's future depends on the health and performance of its employees. For this reason, preventive healthcare is a key component of our corporate "We Are 1" culture and also forms part of our people strategy. Workplace health management is primarily aimed at enabling health-appropriate and health-promoting working (environmental prevention) and at strengthening the health resources and potential of individuals (behavioral prevention). This is intended to improve the work environment and health and wellbeing in the workplace and to prevent risks to health at work.

Health objectives and actions are derived by identifying needs relevant to Covestro, at corporate or division level as well as for the employees. Concrete health objectives are formulated on the basis of information, obtained through health surveys, on the health situation relating to the requirements imposed on employees and their ability to meet them (resources). The focus here is on those indicators for which the analysis has identified a clear need for action. They relate for example to an improved ability to switch off, adequate support by managers, or a reduction in the perceived high workload and responsibility. Targeted measures are offered to improve the health situation, such as attending the "Healthy management" seminar for managers, workshops for analyzing the causes of high workloads, or stress management courses. All measures are therefore tailored to the prevention requirement identified on the basis of health data; they are organized holistically as required by environmental and behavioral prevention. Our basic principles include the constant improvement of working and organizational conditions and the identification of factors that either promote or are detrimental to health.

→ See "Health and Safety."

Our management staff has a significant influence on the performance and wellbeing of our employees. Against this backdrop, we ensure that our managers are qualified to the best possible extent for healthy management at Covestro and receive advice on how to discharge their duties.

The corporate HR function is aided in all its work by the corporate Group Health, Safety and Environment, Law, Intellectual Property & Compliance, and Corporate Audit functions. They ensure that all internal guidelines and all relevant standards and labor law requirements are met.

→ See "Integrated Management System for Health, Safety, Environment, Energy, and Quality."

We continually strive to create working conditions that take account of any burdens on individuals in a continually changing working environment. In many countries, we exceed our legal obligations, e.g., by offering solutions such as flexible working hours, part-time work, working from home, and remote work, if this is compatible with operational requirements. Direct dialogue with our employees is particularly important to us. In this regard, we take into account national and international notification duties. The nature and scope of our health promotion programs differ around the world with regard to the respective country-specific need for development and access to national health systems.

At Covestro, our social responsibility as a company and employer also includes creating fair working conditions that are based on mutual respect and appreciation among employees and particularly ensure safety, health, and wellbeing in the workplace. Our personnel policy also features a strong social safety net for our employees.

→ See "Human Rights" and "Compliance."

Health and Safety

For Covestro, safety is an essential foundation of our business activities. The continuous improvement of a safe work environment is a key component of our corporate responsibility and a topical focus of our human rights due diligence activities. Covestro adheres to the applicable standards, domestic regulations, and laws. These regulations aim to prevent injuries, equipment breakdowns, and transportation incidents, as well as preserve the health of our employees in the workplace and during work-related activities. This also applies to partner companies (contractors) who work for our company within the scope of operational activities. Detailed rules and regular checks are instrumental in meeting these goals, as are safe production processes, plants, and transportation.

Safety incidents that – under other circumstances – could have led to a High Potential Event (HPE) are examined using a set of criteria we have defined that includes their potential effects. Events classified as HPEs are treated similarly to events that have actually occurred and require detailed root cause analysis and communication. Promoting safety awareness among employees is essential for minimizing dangerous situations during day-to-day operations. For this reason, Team Resource Management training to further increase safety awareness and safe conduct among our staff continued in the year 2022.

In the year under review, our employees were encouraged for the 14th time to take part in the CEO Safety & Health Award and submit suggestions for improving occupational health and safety. Due to a serious workplace accident at our site in Shanghai (China), the Board of Management decided not to make an award this year.

Occupational Health and Safety

Our safety management activities take into account requirements and standards applicable around the world. We continually update our safety management system in line with our corporate culture. In support of our Toward Zero goal, the health and safety of our employees in their day-to-day work are the focus of our safety management system. This also includes potential effects on the environment and harmful health effects caused by leaks at production facilities, or accidents involving hazardous goods and other transportation accidents. Our integrated Health, Safety, Environment, Energy, and Quality (HSEQ) management system is a major contributor to fulfilling this vision.

→ See "Safety and Accident Prevention."

An integrated information management system (IIMS) implemented throughout the Group exists for reporting and processing work-related accidents and incidents, as well as potential hazards. The IIMS makes it possible to identify trends in a timely manner so that corresponding short-term corrective and long-term improvement measures can be implemented if necessary. The company's safety experts, supported by external expertise if needed, analyze the background circumstances and the impact. The results of the root cause analysis conducted after an incident occurs and the corrective measures taken are published throughout the Group in order to raise employees' safety awareness. As a result, everybody can better assess comparable hazards and situations and proactively remedy them. The health and safety challenges arising from the coronavirus pandemic in the year under review were significantly less impactful than in previous years. Given the lower infection rates, many sites were able to hold the global Safety & Health Day again as a physical event in September 2022.

Safety and Accident Prevention

Over the long term, we want to prevent all workplace accidents and work-related occupational diseases. For this reason, we regularly analyze the accident rate by site as well as by region and type of accident. The fluctuations observed indicate to us the structural differences that are discussed in analyzing and determining measures to be taken with the sites and segments, and adapted to local requirements.

Activities that led to accidents in the year 2022

	Movement (stumbling/ falling)	Mechanical work	Chemical contact	Traffic and transportation	Other	Total
Employees	19	31	10	2	7	69
Contractors	13	15	3	1	4	36
Total	32	46	13	3	11	105

In the year 2022, one third of all recordable accidents were attributable to movement. Another high-incidence type of accident in the year 2022 was mechanical work, especially accidents involving the hands. To counter this trend, we rolled out "hand safety" throughout the Group as a particular focus area during an HSE campaign in the third quarter of 2022.

We classify accidents at Covestro according to the American Society for Testing and Materials (ASTM) standard E2920-14 to devote particular attention to the life-threatening or life-changing accidents among the entirety of the accident data. In the year 2022, seven contacts with chemicals, four mechanical work injuries, two burn incidents, and one traffic accident were classified as serious. In one of the mechanical work accidents, one employee was injured so seriously that he subsequently died in hospital. Five of the seven contacts with chemicals reported were caused by an incident outside our direct control. At one of our sites, a cloud of cleaning steam containing hazardous substances was released during cleaning work performed by a company based in the Chemical Park. The five employees received paramedical treatment as a precaution and were admitted to the local hospital for one night for observation.

We process recordable workplace accidents and illnesses involving employees and contractors as part of the recordable incident rate (RIR) and lost time recordable incident rate (LTRIR), as per Standard 1904 issued by the U.S. Occupational Safety and Health Administration (OSHA). The RIR is calculated as a ratio of the total number of recordable workplace accidents and illnesses to hours worked (standardized to 200,000 working hours per year). The LTRIR is calculated as a ratio of lost time in days to the same hours worked figure. We calculate the number of hours worked by our employees based on the number of employees in the Group and multiply this figure at country level by the average working hours in the member states of the Organisation for Economic Co-operation and Development (OECD) or the International Labour Organization (ILO). If no OECD or ILO data is available, then we use the average number of hours worked at Group level.

The number of hours worked by our contractors' employees is calculated using a methodology that includes various categories for recording working hours, broken down by electronic or manual timekeeping or obtained using supplier invoices. The figure can also be calculated based on valid assumptions (estimates). At sites with fewer than 50 Covestro employees, no contractor working hours are counted, so these are not included in the incident rates calculation. We apply controls and other measures at the global level as well as individual site level to prevent possible errors in calculating contractor working hours.

In the fiscal 2022, we documented 33.1 million total hours worked (THW) for our employees (previous year: 31.8 million THW). For contractors, 17.5 million THW (previous year: 15.6 million THW) were reported. This results in the following data according to OSHA:

Work-related accidents¹

	2021	2022
Recordable incidents		
in relation to Covestro employees	53	69
in relation to contractor employees ²	21	36
Recordable incident rate (RIR)		
in relation to Covestro employees	0.33	0.42
in relation to contractor employees ²	0.27	0.41
Recordable incidents in connection with days lost		
in relation to Covestro employees	33	37
in relation to contractor employees ²	15	20
Lost time recordable incident rate (LTRIR)		
in relation to Covestro employees	0.23	0.22
in relation to contractor employees ²	0.19	0.23
Fatal injuries		
in relation to Covestro employees	0	1
in relation to contractor employees ²	0	0

¹ Includes work-related accidents and illnesses taking into account all fully consolidated companies, provided that they are part of the consolidation scope.

² Employees of partner companies contracted by Covestro whose accidents occurred on one of our company premises.

In the reporting year, the number of workplace accidents involving our employees went up by 16 to 69 (previous year: 53), increasing our employees' RIR by 0.09 points. The number of accidents involving employees of our contractors increased by 15 to 36 (previous year: 21), raising the RIR of our contractors' employees by 0.14 points.

The increase in manual work also led to a rise in the number of workplace accidents in the year 2022. A risk in this context is posed by the human factors of "skills" and "decisions." Based on analysis of the accidents, they contributed more than 70% to the rise in accident rates.

Hazard Avoidance

Repairs, inspections, and technical modifications frequently require work that is potentially hazardous. Such jobs are performed individually or pooled and performed at one time during plant downtimes, which are planned well in advance. A work permit process is applied here. In addition to a precise description of the work to be performed, this includes a hazard assessment and a determination of the required safety and protective measures. All individuals involved in the work are informed of these parameters and must confirm receipt of this information with a signature. The responsible facility, participating technical crews, and, if necessary, additional safety officers monitor adherence to the measures and safe work performance.

Environmental and Transportation Safety

We work continually toward maximum safety during transportation of our products. We report all incidents at all sites operated by Covestro worldwide in line with our internal directives. These are documented according to defined criteria such as quantity of loss of containment, material hazard class, degree of personal injury, and blocked transportation routes. In the case of certain hazardous materials, we record and categorize all leaks starting with as little as five kilograms, according to our Corporate Commitment. Global events on transportation safety are held at regular intervals. Here, corrective measures are developed and implemented based on actual incidents, and information is exchanged on tried-and-tested approaches.

Process and Plant Safety

We aim to ensure the safety of processes and plants in a way that avoids unacceptable risks to our employees, our neighbors, and the environment. We therefore conduct extensive, systematic safety assessments at regular intervals. Loss of Primary Containment (LoPC) is an early indicator for all Covestro plants, which is reported consistently throughout the world and is integrated into the Group's safety reporting.

Covestro applies the German Chemical Industry Association's (Verband der Chemischen Industrie, VCI) guidelines on documenting plant safety performance indicators. The reporting criteria are thus aligned with the updated and globally harmonized definition by the International Council of Chemical Associations (ICCA). An LoPC event comprises

- the release of chemicals classified according to the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) exceeding the defined volume thresholds within one hour,
- a reportable injury according to OSHA criteria to a Covestro employee or a contractor employee as a result of product release or the release of energy,
- the release of energy (e.g., fire, explosion) that leads to damage with direct costs totaling more than €2,500,
- an evacuation officially declared outside the plant.

We use the LoPC incident rate (LoPC IR) to determine the number of LoPC incidents per 200,000 TWH per year by Covestro employees and contractors. The volume thresholds defined by the ICCA for recording incidents are binding on its members and are therefore also applied at Covestro. We applied these volume thresholds at Covestro so that our statistics would be comparable within the chemical industry and the benchmark. Very low volume thresholds mean that seven less significant incidents are systematically documented and investigated as LoPC events. For instance, the volume threshold for chlorine is one kilogram. In the reporting year, our LoPC IR was 0.57 (previous year: 0.69).

Every LoPC incident as well as minor and near-miss incidents are carefully analyzed to determine their causes, and the results and corrective actions taken are publicized throughout the Group. The criteria (e.g., lower thresholds or nonhazardous substance releases) were selected so that even releases of substances or energy that have no impact on employees, neighbors, or the environment are systematically recorded. This contributes to maintaining the integrity of our facilities. The global exchange of experiences relevant to safety is intended to help maintain the existing high standard of procedural and plant safety within the company. Globally binding standard processes and their uniform implementation also contribute to this effort.

Information Security

In addition to the safety and security of employees and plants, information security and uninterrupted workflows and processes are particularly important to Covestro. This is why our safety strategy systematically focuses on meeting these targets. Covestro has established a central information security committee to ensure close consultation among the relevant departments (Corporate Security, Information & Operational Technology Security, including Cyber Security) and production. Security is already taken into account during system and software development (security by design) and Covestro's security requirements are based on international standards such as ISO 27001 and IEC 62443.

We use modern IT tools in continuous security monitoring processes to detect any attempts to attack our IT systems, and continually improve these tools. Monitoring is carried out by an internal team of security experts in our Security Operation Center (SOC) with the aim of detecting in real time any irregularities and suspicious events in our IT infrastructure that could also point to cyberattacks. We carefully analyze and assess such indications and, if necessary, appropriate countermeasures are taken promptly.

Further decision-making and management bodies focusing on risk, compliance, and crisis management as well as on information security management are firmly established at Covestro. A central anchor point of our security architecture is to raise awareness among employees and train them by conducting global campaigns and compulsory web-based training on topics such as phishing or the secure use of web browsers. In the context of migrating to a cloud environment, the underlying system design was audited by a recognized external consulting firm. Other risk-based security tests are carried out on a continual basis, as are unannounced security gap reviews (using techniques such as red teaming).

Covestro gets information on the general security situation, e.g., from security experts and by using the consultancy services of appropriate external providers, for example with regard to potential cyber threats (threat intelligence).

Data protection is a topic of key importance for Covestro; it is coordinated throughout the Group under the responsibility of the corporate Law, Intellectual Property & Compliance function.

→ See ["Compliance Management System."](#)

Environmental Impact of Own Operations

It goes without saying that, in line with our commitment to sustainable development, we always keep an eye on the environmental impact of our own operations. In accordance with our vision of becoming fully circular, we try to close material cycles. To this end, we also consider, for example, our own waste, which in turn plays a role in our efforts to reduce Scope 3 greenhouse gas (GHG) emissions.

→ See ["Circular Economy"](#) and ["Climate Neutrality."](#)

The emissions into the air, waste, and wastewater associated with our business activities are an integral part of our integrated Health, Safety, Environment, Energy and Quality (HSEQ) management system. Responsibility for this has been assigned to the head of the corporate Group Health, Safety and Environment (HSE) function, who reports directly to the Board of Management.

→ See ["Integrated Management System for Health, Safety, Environment, Energy, and Quality."](#)

Opportunities and risks associated with our operations are considered as part of Group-wide risk management.

→ See ["Opportunities and Risks Report."](#)

[Supplementary information >](#)

Air Quality

In addition to GHGs, Covestro's business activities result in other emissions into the air.

→ See ["Circular Economy"](#), ["Climate Neutrality"](#) and ["Production, Value Creation, and Safety."](#)

These other emissions into the air stem mainly from burning fossil fuels in order to generate electricity and steam. Emissions into the air are also recorded and analyzed as part of determining the Group's environmental impact, which is assessed annually in the environmental management process with the Chief Technology Officer (CTO).

Other important direct air emissions

	2021	2022
	1,000 metric tons p.a.	1,000 metric tons p.a.
CO	0.31	0.35
NO _x	0.62	0.55
SO _x	0.04	0.05
Dust	0.10	0.10
NMVOC ¹	0.16	0.17
ODS ²	0.0002	0.0002

¹ Non-methane volatile organic compounds (NMVOC).

² Ozone-depleting substances (ODS).

[< Supplementary information](#)

Water and Wastewater

Covestro takes a holistic view of water as a resource: We take not only our water usage and the related problems of water scarcity and quality into consideration, but also the wastewater we generate and the growing concern about plastic waste in the oceans. This is underscored in our Corporate Commitment on Water.

+ [Additional information is available at: www.covestro.com/en/sustainability/service-downloads/policies-commitments](http://www.covestro.com/en/sustainability/service-downloads/policies-commitments)

In the reporting year, we again assessed risk at our production sites to examine water availability, quality, and accessibility. In our production activities, we strive to use water several times and to recycle it. Covestro primarily generates wastewater from once-through cooling systems and production. All wastewater is subject to strict monitoring and analysis according to the applicable legal regulations before it is discharged into disposal channels.

[Supplementary information >](#)

Water Usage

The availability and accessibility of clean water is vital for our production sites. As part of our Corporate Commitment on Water issued in the year 2017, we initiated and have continually refined a global risk assessment of all of our production sites covering water availability, quality, and accessibility.

The method for assessing areas with water stress was revised in the year under review. As recommended by the Global Reporting Initiative (GRI), areas with water stress were determined using the Aqueduct Water Risk Atlas of the World Resource Institute, based in Washington, D.C., (United States). In addition to physical risks such as water stress, our water risk assessment also includes potential regulatory risks at our production sites. Regulatory risks comprise, for example, access to drinking water or the Drinking Water Directives and other legal requirements. We also use other recognized tools to this end, such as the Water Risk Filter of the World Wide Fund for Nature (WWF). Sites in current areas with water stress account for 0.2% of our total water consumption.

In order to establish a suitable format to enhance understanding of the local and future water situation, a water dashboard, which also covers physical water risks, was created in the reporting year and shared with our production sites. By analyzing the local water management at the sites, risks can be spotted at an early stage and potential for improvement can be identified. To drive water management and water protection, we have also set up a platform for regularly exchanging information and sharing best practice.

Use of water in the year 2022 (million cubic meters)

Sources of water		Water usage		Water discharges	
	Total for Covestro				
	from WSR ¹				
Surface water	124 (53%)	0.00 (1%)	Cooling water ⁴ 199 (86%)	Once-through cooling water	185 (76%)
Boreholes/springs	1 (1%)	0.10 (23%)	Recycled and/or reused water from cooling and production 7 (2%)	Losses due to evaporation from cooling water circuits	14 (6%)
External water suppliers	99 (42%)	0.34 (74%)		Production ⁵ 34 (14%)	Process wastewater with subsequent treatment
Other sources ²	9 (4%)	0.01 (2%)		Process wastewater w/o subsequent treatment	14 (6%)
Total³	233	0.45	233	243	

¹ Areas with water stress taking into account overall physical risks such as water shortages, and water scarcity.

² E.g., rainwater used.

³ Differences between the volumes of water drawn and discharged can be explained in part through unquantified evaporation, leaks, water used as a raw material in products, condensate from the use of steam as a source of energy, and unused rainwater.

⁴ Also includes water for irrigation purposes.

⁵ Total from production processes, sanitary wastewater, and rinsing and purification in production.

At 233 million cubic meters, overall water usage in the Group is below the previous year's figure. One reason for the decline is a reduction in the amount of water used in the plants along the Lower Rhine due to scaled-back production activity. The majority of the total volume of water used by Covestro (76%) is once-through cooling water. This water is only heated and does not come into contact with products. It can be returned to the water cycle without further treatment in line with the relevant official permits. The total volume of once-through cooling water was 185 million cubic meters in the reporting year.

Some of the water used can be recycled in various ways. For instance, recycled water can be used again in the same process multiple times, e.g., for cleaning or cooling purposes. It is also possible to reuse water from upstream processes in subsequent steps. This permits corresponding quantities of fresh water to be conserved each year. In the reporting year, the volume of recycled water used stood at 7 million cubic meters (previous year: 6 million cubic meters).

We calculate our total water consumption according to GRI Standard 303-5 (2018), which involves determining the difference between total water used and total water discharged. This resulted in calculated consumption (including, e.g., evaporation losses) of 4 million cubic meters.

The volume of process wastewater saw a year-over-year increase of 15%. The proportion of process wastewater purified or otherwise treated (e.g., incinerated) at a wastewater treatment plant operated by Covestro or a third party amounted to 68% worldwide. Following an analysis, another 32% was categorized as environmentally safe and returned to the water cycle. Evaporation losses went up 26% in the reporting year to 14 million cubic meters.

Our goal is to minimize wastewater emissions that depend largely on our production volumes and the current product portfolio, as much as possible.

Emissions into water

	2021	2022
	1,000 metric tons p.a.	1,000 metric tons p.a.
Phosphor	0.03	0.03
Nitrogen	0.29	0.18
TOC ¹	0.55	0.56
Heavy metals	0.0056	0.0036
Inorganic salts	737	781

¹ Chemical oxygen demand (COD), calculated based on total organic carbon (TOC) values: 1.68 (TOC × 3 = COD).

Since the year 2021, Covestro has been involved in the collaborative "RIKovery" project, which is sponsored by the German Federal Ministry of Education and Research (BMBF) and drives salt water recycling activities. Over the three-year project term, Covestro is working with additional industrial, plant engineering, and research partners to achieve goals including taking the next technological step to increase the circular usage of process wastewater. The goal is to further increase concentrations and reduce the amount of energy required so that even more salt and water can be recovered. On the back of initial positive result, pilots of the technologies are now being prepared and are expected to be launched next year.

[< Supplementary information](#)

Waste

From an economic considerations perspective, Covestro's manufacturing processes apply a maximum of efficiency when it comes to the use of materials; compared with other chemical companies, these result in relatively small volumes of waste. We observe and evaluate our manufacturing processes on an ongoing basis to minimize material consumption and disposal volumes as much as possible. This is achieved by safe disposal channels with separation according to the type of waste and economically expedient recycling processes. However, production fluctuations, building demolition and refurbishment, and land remediation can also influence waste volumes and recycling paths. In fiscal 2022, the total volume of waste we generated decreased, mainly due to the general decline in production and the resulting drop in the volume of production-related waste. We determine specific opportunities for waste reduction with targeted projects and put these into practice within the context of our existing manufacturing processes. For instance, in the manufacturing process for our toluylene

diisocyanate (TDI) product, our Dormagen site began testing a new procedure that significantly reduces the resulting process waste volumes in the year 2019. The insights gained from this project can be transferred to additional plants at other production sites. Our large-scale TDI production facility in Shanghai (China) is currently being equipped with this technology after a pandemic-related break.

Covestro also supports the reuse and treatment of its materials in accordance with economic and environmental criteria. Some of the waste created by our production processes with a high heating value is burned as fuel to generate steam for our production facilities.

Sustainability plays an increasingly vital role with regard to the purchasing of packaging materials. We have implemented an approach to address this: When procuring packing materials, Covestro reviews in principle whether and to what extent used or reconditioned packaging can be used in the place of new packaging. For instance, Covestro uses post-consumer regrind plastic barrels for waste transportation. Drums made of recycled plastic replace plastic drums from virgin material. Thus, Covestro uses fewer raw materials, reduces emissions, and has established the initial building blocks for a circular economy in the area of transportation and packaging.

Covestro also supports initiatives such as Operation Clean Sweep (OCS) that focus on preventing plastic particles from entering waterways and oceans. We have introduced global measures to minimize the loss of plastic pellets on the way from production to the finished product at our customers' locations. Following the integration of the Resins & Functional Materials (RFM) business acquired from Koninklijke DSM N.V., Heerlen (Netherlands), the next step now is to evaluate the potential relevance for OCS and implement any measures accordingly.

The Plastics Europe association is in the process of enhancing the OCS program. All member companies are now required to take part in Operation Clean Sweep. Covestro started work on a proposal for an external certification system for the entire plastics value chain in cooperation with Plastics Europe and other members in the fiscal year 2019. The initial test runs were held in the year 2021, and the system is being rolled out to Plastics Europe members starting in fiscal 2022. Certification of the relevant sites is now also mandatory for all member companies.

Covestro had already added the topic of OCS to its HSEQ certifications in the year 2020. The next step will be to review and assess the measures, which were previously voluntary, and adapt them to the new certification requirements.

[Supplementary information >](#)**Waste and Recycling**

In nearly all countries, the law stipulates exhaustive reporting on waste volumes and waste streams, a requirement complied with accordingly by Covestro's sites. In Germany, for example, there are waste-tracking procedures between the source of the waste and its disposal that enable end-to-end traceability of the waste flows. In fiscal 2022, we continued to harmonize our global waste data reporting. We aim to keep comparable the waste volumes generated at our sites around the world, but due to local legislation, this is not always possible. In particular the disposal of hazardous waste is subject to local definitions and regulations. Based on this information, we prepare and evaluate our annual waste report.

Waste generated

	2021	2022
	1,000 metric tons p.a.	1,000 metric tons p.a.
Total waste generated	264	254
Non-hazardous waste generated	75	74
Hazardous waste generated ¹	189	180
of which hazardous waste from production	184	174

¹ Definition of hazardous waste in accordance with local laws.

Waste by means of disposal

	2021	2022
	1,000 metric tons p.a.	1,000 metric tons p.a.
Total volume of waste treated¹	264	256
Recovery	205	189
recycled waste	61	57
thermally recycled waste (with energy recovery)	144	132
Disposal	48	55
incinerated waste (without energy recovery)	33	31
hazardous waste removed to landfill	3	5
nonhazardous waste removed to landfill	12	19
Other²	11	12

¹ A variance between the volume of waste generated and waste disposed of may arise due to the different times the waste is generated or disposed of and any resulting internal temporary storage.

² Disposal method cannot be unambiguously allocated to the above disposal/recovery methods, e.g., chemical-physical waste treatment.

[< Supplementary information](#)

Sustainability in the Supply Chain

Covestro regards adherence to sustainability standards within the supply chain as a fundamental factor in value creation and an important lever for minimizing risks. Both current and new Covestro suppliers must meet not only economic standards but also social, ethical, and environmental standards as well as those related to corporate responsibility. Our expectations are defined in Covestro's Supplier Code of Conduct, the basis for our collaboration with suppliers; the Code is available online in 13 languages. The Code is derived from the principles of the UN Global Compact and our Corporate Commitment on human rights. It is integrated into the electronic ordering systems and contracts across the Covestro Group. New and renewed supply agreements in particular generally contain special clauses requesting that suppliers adhere to the sustainability requirements outlined in the Code of Conduct and entitling Covestro to verify compliance. Working conditions and health effects on people working in the supply chain are particularly important to us, which is why they are a key topic of our cross-functional Human Rights Task Force. Although the risk analysis conducted there as part of human rights due diligence focuses on direct suppliers, it also considers the upstream supply chain, especially if there are specific allegations. Conflict minerals are one area relevant to human rights that we prioritize. They include, e.g., tin, tungsten, tantalum, and gold (3TG) from conflict or high-risk regions. Conflict minerals can enter our company's products through the upstream supply chain. To minimize the risk of including conflict minerals in our production processes, our requirements in this regard are communicated in our Supplier Code of Conduct.

→ See "Human Rights."

+ Additional information is available at: www.covestro.com/en/company/profile/procurement/sustainability-in-procurement/supplier-code-of-conduct

Covestro has set ambitious measurable targets through 2025 aimed at systematically promoting sustainability in supplier management. All suppliers must comply with our code of conduct, which they commit to by accepting the conditions of our purchase orders or contracts. In addition, relevant suppliers with a regular purchasing value exceeding €1 million per year are assessed. In the year under review, 90% (previous year: 93%) of our total purchasing value was attributable to these target-relevant suppliers. They comply with Covestro's sustainability requirements by meeting the minimum result as defined by us in the supplier evaluations described below. In addition, we work closely with our strategically most important suppliers to improve their sustainability performance. We have also incorporated this approach into our sustainability goals. In the reporting year, we added a risk-based approach to our goals. A risk analysis considers all suppliers, irrespective of purchasing value, on the basis of industry and country risks. Additional measures can be taken for any high-risk suppliers identified.

Evaluation Methods and Processes of the Together for Sustainability (TfS) Initiative

Covestro is a member of Together for Sustainability AISBL, Brussels (Belgium), a joint initiative undertaken by the chemical industry that now includes 40 companies. This industry-led initiative pursues the goal of establishing a program of global standards for responsibly sourcing goods and services and standardizing supplier evaluation methods worldwide. Covestro supports all criteria by the TfS initiative concerning the areas of ethics, labor & human rights, health and safety, and the environment.

As a member of TfS, Covestro is responsible for monitoring and auditing the sustainability performance of its suppliers. TfS supports this effort by providing the infrastructure for online assessments and on-site audits of suppliers by third parties. The results of these supplier evaluations can be shared via an online platform. During the reporting year, Covestro once again played an active role in all TfS work streams in designing and improving the TfS program and the associated evaluation process. Since April 2022, the head of the corporate Group Procurement function has also co-chaired TfS workstream 5, which focuses on Scope 3 emissions. This working group has published a chemical-sector-specific guideline for calculating product carbon footprints. This guideline harmonizes the methods for calculating product carbon footprints and can be applied to the vast majority of chemical products, allowing companies to compare and effectively manage Scope 3 greenhouse gas (GHG) emissions from the upstream value chain. Suppliers are also encouraged to take measures to reduce their GHG emissions to make the industry more sustainable.

In order to avoid duplication of audits, increase acceptance by suppliers, and save resources, TfS and the European Chemical Industry Council (Cefic) have entered into a partnership aiming to work jointly on audits of logistics service providers in particular. Cefic uses the SQAS (Safety & Quality Assessment for Sustainability) system for this purpose, a standardized assessment process for European logistics service providers and chemicals distributors that covers quality, safety, environmental, Responsible Care™, and corporate social responsibility criteria. The SQAS reports prepared by Cefic are recognized by TfS as equivalent to a TfS audit report.

Using a standardized TfS assessment process, Covestro evaluates whether the suppliers maintain the required sustainability standards. A structured prioritization process is then carried out to select the suppliers to be evaluated and either an online assessment or an on-site audit initiated for these suppliers – provided that there are no current results. In prioritizing the suppliers for these evaluations, Covestro considers a combination of country and commodity risks. The risk assessment for country and material groups that we use for our risk analysis is based on recognized external sources.

EcoVadis SAS (EcoVadis), Paris (France), an established external provider accredited by TfS, conducts the online assessments. It evaluates the degree to which suppliers' business practices are aligned with sustainability principles. The questionnaire suppliers complete for the online assessment is based on internationally recognized sustainability standards and includes 21 sustainability criteria grouped into the categories of environmental protection, labor and human rights, ethics, and sustainable procurement. The section on sustainable procurement also inquires about the extent to which the sustainability standards of upstream suppliers are considered. Certain suppliers that do not engage in wholesale trade and do not employ more than 25 people receive an abbreviated questionnaire that does not address the topic of sustainable procurement.

The questionnaire is dynamically adapted by EcoVadis depending on factors such as the industrial sector, company size, and country risk. Suppliers must document their responses to the questionnaire with corresponding supporting documents. The EcoVadis analysts assess supplier responses and supporting documents under consideration of international standards, such as the UN Global Compact, and consolidate the data into a scorecard available online that shows results by category. This scorecard information includes a detailed overview of identified strengths and areas for improvement as well as a weighted overall result for the suppliers analyzed.

External, independent auditors trained and accredited by TfS or Cefic conduct on-site audits of selected companies – and follow-up audits, if necessary, based on defined sustainability criteria. For the purpose of monitoring the quality of the audits, the initiating TfS member takes part in audits selected on a random basis and evaluates them using a standardized checklist.

Covestro analyzes and documents the online assessments and on-site audits. The number of supplier evaluations conducted and the overall results are reviewed regularly and reported to the Chief Technology Officer. In the event of noncompliance with our sustainability requirements, we work with suppliers to define specific improvement measures and corresponding targets, and Covestro constantly verifies the implementation of the required improvements.

Despite the continuing coronavirus pandemic and its effects on our suppliers, the number of supplier evaluations conducted was up from the previous year, totaling 969 in the reporting year (previous year: 807).

Key data from the sustainability evaluations of Covestro's suppliers¹

	2021	2022
Supplier evaluations conducted in the reporting year	807	969
through online assessments	788	954
through on-site audits	19	15
Total supplier evaluations conducted	1,690	1,628
through online assessments	1,585	1,544
through on-site audits	105	84

¹ Online assessments (conducted by external, independent, TFS-accredited provider EcoVadis) and on-site audits (conducted by external, independent, TFS- or Cefic-accredited auditors) of Covestro's suppliers, both initiated by Covestro and shared within the TFS initiative, are taken into account. Only assessments of our active suppliers that are no more than three years old are included.

Supplier Evaluation Results*

At the end of fiscal 2022, the number of supplier evaluations whose results met our sustainability requirements amounted to 1,236 (previous year: 1,211). Of these supplier assessments, 304 involved our target-relevant suppliers, who account for 80% (previous year: 80%) of our target-relevant purchasing value. Furthermore, 61% of our target-relevant suppliers who underwent a repeat assessment in fiscal 2022 have improved compared with their previous results.



OUR SUPPLIER MANAGEMENT GOAL



STATUS 2022

80%

of suppliers

2021: 80%

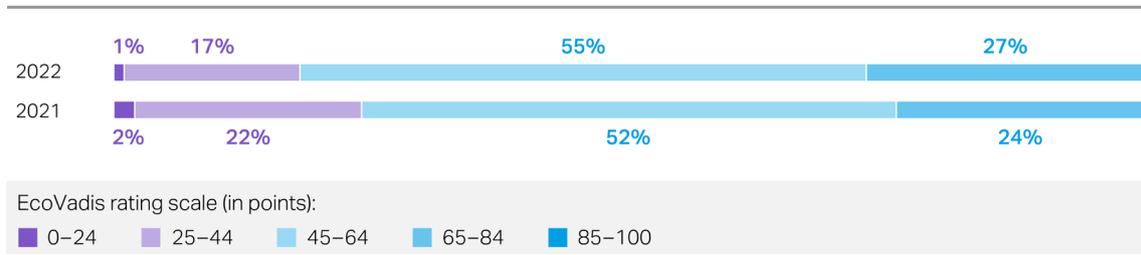
2020: 79%

All of our suppliers with regular purchasing volumes of more than €1 million per year are expected to comply with our sustainability requirements by the year 2025.

In the year 2022, assessment results considered critical by Covestro were identified for one target-relevant supplier (previous year: seven); that is, this supplier failed to meet the required minimum result by a significant margin. Covestro responds to such infractions with specific action plans and demands that the suppliers in question implement appropriate corrective measures; supplier assessments will be conducted in future to verify compliance.

The share of online assessments in which suppliers met the minimum result we defined (45 out of 100 possible points) was 82% for the online assessments conducted in the year under review (previous year: 77%). Thanks to our joint efforts toward continually improving our sustainability performance as well as training opportunities offered, the results of the online assessments improved year over year.

Overall results of the online assessments completed in the reporting year



* The results provided by the external providers EcoVadis SAS, Together for Sustainability AISBL, and the European Chemical Industry Council (Cefic) were not subject to the audit by KPMG AG Wirtschaftsprüfungsgesellschaft, Düsseldorf (Germany).

The share of on-site audits in which suppliers met the minimum result we defined (45 out of 100 possible points) was 93% for the on-site audits conducted in the year under review (previous year: 100%).

None of the supplier assessments conducted revealed any indication of child or forced labor. In addition, Covestro had no cause to terminate a supplier relationship in the reporting year or in the previous year solely on account of an externally determined result or a serious sustainability deficit.

[Supplementary information >](#)

Worldwide Supplier Evaluations through the Tfs Initiative*

In the year 2022, the now 40 members of Tfs evaluated the sustainability performance of a total of 8,386 suppliers through online assessments and performed 378 on-site supplier audits.

All the results from the online assessments and on-site audits are available to members of the initiative on an online platform, thereby enabling continual monitoring of suppliers with a view to improvements. The Tfs initiative also benefits suppliers because their standardized evaluations can be viewed by all Tfs members. This means they do not have to complete multiple evaluation surveys from various (potential) customers.

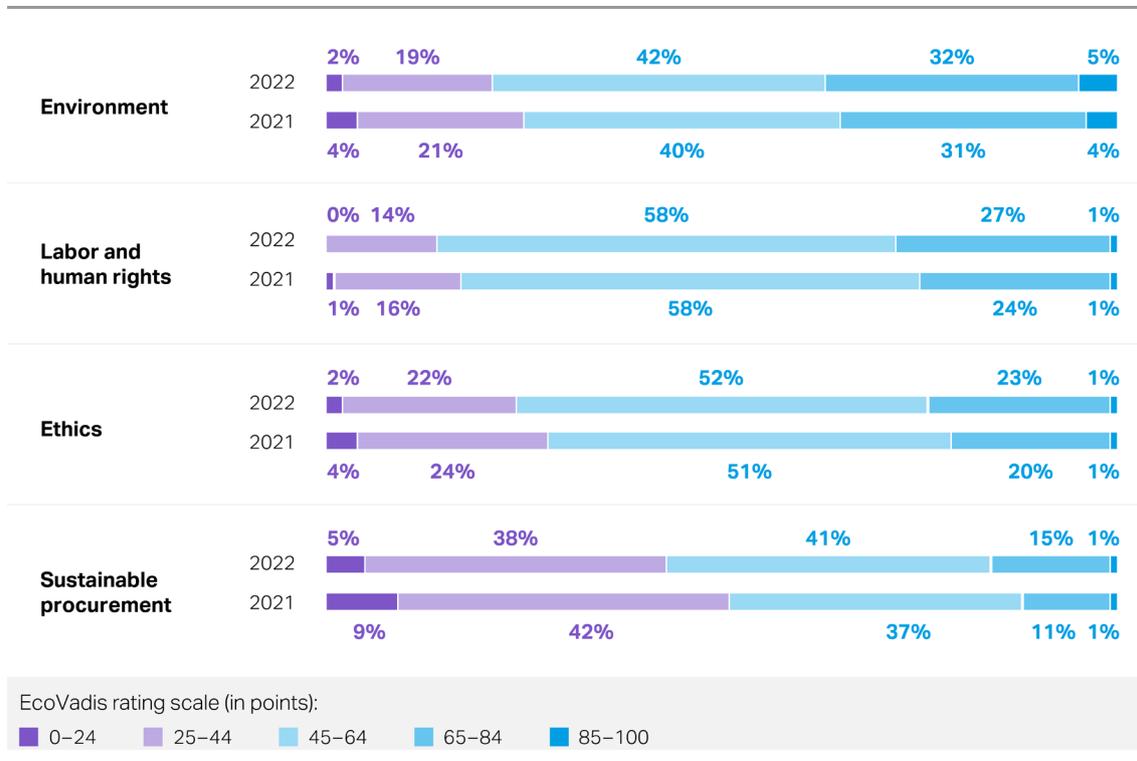
In October 2022, Covestro hosted a Tfs North America Committee meeting in Pittsburgh, Pennsylvania (United States), which focused on issues such as corporate governance, sustainability evaluations and audits, developments in the working group, communications, and GHG emissions.

+ Additional information is available at: www.tfs-initiative.com

Detailed Results of the Supplier Evaluations*

We regularly analyze the results of the online assessments in the areas of environment, labor and human rights, ethics, and sustainable procurement. The results of the assessments carried out in the previous year and the reporting year are summarized in the following chart:

Detailed results of the online assessments completed in the reporting year



* The results provided by the external providers EcoVadis SAS, Together for Sustainability AISBL, and the European Chemical Industry Council (Cefic) were not subject to the audit by KPMG AG Wirtschaftsprüfungsgesellschaft, Düsseldorf (Germany).

The detailed results in all areas indicate a positive trend (increased share of online assessments reaching a score of 45 or higher).

In analyzing the supplier evaluations for the year 2022, we identified deviations from our sustainability requirements in all listed areas. This was due to factors including missing documentation of policies and measures relating to waste, water, and environmental management as well as a lack of occupational safety measures such as insufficient or no signage installed at emergency exits or exceeding the weekly working hours according to the TfS standard.

[< Supplementary information](#)

Sustainability Training and Dialogue

For Covestro, it is important for our own procurement staff, in particular, to have a comprehensive understanding of the significance of sustainability in the supply chain. Awareness of this issue was raised among employees again in fiscal 2022 in company-wide sustainability training plus region- and country-specific training on evaluation methods and processes.

During the reporting year, we continued to promote the implementation of four strategic principles in procurement (reliability, sustainability, cost transformation, and innovation). Moreover, our regional program management in the EMLA, NA, and APAC regions is working on permanently improving our sustainability program.

→ [See "Procurement."](#)

Dialogue and close collaboration are essential in enabling suppliers to successfully comply with Covestro's sustainability requirements. We therefore offer our suppliers a range of opportunities for training and dialogue. This provides the foundation for building reliable relationships and enables us to identify and eliminate issues at an early stage. Continually improving our suppliers' sustainability performance is a priority for Covestro and is supported by the TfS initiative, which regularly organizes supplier days and promotes further training, among other activities. The TfS Academy was launched in April 2022, a platform for buyers in the chemical industry and their suppliers on which they can expand and deepen their knowledge, keep up to date with trends, and make their contribution to creating more sustainable, more innovative, and more resilient supply chains. The TfS Academy currently provides access to more than 335 courses in ten languages.

+ [Additional information is available at: www.tfs-initiative.com](http://www.tfs-initiative.com)

Social Responsibility

Human Rights

Human rights are the foundation of Covestro's social responsibility efforts. We are committed to respecting and safeguarding human rights on the basis of the United Nations (UN) Guiding Principles on Business and Human Rights and the Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy of the International Labour Organization (ILO). In various working groups in industry associations, Covestro advocates for compliance with various national action plans and laws on corporate human rights due diligence. As a company, we clearly take responsibility for respecting human rights in all of the Covestro Group's activities and throughout global supply chains and value chains.

In the year under review, the Board of Management appointed the Chief Sustainability Officer (CSO), who also heads the corporate Sustainability and Public Affairs function, as Group Human Rights Officer. In their function, the Group Human Rights Officer, who will report directly to the Board of Management, will be responsible for monitoring Covestro's risk management processes related to human rights. Established in the year 2020, our cross-functional Human Rights Task Force supports the Group Human Rights Officer in fully integrating human rights requirements into our company's activities. To ensure that we pursue a harmonized approach to managing human rights across the Group as a whole, in the reporting year designated individuals were nominated as caretakers in the business entities. They serve as points of contact for our employees on issues relating to human rights in connection with our activities.

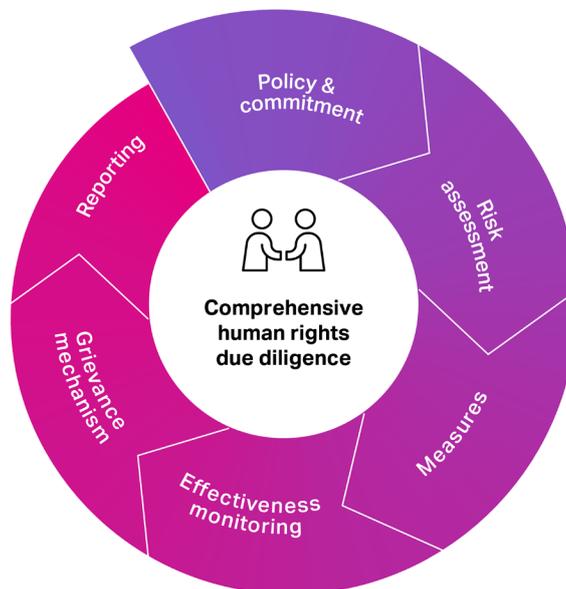
The Task Force, under the leadership of the Group Human Rights Officer, has permanent members from the following corporate functions: Sustainability and Public Affairs, Group Health, Safety and Environment, Group Procurement, Human Resources, Law, and Intellectual Property & Compliance. A broader group of professionals from Quality Management, individual business entities, along with Risk Management employees also participate. The responsibilities of the Task Force include developing and implementing the comprehensive management approach, systematically assessing risks, prioritizing and monitoring the implementation of individual measures, planning and conducting trainings, preparing reports for the Board of Management, and communicating about this issue in general. The individual corporate functions are responsible for, among other things, identifying and assessing risks and developing measures. These measures are designed and implemented in the segments and corporate functions in consultation with the Task Force.

Comprehensive Human Rights Due Diligence Process

Covestro has established a comprehensive due diligence process to safeguard human rights in our business activities. The overarching management approach is based on the UN's Guiding Principles on Business and Human Rights, the core elements of the German Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains, which will enter into force in 2023, and the French law on human rights due diligence. We regularly monitor other national and international laws and legislative initiatives such as the proposed European Union (EU) Corporate Due Diligence Directive.

This overarching management approach is a continual process comprising the six core elements described below.

Human rights due diligence process



Policy and Commitment

The principles of our human rights due diligence are delineated in various Corporate Commitments, Group regulations, and in our Supplier Code of Conduct. In these documents, we have specified key international conventions and principles as the basis of our conduct. A key component of our commitment is zero tolerance toward child labor, forced labor, modern slavery, and human trafficking. In the reporting year, we once again made a public statement on slavery and human trafficking ("Corporate Commitment against Slavery and Human Trafficking") to underline our position. Our corporate commitment to safeguarding human rights is an integral part of our operating policies and procedures and is published on our website. By publishing this commitment, we state our clear expectation that our employees and business partners around the world conduct themselves in accordance with these principles.

+ Additional information is available at: www.covestro.com/en/sustainability/service-downloads/policies-commitments

Risk Analysis

The starting point for our human rights due diligence is a risk analysis that identifies and assesses actual or potential negative impacts on human rights that Covestro could cause, either directly or indirectly, as a result of its business activities. Potentially affected persons could include Covestro's own employees, contractors, suppliers, customers, consumers, or even neighboring communities. Covestro conducts a comprehensive risk analysis every three to four years. The last one was in the year 2019. Between those analyses, relevant information obtained from internal and external sources, such as from Covestro's grievance mechanism, is taken into account by the Human Rights Task Force. No grievances were reported in the year 2021 that could have been analyzed in the human rights-related risks analysis conducted in the year 2022. The comprehensive and ongoing risk analysis covers all of Covestro's own sites, the supply chain, as well as the use phase and end-of-life of our products.

The comprehensive risk analysis first identifies all potential human rights risks. The potential risks are then discussed with selected business entities and corporate functions and prioritized for further management, depending on the severity of the potential human rights violation. In this process, potential human rights violations assigned the highest degree of severity, based on the scale, scope, and irremediability of the potential violation, always take top priority for us. The human rights focal areas we have identified primarily relate to working conditions and health effects on workers and contractors at Covestro's sites and in the supply chain. Other identified focal areas include the possible effects of our operations on the communities surrounding our sites, the potential impact of collecting and processing waste from our products, and the use of Covestro products in sensitive applications.

In the reporting year, the human rights risk owners at Covestro, who assumed responsibility for the human rights-related focal areas in the year 2021, prioritized the human rights-related risks for further management in the human rights management system.

Measures

In accordance with the risk-based approach recommended in the UN Guiding Principles, Covestro's human rights risk owners assess the suitability of existing preventive measures where Covestro may cause, contribute to, or is directly linked to negative impacts on human rights. Many measures in the areas of health and safety, product stewardship, compliance, human resources, and sustainable supplier management have long been integrated at Covestro.

→ See "Employees," "Health and Safety," "Product Stewardship," "Compliance," and "Sustainability in the Supply Chain."

The cross-functional Human Rights Task Force provides regular information about human rights in the company and advises corporate functions on how to fully integrate the human rights requirements. In the year under review, the human rights requirements and Covestro's human rights management approach were presented to, among others, the management bodies of all Covestro's business entities. In addition, human rights-related training was given to the human rights caretakers in the business entities.

Effectiveness Monitoring

Appropriate qualitative and quantitative indicators along with internal and external sources are used to assess Covestro's human rights measures and to review their effectiveness in preventing negative impacts on human rights. In the year 2022, the selected corporate functions reported on a monthly basis to the Human Rights Task Force on the implemented measures and their effectiveness. The effectiveness of measures and indicators was assessed in the reporting year.

Grievance Mechanism

Covestro expressly encourages reporting of suspected human rights violations in the Group as well as at suppliers' companies. We use a whistleblower tool for reporting violations in the supply chain, which consists of a worldwide hotline and an online tool. Covestro therefore enables employees and third parties to anonymously inform us of potential violations at our suppliers. We investigate potential cases of suspected human rights violations by following a defined process based on the involvement of potentially affected stakeholders. No confirmed cases of human rights violations were reported through the Group-wide grievance mechanism in fiscal 2022.

→ See "Compliance."

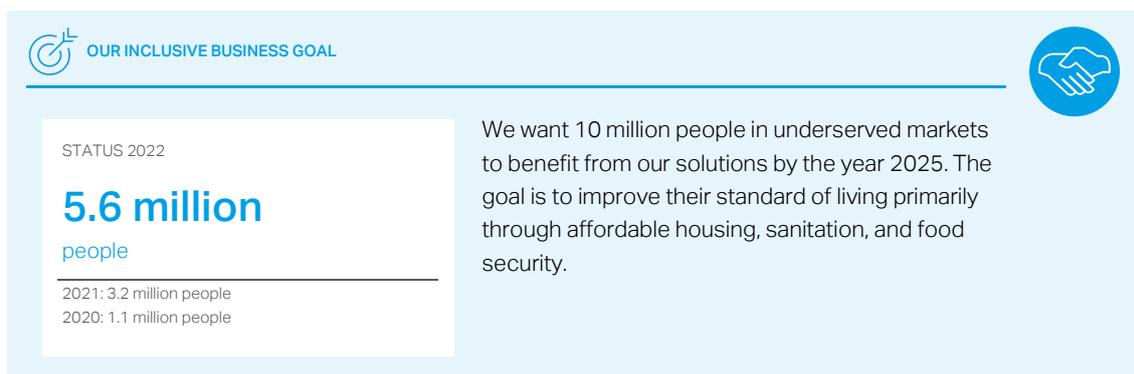
Reporting

Every year, Covestro communicates its human rights activities to the public in its Group Management Report. Moreover, the Group Human Rights Officer and the Human Rights Task Force report regularly (no less than once a year) to the Board of Management on the status of human rights due diligence and the systematic integration of these requirements into Covestro's management systems. The Sustainability Committee of the Supervisory Board was also updated on the management system in the year under review.

Inclusive Business

Our Inclusive Business activities are another aspect of our sustainability management. This business model focuses specifically on unmet needs of communities in underserved markets. Our collaborative approach offers scalable solutions to reach as many people as possible in these markets. We collaborate with our customers as well as governmental and nongovernmental organizations to develop affordable solutions based on our technologies and products to benefit underserved communities and regions by improving living conditions. Our employees concentrate on three regions – the Indian subcontinent, Southeast Asia, and Eastern and Southern Africa – with the main goal of implementing innovative solutions in the fields of food security, drinking water management, and biosolids management.

In terms of food security, one of the areas we are actively engaged in is to fight against post-harvest losses, which are all losses that occur after the harvest (e.g., as a result of improper storage). They are an economic challenge particularly for smallholding farms. Solar greenhouse dryers and cold storage, which are developed with industry partners within Inclusive Business, contribute substantially toward improving the financial situation of these farms by reducing post-harvest losses. In addition, these innovative solutions help develop new sales markets – for instance, in Ethiopia or Tanzania – for Covestro. We define drinking water management as the use of solar-powered water treatment plants that are able to turn any source of water into drinking water. Biosolids management is another key action area. Biosolids are defined as human feces processed in drying facilities, which can then be used as organic fertilizer in agriculture. The solar drier technology used in our work on food security is also deployed in this process.



We want our solutions to improve the lives of 10 million people in underserved markets by the year 2025. Covestro defines this figure by including people who potentially benefit from our activities as part of their work or daily life. These individuals include people working on smallholdings and their families, school children, and other people who are positively impacted by completion of our projects or installation of our solutions.

Participating governmental and nongovernmental organizations helped us collect the data. The data collected as part of a defined process is reviewed at local and global level, and the processes are continuously refined. In fiscal 2021, the methodology for calculating the number of people reached was optimized. Instead of calculating the number of persons reached once, immediately after implementing our Inclusive Business solutions, we have since the year 2021 determined the cumulative number of all people reached over the years since the solution was installed. Covestro's Board of Management is informed annually about these global activities.

By the end of the reporting year, we reached 5.6 million people with inclusive business solutions (previous year: 3.2 million people). This trend is attributable to the year-on-year rise in the number of new drying facilities installed in the area of biosolids management.

In the year 2022, we once again concentrated on collaboratively developing new, affordable solutions with partners who passed a due diligence review in advance. These solutions are financed by governmental and nongovernmental organizations. Our work in consortia – always preceded by our standard due diligence process for new partners – also ensures that the relevant segments of the population profit from the jointly developed end products.

Indian Subcontinent

In the Indian Subcontinent, our Inclusive Business activities concentrated on biosolids management in the reporting year. Under the Clean India Mission, an initiative of the Indian government, we installed 11 solar dryers for treating human feces in the Indian states of Andhra Pradesh, Tamil Nadu, and Karnataka. Studies undertaken jointly with the Consortium for DEWATS Dissemination (CDD) Society, a nongovernmental organization based in Bangalore (India), on the drying kinetics of feces and with Tamil Nadu Agricultural University on processing biosolids and their subsequent use as an organic fertilizer made it possible to harness the food cycle holistically – from production to the reuse of human biosolids. At the same time, this is an important step in the fight against rapidly increasing water pollution with human feces. A joint study planned with the Administrative Staff College of India (ASCI) is intended to capture the data required from biosolids processing. This data is intended to assist in drafting statutory regulations on biosolids treatment. For its work on the safe treatment of human feces, ASCI also honored Covestro with the WASH Stewardship Award.

We continued our food security activities with increased intensity, including the establishment of a new digital platform. Once the platform has gone live, which is planned for the second quarter of 2023, it will provide information on innovation, potential partnerships, financing opportunities, and agricultural products. The platform is intended to enable all people involved in the post-harvest value chain to support Indian farms in optimizing food security efforts.

As part of our partnership with CEPT University in Gujarat (India), Covestro installed a solar dryer in Satara, Maharashtra (India) for the treatment of biosolids. Another partnership with the state government of Telangana led to the installation of further drying equipment in the cities of Nizamabad and Nirmal.

Southeast Asia

Our Inclusive Business activities continued in Southeast Asia as follows in the reporting year: Specifically, our initiative in Vietnam launched in previous years under the GREAT program by the Australian Department of Foreign Affairs and Trade remained active. With the help of the Vietnamese government, five more solar dryers were installed in Son La province in the reporting year. By the end of the year 2022, the program had benefited more than 2,500 people, mainly women from Thai minorities in northwest Vietnam.

Covestro is engaged in promoting food security projects in the region, for instance by giving support to our partners in securing financing. The project finance granted by the Agri Innovation Fund of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Bonn (Germany), to our project partners in Cambodia, and Vietnam in the previous year was used successfully for the installation of solar dryers. The use of solar dryers in coffee cultivation in the Vietnamese province of Son La reduced drying times for coffee beans while enhancing drying efficiency.

Eastern and Southern Africa

As in the previous year, the main focus in Africa was on food security in 2022. In the reporting year, we were able to continue our partnership with Tshwane University of Technology in Pretoria (South Africa). The students at the university are working on various research projects that use solar greenhouse dryers with a focus on alternative methods for drying traditional African fruits. Furthermore, our collaboration with Community Forest International and the installation of the solar dryer system financed by the European Union in Mtambwe Dayaauf (Tanzania) also continued. Following the successful commissioning of the dryer supplied, two additional dryers were delivered in the reporting year, whose use is intended to benefit other local spice growers and their families. The planned installation is expected to be completed in the first quarter of 2023. As announced in the Group Management Report 2021, the agreement with GIZ under the BMZ's develoPPP program was signed in the year 2022 and its operational implementation started as contractually agreed. After initial drying units are successfully deployed in various regions of Ethiopia, this program will support craft-based businesses with technology transfer so that they can manufacture dryers themselves. The first six dryers have already been imported into Ethiopia. Once they have been installed and commissioned as planned in the first quarter of 2023, the use of imported facilities will not just be for demonstration purposes: It is intended to help coffee growers demonstrably improve their harvest by increasing the quality of the coffee beans. Training of the local population in production and use of the facilities are part of the project.

REPORT ON ECONOMIC POSITION

Economic Environment

Global Economy

In fiscal 2022, the Russian war against Ukraine fundamentally changed the geopolitical landscape and had an impact on the global economy. The conflict led to a massive increase in prices for sources of energy and certain raw materials, higher inflation, as well as slower global economic growth. Moreover, China's zero-COVID policy, which the country pursued until the beginning of December, and the resulting lockdowns slowed down regional and global economic performance in the year 2022. In contrast with significant growth in the previous year, the global economy expanded at a rate of 3.1% in the reporting year, with all regions recording positive growth rates.

Economic environment

	Growth ¹ 2021	Growth ¹ 2022
	%	%
World	6.1	3.1
Europe, Middle East, Latin America², Africa (EMLA)	5.8	3.6
of which Europe	5.9	3.3
of which Germany	2.6	1.9
of which Middle East	4.0	6.0
of which Latin America ²	6.8	3.7
of which Africa	5.8	3.4
North America³ (NA)	5.8	2.2
of which United States	5.9	2.1
Asia-Pacific (APAC)	6.4	3.3
of which China	8.1	3.0

¹ Real growth of gross domestic product; source: Oxford Economics, as of February 2023.

² Latin America (excluding Mexico).

³ North America (Canada, Mexico, United States).

Main Customer Industries

At 6.9%, the global automotive industry grew faster in fiscal 2022 than in the previous year. Order backlogs protected this industry from the downturn in the reporting year. The APAC and NA regions recorded significant positive growth, while growth in the EMLA region was slightly positive.

In the year 2022, the global construction industry saw a lower growth rate of 1.2% compared with the previous year. Deceleration in economic growth in all three regions, rising interest rates, as well as the high cost of construction materials and labor shortages had a negative impact on the construction industry in the reporting year, but growth was slightly positive in all regions.

The 4.9% growth rate in the global electrical, electronics, and household appliances industry in fiscal year 2022 was well down on the previous year's level. Due to shifts in consumer spending from goods to services, there was weak demand for electronics and electrical components in fiscal 2022 compared with the previous year. The NA and APAC regions recorded significant growth in the year 2022. Due to the worldwide drop in consumer demand in the sector, growth in the APAC region, a global production hub, was slower than in the previous year. The EMLA region's growth was slightly positive.

The global furniture industry experienced negative growth of 3.6% compared with significant positive growth in the previous year. High inflation, rising selling prices, a slowdown in consumer demand, and lower investments in the housing sector led to a significant year-over-year downturn in demand for furniture in all regions in fiscal 2022.

Main customer industries¹

	Growth 2021	Growth 2022
	%	%
Automotive	3.0	6.9
Construction	3.5	1.2
Electrical, electronics and household appliances	16.6	4.9
Furniture	8.8	-3.6

¹ Covestro's estimate, based on the following sources: LMC Automotive Limited, B+L, CSIL (Centre for Industrial Studies), Oxford Economics. We limited the economic data of our "automotive and transportation" and "furniture and wood processing" main customer industries to the automotive and furniture segments (excluding the transportation or wood processing segments). As of: February 2023.

Business Performance at a Glance

Significant Events

Events outside the Company

War in Ukraine

The Russian war against Ukraine, which began in February 2022, had a notable impact on the global economy. The consequences for the energy and raw material markets also influenced Covestro's business situation. Covestro discontinued its business activities with Russia and Belarus in fiscal 2022; in previous years, these had accounted for less than 1% of Group sales. The Covestro company (a sales support office) in Russia was liquidated in the process. This means that Covestro does not operate any locations in Russia, Belarus, or Ukraine so that the international sanctions imposed on Russia and Belarus only had an indirect effect on Covestro's business.

Covestro reacted to the humanitarian crisis in Ukraine and its neighboring countries by donating aid for this purpose to UNO-Flüchtlingshilfe and local aid organizations in Ukraine's neighboring countries.

Energy Crisis and Drop in Demand

The situation on the energy markets worsened in fiscal 2022 compared with the previous year for reasons that include the complete suspension of Russian gas supplies to Europe; this led to considerable fluctuations and a significant increase in energy prices in the course of the year, especially in Europe.

Covestro is an energy-intensive company and depends to a large extent on gas. It is predominantly used as a source of energy and as process gas in chemical reactions and there is no comprehensive short-term substitute for gas in the production processes. For this reason, Covestro, along with large parts of the chemical industry, was majorly affected by the high and volatile energy prices, which could be passed on to customers only in part. Covestro continued to receive gas supplies to meet its demand in the year 2022, thus ensuring supplies at our production sites.

The considerable rise in energy prices and weak demand as a consequence of the global economic slowdown worsened the business situation in the year under review and business prospects for the year 2023. Europe was particularly affected by the adverse macroeconomic framework. In addition, there was a significant increase in borrowing costs. The above facts were the main reason for subjecting all cash-generating units to an impairment test in the reporting year. Impairment tests led to the recognition of impairment losses on some items of property, plant and equipment and intangible assets. Impairment losses recognized in the fiscal year totaled €463 million. Other factors included impairment losses on, or the non-recognition of, deferred tax assets on tax loss carryforwards in an amount of €255 million. The above effects were a major driver of the Group's net loss in the reporting year.

→ See note 3 "Accounting Policies and Valuation Principles" and note 11 "Taxes" in the Notes to the Consolidated Financial Statements.

Coronavirus Pandemic

The coronavirus pandemic did not have any direct impact on Covestro in the year 2022. Production at Covestro's sites was unaffected by the pandemic, although logistical bottlenecks emerged at the Shanghai (China) site in the course of the first half of 2022. This had significant indirect effects on business performance in the APAC region in the second quarter of 2022. These bottlenecks did not persist in the second half of 2022.

The health, safety, and hygiene measures implemented by Covestro were regularly reviewed and modified to address current conditions. Employees in the EMLA and NA regions gradually returned to the workplace. Especially in China, part of the workforce, particularly employees in administrative departments, continued to work from home.

Events within the Company

New Management System

From fiscal 2022 onward, Covestro's management system will have four instead of the previous three components: Core volume growth, the previous key management indicator for growth, will be replaced with EBITDA. Liquidity is measured in terms of free operating cash flow (FOCF), and profitability in terms of return on capital employed (ROCE) above the weighted average cost of capital (WACC). In addition, a sustainability component has been added, which takes account of selected ESG (environmental, social, governance) criteria. In the year 2022, direct and indirect (Scope 1 and Scope 2) greenhouse gas (GHG) emissions of the main sites were relevant for this component. Other criteria relating to social and corporate governance are also to be incorporated in the future.

→ See "Management System."

Climate Neutrality by the Year 2035

In the course of Covestro's efforts to make plastics production fully circular, on March 1, 2022, the company communicated new climate targets to reduce its direct greenhouse gas (GHG) emissions from its own production activities (Scope 1) and indirect GHG emissions from the provision and use of energy produced outside the company (Scope 2). The Group is striving to become climate-neutral and to reach net-zero GHG emissions* at all environmentally relevant sites by the year 2035. The company plans to reduce Scope 1 and Scope 2 GHG emissions by 60% compared with the year 2020 to 2.2 million metric tons of CO₂ equivalents by the year 2030. In the long term, Covestro's goal is to use up to 100% renewable energy such as wind and solar power as well as alternative raw materials such as biomass, waste, CO₂, and hydrogen in its production processes. In addition, a target for the long-term reduction of indirect GHG emissions from upstream and downstream processes in the value chain (Scope 3) is to be defined in the year 2023.

→ See "Climate Neutrality."

CEO Dr. Markus Steilemann's Contract Extended

In June 2022, the Supervisory Board prematurely extended, to May 31, 2028, the contract with Dr. Markus Steilemann, which was due to expire in May 2023. This means that he will remain the CEO of Covestro AG for another five years. Dr. Markus Steilemann has been a member of Covestro AG's Board of Management since September 2015 and its Chair since June 2018. In his function as CEO, he is responsible for the Strategy, Sustainability & Public Affairs, Group Innovation, Corporate Audit, Human Resources, and Communications corporate functions.

New Chief Technology Officer Appointed

In November 2022, the Supervisory Board unanimously appointed Dr. Thorsten Dreier as Covestro AG's Chief Technology Officer (CTO). As of July 1, 2023, he will succeed Dr. Klaus Schäfer, who had extended his contract, which would originally have expired at the end of 2022, by six months to ensure staffing stability for Covestro given the tense policy situation in the energy markets. In his role as CTO, Dr. Thorsten Dreier will be responsible in future for the corporate functions of Process Technology; Engineering; Group Health, Safety and Environment; and Group Procurement.

Sale of Additive Manufacturing Business

On August 5, 2022, Covestro signed an agreement for the sale of its additive manufacturing business to Stratasys, a U.S.-Israeli manufacturer of 3D printers and 3D production systems. The selling price amounts to €43 million and an additional payment for certain assets, less any liabilities transferred. In addition, the agreement specifies a variable earn-out payment, which depends on the achievement of various success factors. The business offers material solutions for common polymer 3D printing processes. The portfolio of the additive manufacturing business also comprises products of the Resins & Functional Materials business acquired from Koninklijke DSM N.V., Heerlen (Netherlands), in fiscal 2021. The transaction is now expected to be completed in the second quarter of 2023.

→ See note 5.2 "Acquisitions and Divestitures" in the Notes to the Consolidated Financial Statements.

* Achievement of net-zero GHG emissions is defined as a balance between anthropogenic production of GHG emissions (caused by the company's own production activities and by the provision and use of energy produced outside the company) and anthropogenic reduction of GHG emissions.

Financing Measures

Extension of the Revolving Credit Facility and Establishment of the Green Financing Framework

In March 2022, the second of two agreed options was exercised to extend the term of the five-year, €2.5 billion syndicated revolving credit facility obtained in fiscal 2020 by another year until March 2027. This facility provides a back-up cash reserve and is linked to an ESG rating. In May 2022, Covestro also published a Green Financing Framework, which supports Covestro's strategic goals and allows it to finance green projects with green financing instruments (such as bonds or other debt instruments). In this context, Covestro issued its first green euro bond with a total volume of €500 million on November 8, 2022. The bond, which has a maturity of six years ending in November 2028, has an annual coupon of 4.75%.

→ See "Financial Management."

+ Further information at: <https://www.covestro.com/en/investors/debt/green-financing-framework>

Share Buyback Program

On February 28, 2022, Covestro AG's Board of Management resolved to initiate a share buyback program. The total volume of the program is approximately €500 million (excluding transaction costs), and it is expected to be completed within two years. All repurchased shares are subsequently expected to be retired and the capital stock reduced accordingly. Share buybacks began in March 2022. By the end of the year 2022, Covestro AG had acquired 3,479,956 shares valued at €150 million in two tranches.

+ Additional information is available at: www.covestro.com/en/investors/share-performance/share-buyback

Issuance of a Euro Commercial Paper Programme (ECPP)

On August 26, 2022, Covestro established a Euro Commercial Paper Programme (ECPP) with a potential total volume of €1.5 billion in order to allow the company to issue notes in different currencies and tenors of up to one year on a flexible basis. As of December 31, 2022, no commercial paper was outstanding under the ECPP.

+ Further information at: www.covestro.com/en/investors/debt/euro-commercial-paper-program

Covestro Successfully Places Schuldschein Loans

Covestro issued its first-ever Schuldschein loans on October 7, 2022. Linked to an ESG rating, these loans were issued in tranches comprising fixed and variable interest rates with terms of three, five, and seven years. The issue is denominated in U.S. dollars and euros. Driven by strong demand, the Schuldschein loans reached a total volume of €650 million equivalent, significantly exceeding the volume of €300 million originally announced. €100 million of the firm Schuldschein loan commitment will only be paid out in the first quarter of 2023.

Overall Assessment of Business Performance and Target Attainment

Negative changes in the economic environment made the fiscal year 2022 very challenging for Covestro. Driven in particular by a higher selling price level, sales were up by 13.0% year over year to €17,968 million (previous year: €15,903 million), the highest ever recorded in the Group's history. However, the sharp rise in raw material and energy prices in the course of the year, which could be passed on to customers only in part, and weak demand as a consequence of the global economic slowdown led to a 47.6% decline in EBITDA to €1,617 million (previous year: €3,085 million). Moreover, the Group's net income was weighed down in the fiscal year by impairment losses on some items of property, plant and equipment and intangible assets in an amount of €463 million and impairment losses on or the non-recognition of deferred tax assets on tax loss carryforwards in an amount of €255 million. As a result, the Group recorded its first ever net loss of €272 million (previous year: net income of €1,616 million). Free operating cash flow stood at €138 million (previous year: €1,429 million). The year-over-year decline was mainly attributable to lower cash flows from operating activities, tracking the decrease in EBITDA. In addition, ROCE above WACC was -5.0% points (previous year: 12.9% points). The year-over-year decline was attributable to significantly lower net operating profit after taxes (NOPAT) and a simultaneous substantial rise in capital employed, primarily due to the acquisition of the Resins & Functional Materials (RFM) business from Koninklijke DSM N.V., Heerlen (Netherlands), in the second quarter of 2021. At the same time, GHG emissions of 4.7 million metric tons of CO₂ equivalents were significantly down on the prior-year value of 5.2 million metric tons of CO₂ equivalents. This was mainly caused by the reduction in production activity and the resulting drop in energy demand, especially for electricity and steam.

In the Annual Report 2021, the Covestro Group published a forecast for key management indicators in fiscal 2022. Due to the effects of the Russian war against Ukraine and the adverse macroeconomic conditions, Covestro updated the forecast in the course of the year, on May 2, 2022 and July 29, 2022, and narrowed the guidance on October 25, 2022.

The forecast for all key management indicators was also adjusted. The Covestro Group most recently anticipated EBITDA between €1,700 million and €1,800 million after originally projecting EBITDA between €2,500 million and €3,000 million. After initially projecting FOCF of between €1,000 million and €1,500 million, in October 2022 the Covestro Group ultimately forecast a figure between €0 million and €100 million for the full year. The original forecast for ROCE above WACC was between 5% and 9%; it was recently adjusted to between –2% and –1%. For GHG emissions, the Covestro Group had originally anticipated a figure between 5.6 million metric tons of CO₂ equivalents and 6.1 million metric tons of CO₂ equivalents. In October 2022, the projected range was between 5.0 million metric tons of CO₂ equivalents and 5.4 million metric tons of CO₂ equivalents.

Covestro did not meet the original forecast of its financial performance indicators issued in the Annual Report 2021. Compared with the previous year, EBITDA decreased to €1,617 million (previous year: €3,085 million), mainly due to a considerable decline in margins. In particular, lower EBITDA also reduced free operating cash flow (FOCF), which declined to €138 million (previous year: €1,429 million). ROCE above WACC was –5.0% points (previous year: 12.9% points). The forecast of the nonfinancial key management indicator for reducing GHG emissions was exceeded. At 4.7 million metric tons of CO₂ equivalents, GHG emissions were significantly below the forecast range.

Compared to the forecast figures, which were last adjusted in October 2022, EBITDA and ROCE above WACC were lower than the ranges communicated. FOCF and GHG emissions, however, performed better than indicated in the most recent forecast. Given the potential divergence from capital market expectations, Covestro decided on January 13, 2023, to publish preliminary results.

Target attainment for fiscal year 2022

	2021	Forecast 2022 ¹	Adjusted forecast 2022 ²	Target attainment 2022
EBITDA ³	€3,085 million	Between €2,500 million and €3,000 million	Between €1,700 million and €1,800 million	€1,617 million
Free operating cash flow ⁴	€1,429 million	Between €1,000 million and €1,500 million	Between €0 million and €100 million	€138 million
ROCE above WACC ^{5,6}	12.9% points	Between 5% points and 9% points	Between –2% points and –1% point	–5.0% points
Greenhouse gas emissions ⁷ (CO ₂ equivalents)	5.2 million metric tons	Between 5.6 million metric tons and 6.1 million metric tons	Between 5.0 million metric tons and 5.4 million metric tons	4.7 million metric tons

¹ Published on March 1, 2022 (Annual Report 2021).

² Published on October 25, 2022 (Quarterly Statement as of September 30, 2022).

³ Earnings before interest, taxes, depreciation and amortization (EBITDA): EBIT plus depreciation, amortization, and impairment losses; less impairment loss reversals on intangible assets and property, plant and equipment.

⁴ Free operating cash flow (FOCF): cash flows from operating activities less cash outflows for additions to property, plant, equipment and intangible assets.

⁵ Return on capital employed (ROCE): ratio of EBIT after imputed income taxes to capital employed. Since the year 2022, imputed income taxes have been calculated by multiplying an imputed tax rate (previously: effective tax rate) of 25% by EBIT.

⁶ Weighted average cost of capital (WACC): weighted average cost of capital reflecting the expected return on the company's equity and debt capital. A figure of 7.0% has been taken into account for the year 2022 (2021: 6.6%).

⁷ GHG emissions (Scope 1 and Scope 2, GHG Protocol) at main production sites (responsible for more than 95% of our energy usage).

Results of Operations, Financial Position, and Net Assets of the Covestro Group

Covestro Group key data

	4th quarter 2021	4th quarter 2022	Change	2021	2022	Change
Sales	€4,338 million	€3,964 million	-8.6%	€15,903 million	€17,968 million	13.0%
Change in sales						
Volume	-0.2%	-13.2%		6.5%	-5.0%	
Price	31.6%	0.8%		34.7%	10.1%	
Currency	3.8%	3.8%		-0.8%	5.9%	
Portfolio	9.1%	0.0%		8.1%	2.0%	
EBITDA¹	€663 million	(€38 million)	.	€3,085 million	€1,617 million	-47.6%
Depreciation, amortization and impairment losses and impairment loss reversals	€218 million	€657 million	201.4%	€823 million	€1,350 million	64.0%
EBIT ²	€445 million	(€695 million)	.	€2,262 million	€267 million	-88.2%
Financial result	(€10 million)	(€25 million)	150.0%	(€77 million)	(€137 million)	77.9%
Net income³	€302 million	(€899 million)	.	€1,616 million	(€272 million)	.
Operating cash flows ⁴	€648 million	€839 million	29.5%	€2,193 million	€970 million	-55.8%
Cash outflows for additions to property, plant, equipment and intangible assets	€292 million	€289 million	-1.0%	€764 million	€832 million	8.9%
Free operating cash flow⁵	€356 million	€550 million	54.5%	€1,429 million	€138 million	-90.3%
Net financial debt ⁶				€1,405 million	€2,434 million	73.2%
Return on capital employed (ROCE) ⁷				19.5%	2.0%	
Weighted average cost of capital (WACC) ⁸				6.6%	7.0%	
ROCE above WACC^{7, 8}				12.9% points	-5.0% points	

¹ Earnings before interest, taxes, depreciation and amortization (EBITDA): EBIT plus depreciation, amortization, and impairment losses; less impairment loss reversals on intangible assets and property, plant and equipment.

² Earnings before interest and taxes (EBIT): income after income taxes plus financial result and income taxes.

³ Net income: income after income taxes attributable to the shareholders of Covestro AG.

⁴ Cash flows from operating activities according to IAS 7 (Statement of Cash Flows).

⁵ Free operating cash flow (FOCF): cash flows from operating activities less cash outflows for additions to property, plant, equipment and intangible assets.

⁶ As of December 31 in each case.

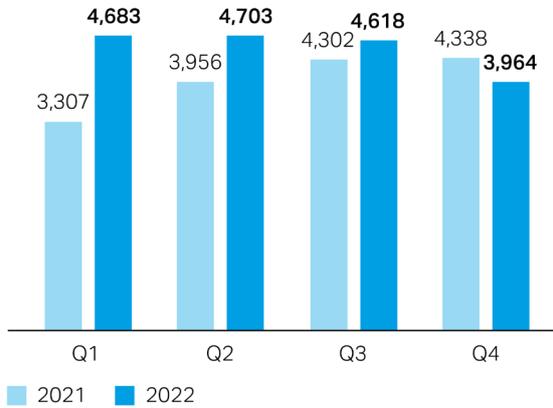
⁷ Return on capital employed (ROCE): ratio of EBIT after imputed income taxes to capital employed. Since the year 2022, imputed income taxes have been calculated by multiplying an imputed tax rate (previously: effective tax rate) of 25% by EBIT.

⁸ Weighted average cost of capital (WACC): weighted average cost of capital reflecting the expected return on the company's equity and debt capital.

Results of Operations

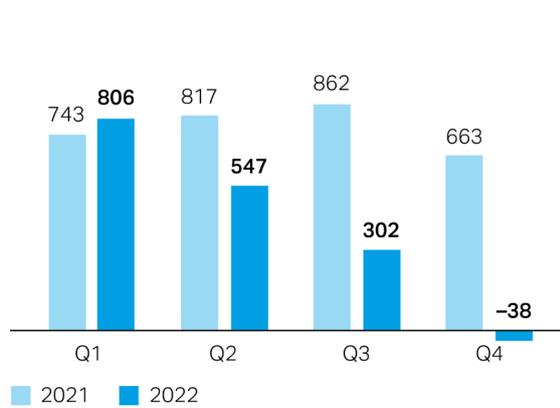
Covestro Group Quarterly sales

€ million



Covestro Group Quarterly EBITDA

€ million



Sales

In fiscal 2022, Group sales were up by 13.0% to €17,968 million (previous year: €15,903 million), the highest ever recorded in Group's history. This was mainly due to a considerably higher selling price level, which had a positive impact on sales amounting to 10.1%. Moreover, changes in exchange rates had a positive effect of 5.9% on sales. The portfolio change resulting from the acquisition of the Resins & Functional Materials (RFM) business from Koninklijke DSM N.V., Heerlen (Netherlands), in the second quarter of 2021 had the effect of increasing sales by 2.0%. In contrast, the change in total volumes sold had a negative effect of 5.0% on sales.

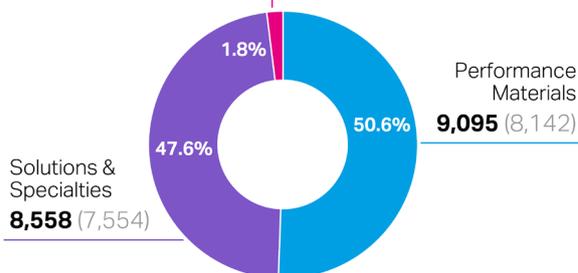
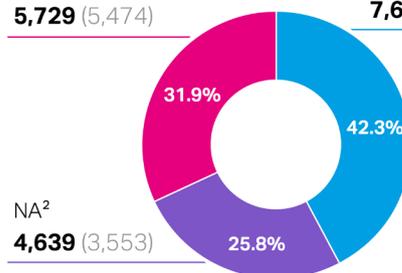
Sales in both segments were up in fiscal 2022. In the Performance Materials segment, sales rose 11.7% to €9,095 million (previous year: €8,142 million), while the Solutions & Specialties segment's sales increased 13.3% to €8,558 million (previous year: €7,554 million).

In the EMLA region, sales climbed by 10.5% to €7,600 million (previous year: €6,876 million). Sales rose by 30.6% to €4,639 million (previous year: €3,553 million) in the NA region, and by 4.7% to €5,729 million (previous year: €5,474 million) in the APAC region.

Sales by segment and region

€ million, prior-year figures in brackets

Others/Consolidation

315 (207)APAC³**5,729** (5,474)EMLA¹**7,600** (6,876)NA²**4,639** (3,553)

¹ EMLA: Europe, Middle East, Latin America (excluding Mexico), Africa region.

² NA: North America region (Canada, Mexico, United States).

³ APAC: Asia and Pacific region.

EBIT**Covestro Group summary income statement**

	2021	2022	Change
	€ million	€ million	%
Sales	15,903	17,968	13.0
Cost of goods sold	(11,475)	(15,404)	34.2
Gross profit	4,428	2,564	-42.1
Selling expenses	(1,428)	(1,604)	12.3
Research and development expenses	(341)	(361)	5.9
General administration expenses	(415)	(353)	-14.9
Other operating (expenses) and income	18	21	16.7
EBIT	2,262	267	-88.2
Financial result	(77)	(137)	77.9
Income/(loss) before income taxes	2,185	130	-94.1
Income taxes	(566)	(411)	-27.4
Income/(loss) after income taxes	1,619	(281)	.
attributable to noncontrolling interest	3	(9)	.
attributable to Covestro AG shareholders: net income/(net loss)	1,616	(272)	.

There was a 34.2% rise in cost of goods sold – especially due to higher raw material and energy costs and the impairment losses on property, plant and equipment – to €15,404 million (previous year: €11,475 million); as a result, the ratio of cost of goods sold to sales increased to 85.7% (previous year: 72.2%).

Gross profit fell 42.1% to €2,564 million (previous year: €4,428 million), driven by the above-mentioned increase in raw material and energy costs, which could be passed on to customers only in part, the impairment losses mentioned earlier, and a decline in total volumes sold. On the other hand, the rise in the selling price level and positive effects of exchange rate movements boosted earnings.

Selling expenses were up 12.3% to €1,604 million (previous year: €1,428 million); the figure included impairment losses on intangible assets in the reporting year. The ratio of selling expenses to sales was 8.9% (previous year: 9.0%). Research and development (R&D) expenses were up 5.9% to €361 million (previous year: €341 million). As a share of sales, this produced an R&D ratio of 2.0% (previous year: 2.1%). General administration expenses were down 14.9% to €353 million (previous year: €415 million), for a ratio of administration expenses to sales of 2.0% (previous year: 2.6%).

Lower provisions for variable compensation of €472 million boosted earnings. Another positive effect on earnings (€71 million) came from business development subsidies received in China. In connection with the acquisition of RFM, lower nonrecurring expenses and higher positive synergy effects than in the previous year, thanks in particular to an efficiency boost in sales, administration, and procurement activities had a positive effect on earnings in the mid-double-digit euro range.

Other operating income exceeded other operating expenses by €21 million (previous year: €18 million), although this item had included acquired goodwill.

EBIT declined 88.2% to €267 million (previous year: €2,262 million). The EBIT margin retreated to 1.5% (previous year: 14.2%).

EBITDA

Calculation of EBITDA

	2021	2022
	€ million	€ million
EBIT	2,262	267
Depreciation, amortization, impairment losses, and impairment loss reversals	823	1,350
EBITDA	3,085	1,617

Depreciation, amortization, impairment losses, and impairment loss reversals rose by 64% to €1,350 million in fiscal 2022 (previous year: €823 million), of which €1,194 million (previous year: €760 million) was attributable to property, plant and equipment and €156 million (previous year: €63 million) to intangible assets. This included €463 million (previous year: €5 million) in impairment losses and €1 million (previous year: €3 million) in reversals of impairment losses. The impairment losses were primarily recognized following impairment tests triggered by the deterioration of business prospects because of the energy crisis and the decline in demand.

EBITDA decreased 47.6% year-over-year in the full-year period, declining to €1,617 million (previous year: €3,085 million). This was attributable to the 63.0% fall in EBITDA, to €951 million (previous year: €2,572 million), in the Performance Materials segment. In contrast, the Solutions & Specialties segment's EBITDA rose by 9.9% to €825 million (previous year: €751 million).

Net Income

In the fiscal year, the financial result stood at €-137 million (previous year: €-77 million) and largely consisted of net interest expense of €61 million (previous year: €41 million). In view of the financial result, income before income taxes went down to €130 million (previous year: €2,185 million). Income tax expense amounted to €411 million (previous year: €566 million). A decline due to the change in income was set against impairment losses on, or the non-recognition of, deferred tax assets on tax loss carryforwards in an amount of €255 million. After income taxes and noncontrolling interests, the net loss amounted to €272 million (previous year: net income of €1,616 million).

Return on Capital Employed (ROCE) above Weighted Average Cost of Capital (WACC)

Calculation of ROCE above WACC

		2021	2022 ¹
EBIT	€ million	2,262	267
Imputed tax rate ²	%	25.9	25.0
Imputed income taxes ³	€ million	586	67
Net operating profit after taxes (NOPAT)	€ million	1,676	200
Average capital employed	€ million	8,598	9,785
ROCE	%	19.5	2.0
Weighted average cost of capital (WACC)	%	6.6	7.0
ROCE over WACC	% points	12.9	-5.0

¹ An imputed tax rate of 25% has been used since the year 2022 (previous year: effective tax rate). If the effective tax rate of 316.2% had been used, imputed income taxes would have amounted to €844 million for the year 2022, resulting in net operating profit (NOPAT) of €-577 million. ROCE would consequently have amounted to -5.9% and ROCE above WACC would have been -12.9% points.

² The effective tax rate (applied to the previous year) is presented in note 11 "Taxes" in the Notes to the Consolidated Financial Statements.

³ The imputed income taxes used in the calculation of NOPAT are determined by multiplying EBIT by the imputed tax rate.

The Covestro Group's NOPAT totaled €200 million (previous year: €1,676 million), and average capital employed amounted to €9,785 million (previous year: €8,598 million). The resulting ROCE was 2.0% (previous year: 19.5%), significantly lower than the increased WACC of 7.0% (previous year: 6.6%).

→ [Additional information on the calculation of indicators is available in "Key Management Indicators."](#)

Calculation of average capital employed

	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million	€ million
Goodwill	255	757	729
Other intangible assets	109	706	603
Property, plant and equipment	5,175	6,032	5,801
Investments accounted for using the equity method	173	172	185
Other noncurrent financial assets ¹	5	6	3
Other receivables ²	309	447	470
Deferred tax assets ³	253	301	277
Inventories	1,663	2,914	2,814
Trade accounts receivable	1,593	2,343	2,011
Claims for income tax refunds	55	128	115
Assets held for sale ⁴	36	–	18
Gross capital employed	9,626	13,806	13,026
Other provisions ⁵	(360)	(843)	(349)
Other liabilities ⁶	(269)	(333)	(394)
Deferred tax liabilities ⁷	(177)	(293)	(307)
Trade accounts payable	(1,241)	(2,214)	(2,016)
Income tax liabilities	(162)	(337)	(175)
Liabilities directly related to assets held for sale ⁸	(7)	–	(2)
Capital employed	7,410	9,786	9,783
Average capital employed	7,475	8,598	9,785

¹ Other noncurrent financial assets were adjusted for nonoperating assets.

² Other receivables were adjusted for nonoperating and financial receivables.

³ Deferred tax assets were adjusted for deferred taxes from defined benefit plans and similar obligations recognized in other comprehensive income.

⁴ Assets held for sale were adjusted for nonoperating and financial assets.

⁵ Other provisions were adjusted for provisions for interest payments.

⁶ Other liabilities were adjusted for nonoperating and financial liabilities.

⁷ Deferred tax liabilities were adjusted for deferred tax liabilities from defined benefit plans and similar obligations recognized in other comprehensive income.

⁸ Liabilities directly related to assets held for sale were adjusted for nonoperating and financial liabilities.

Financial Position

Statement of Cash Flows

Covestro Group summary statement of cash flows

	4th quarter 2021	4th quarter 2022	2021	2022
	€ million	€ million	€ million	€ million
EBITDA	663	(38)	3,085	1,617
Income taxes paid	(237)	(92)	(546)	(538)
Change in pension provisions	1	36	31	54
(Gains)/losses on retirements of noncurrent assets	1	(3)	(3)	(3)
Change in working capital/other noncash items	220	936	(374)	(160)
Cash flows from operating activities	648	839	2,193	970
Cash outflows for additions to property, plant, equipment and intangible assets	(292)	(289)	(764)	(832)
Free operating cash flow	356	550	1,429	138
Cash flows from investing activities	(498)	(407)	(1,995)	(477)
Cash flows from financing activities	(2)	492	(965)	64
Change in cash and cash equivalents due to business activities	148	924	(767)	557
Cash and cash equivalents at beginning of period	496	292	1,404	649
Change in cash and cash equivalents due to exchange rate movements	5	(18)	12	(8)
Cash and cash equivalents at end of period	649	1,198	649	1,198

Cash Flows from Operating Activities/Free Operating Cash Flow

Net cash flows from operating activities amounted to €970 million (previous year: €2,193 million). This was driven mainly by a significant decline in EBITDA, while a smaller amount of cash was tied up in working capital. Lower cash inflows from operating activities and higher cash outflows for additions to property, plant, equipment, and intangible assets of €832 million (previous year: €764 million) led to a decrease in free operating cash flow to €138 million (previous year: €1,429 million).

→ [Additional information on the calculation of indicators is available in "Key Management Indicators."](#)

Cash Flows from Investing Activities

In fiscal 2022, net cash used in investing activities totaled €477 million (previous year: €1,995 million). The prior-year period had been affected in particular by the net purchase price payments of €1,469 million to acquire the Resins & Functional Materials (RFM) business from Koninklijke DSM N.V., Heerlen (Netherlands). The main factors driving the cash outflows in the year 2022 were payments for additions to property, plant, equipment and intangible assets of €832 million (previous year: €764 million) and noncurrent financial assets of €124 million. In contrast, cash inflows stemmed from the net proceeds of short-term bank deposits maturing in an amount of €372 million and cash inflows of €65 million from the net sale of money market fund units.

Capital expenditures in fiscal 2022 were targeted at maintenance and improvement of existing plants as well as new capacity in both segments. In the Performance Materials segment, construction of Covestro's own chlorine production facility, where energy-conserving technologies will be used, continued at the site in Tarragona (Spain), as it had in fiscal 2021. In addition, capital expenditure related to increasing capacity at the site in Antwerp (Belgium) to expand the production of aniline, a precursor for diphenylmethane diisocyanate (MDI). At the sites in Baytown, Texas (United States), and Shanghai (China), capital expenditure was moreover targeted at equipment maintenance and the installation of new catalysts. Strategic capital expenditure in the Solutions & Specialties segment was aimed at the construction of a plant for mechanical recycling of polycarbonates at the Shanghai (China) site and at increasing capacity for precursors in the Vulkollan® product group at the site in Map Ta Phut (Thailand).

Cash outflows for additions to property, plant, equipment and intangible assets

	2021	2022
	€ million	€ million
Performance Materials	488	547
Solutions & Specialties	273	277
Others/Consolidation	3	8
Covestro Group	764	832

Cash Flows from Financing Activities

Net cash inflow from the Covestro Group's financing activities amounted to €64 million in fiscal 2022 (previous year: net cash outflow of €965 million). Cash inflows resulted from the successful placement of the Schuldschein loans of around €550 million in October 2022 and the issuance of a bond of €500 million on the basis of the Green Financing Framework published in the year 2022. In addition, net borrowing of €75 million generated further cash inflows.

In contrast, dividend payments of €654 million resulted in cash outflows, of which an amount of €651 million was attributable to Covestro AG shareholders. Other factors contributing to cash outflows were payments for lease liabilities in an amount of €160 million, the buyback of 3,479,956 treasury shares at a value of €150 million under the announced share buyback program, and interest payments of €131 million.

Net Financial Debt**Net financial debt**

	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million
Bonds	1,492	1,988
Liabilities to banks	275	922
Lease liabilities	761	746
Liabilities from derivatives	11	32
Other financial liabilities	2	1
Receivables from derivatives	(34)	(42)
Financial debt	2,507	3,647
Cash and cash equivalents	(649)	(1,198)
Current financial assets	(453)	(15)
Net financial debt	1,405	2,434

In comparison with December 31, 2021, the Covestro Group's financial debt increased by €1,140 million to €3,647 million as of December 31, 2022 (previous year: €2,507 million). In addition to an increase in liabilities to banks by €647 million, mainly due to the issuance of the Schuldschein loans and net borrowing of €75 million, this was driven by the issuance of bonds of €500 million under the Green financing Framework.

Cash and cash equivalents were up €549 million in comparison with the figure on December 31, 2021, to €1,198 million. The rise was mainly driven by positive operating cash flows amounting to €970 million, cash inflows from the issuance of Schuldschein loans in an amount equivalent to around €550 million, the issuance of a bond of €500 million under the Green Financing Framework, from the net proceeds of short-term bank deposits of €372 million, by net borrowing of €75 million, and the net sale of money market fund units of €65 million. The positive effects on cash and cash equivalents was offset above all by cash outflows 832 million for additions to property, plant, equipment and intangible assets of €832 million and dividend payments of €654 million. At the same time, the net proceeds of short-term bank deposits maturing and the net sale of money market fund units led to a €438 million decrease in current financial assets.

As a result, net financial debt increased by €1,029 million to €2,434 million in fiscal 2022 (previous year: €1,405 million).

Financial Management

The main purpose of financial management is to ensure solvency at all times, continuously optimize capital costs, and reduce the risks of financing measures. Financial management for the Covestro Group is performed centrally by Covestro AG.

Covestro AG operates a Debt Issuance Program with a total volume of €5.0 billion to facilitate obtaining flexible financing from the capital market. The company is thus in the position to issue fixed- and variable-rate bonds with different maturities as well as to undertake private placements. Covestro AG successfully placed several bonds from its Debt Issuance Program. The €500 million euro bond placed in March 2016 carries a fixed coupon of 1.75% and matures in September 2024. The additional €1.0 billion in euro bonds placed in June 2020 consist of one €500 million euro bond with a fixed coupon of 0.875% maturing in February 2026, and another €500 million euro bond with a fixed coupon of 1.375% maturing in June 2030. All outstanding bonds have been assigned a Baa2 rating with stable outlook by Moody's Investors Service, London (United Kingdom).

In addition, Covestro published a Green Financing Framework in May 2022, which enables green bonds or other debt instruments to be issued where the funds raised are tied to sustainable investments that we can use, e.g., to (re)finance products or projects with a clear benefit for the environment. The framework's conformity to the Green Bond Principles of the International Capital Markets Association (ICMA) has been confirmed by the independent ESG rating agency ISS ESG. The first green euro bond was issued in November 2022 under the Green Finance Framework with a fixed coupon of 4.75% and a volume of €500 million, maturing in November 2028. All the proceeds from the bond issue are to be used to fund sustainable projects that contribute to the circular economy and originate in areas such as renewable energy, energy efficiency, and sustainable building.

Covestro also issued its first-ever Schuldschein loans on October 7, 2022. Linked to an ESG rating, these loans were issued in tranches comprising fixed and variable interest rates with terms of three, five, and seven years. The issue is denominated in U.S. dollars and euros. Driven by strong demand, the Schuldschein loans reached a total volume of €650 million equivalent, significantly exceeding the volume of €300 million originally announced. €100 million of the firm Schuldschein loan commitment will only be paid out in the first quarter of 2023. The Schuldschein loans are also linked to an ESG rating.

In fiscal 2020, Covestro AG obtained a syndicated revolving credit facility totaling €2.5 billion with a term of five years. It included two options to extend the term by one year in each case and represents a back-up liquidity reserve. One option to extend was exercised in March 2021 to extend the term of the syndicated revolving credit facility to March 2026. Using the second of two agreed options, the term was extended in March 2022 by another year to March 2027. One feature of the credit line is its link to an environmental, social, governance (ESG) rating: The better (worse) the externally calculated ESG score is, the lower (higher) the interest component of the credit facility. The syndicated credit facility was unused as of December 31, 2022.

On August 26, 2022, Covestro additionally established a Euro Commercial Paper Programme (ECCP) with a potential total volume of €1.5 billion in order to allow the company to issue notes in different currencies and tenors of up to one year on a flexible basis. As of December 31, 2022, no commercial paper was outstanding under the ECCP.

On May 10, 2022, the rating agency Moody's Investors Service confirmed Covestro AG's Baa2 investment-grade rating and a stable outlook. Covestro intends to continue to maintain financing structures and financial ratios that support a solid investment-grade rating in the future.

The Covestro Group pursues a prudent debt management strategy to ensure flexibility, drawing on a balanced financing portfolio. This is based for the most part on bonds, syndicated credit facilities, and bilateral loan agreements.

As a company with international operations, Covestro is exposed to financial opportunities and risks. These are continuously monitored within the context of Covestro's financial management activities. Instruments including derivatives are used to minimize risks.

For a detailed presentation of financial opportunities and risks as well as further explanations, please see Covestro's opportunities and risks report.

→ See ["Opportunities and Risks Report"](#) and note 24.2 ["Financial Risk Management and Information on Derivatives"](#) in the [Notes to the Consolidated Financial Statements](#).

Net Assets

Covestro Group summary statement of financial position

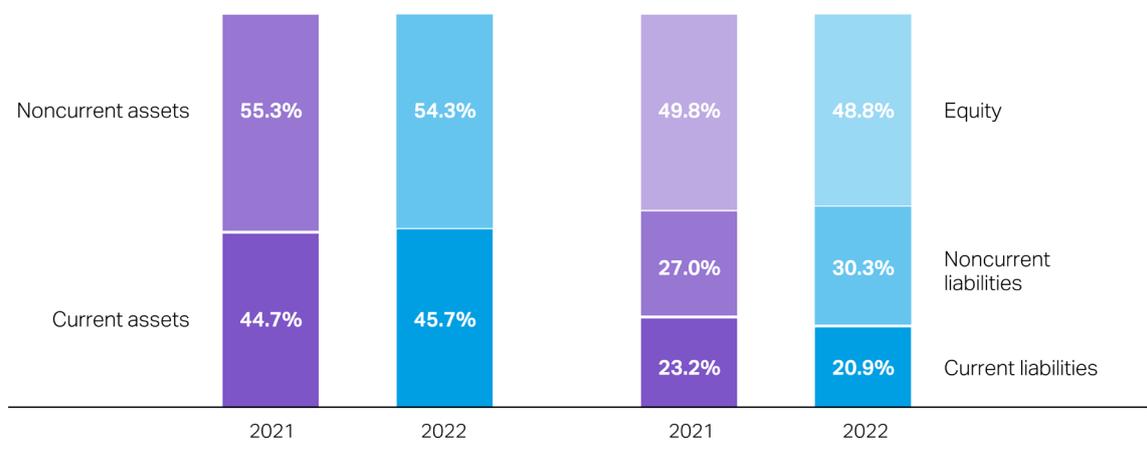
	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million
Noncurrent assets	8,610	7,916
Current assets	6,961	6,669
Total assets	15,571	14,585
Equity	7,762	7,122
Noncurrent liabilities	4,203	4,408
Current liabilities	3,606	3,055
Liabilities	7,809	7,463
Total equity and liabilities	15,571	14,585

Total assets declined by €986 million from €15,571 million as of December 31, 2021, to €14,585 million as of December 31, 2022.

Noncurrent assets decreased by €694 million to €7,916 million (previous year: €8,610 million) and accounted for 54.3% (previous year: 55.3%) of total assets. This change is mainly due to the impairment loss on deferred tax assets and lower property, plant and equipment and intangible assets. This was in particular the result of impairment losses recognized as part of impairment testing in the fiscal year under review.

Current assets were down €292 million to €6,669 million (previous year: €6,961 million), and their ratio to total assets was 45.7% (previous year: 44.7%). This change is mainly due to a decline in current financial assets, trade accounts receivable, and inventories, while cash and cash equivalents increased year over year.

Structure of the Covestro Group's statement of financial position



Equity decreased by €640 million to €7,122 million as of December 31, 2022 (previous year: €7,762 million). The equity ratio at the reporting date was 48.8% (previous year: 49.8%). The main reasons for the decline in equity were the dividend distribution for fiscal 2021, income after income taxes for fiscal 2022, and the acquisition of treasury shares. Conversely, the remeasurement of the net defined benefit liability for post-employment benefits was a predominant factor increasing equity.

Noncurrent liabilities went up by €205 million to €4,408 million as of the reporting date (previous year: €4,203 million) and accounted for 30.3% (previous year: 27.0%) of total capital and 59.1% (previous year: 53.8%) of liabilities. This is primarily due to an increase in noncurrent financial liabilities. Lower provisions for pensions and other post-employment benefits had an offsetting effect.

Net defined benefit liability for post-employment benefit plans

	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million
Provisions for pensions and other post-employment benefits	1,199	486
Net defined benefit asset	(4)	(56)
Net defined benefit liability	1,195	430

The net defined benefit liability for post-employment benefits (provisions for pensions and other post-employment benefits less net defined benefit asset) was down by €765 million in the reporting year to €430 million (previous year: €1,195 million). This was due to actuarial gains, especially those attributable to the increase in the discount rate in Germany and the United States, offset by actuarial losses on plan assets.

Current liabilities went down by €551 million to €3,055 million (previous year: €3,606 million) and therefore accounted for 20.9% (previous year: 23.2%) of total capital and 40.9% (previous year: 46.2%) of liabilities. This decline was mainly driven by lower provisions for short-term variable compensation and trade accounts payable, offset by higher current financial liabilities.

Performance of the Segments

Performance Materials

Performance Materials key data

	4th quarter 2021	4th quarter 2022	Change	2021	2022	Change
Sales (external)	€2,259 million	€1,916 million	-15.2%	€8,142 million	€9,095 million	11.7%
Intersegment sales ¹	€696 million	€644 million	-7.5%	€2,608 million	€2,967 million	13.8%
Sales (total)	€2,955 million	€2,560 million	-13.4%	€10,750 million	€12,062 million	12.2%
Change in sales (external)						
Volume	0.5%	-17.5%		1.6%	-5.0%	
Price	37.6%	-1.3%		48.1%	10.9%	
Currency	3.6%	3.6%		-0.8%	5.8%	
Portfolio	0.0%	0.0%		0.0%	0.0%	
Sales by region (external)						
EMLA	€1,039 million	€785 million	-24.4%	€3,878 million	€4,152 million	7.1%
NA	€582 million	€516 million	-11.3%	€1,926 million	€2,447 million	27.1%
APAC	€638 million	€615 million	-3.6%	€2,338 million	€2,496 million	6.8%
EBITDA²	€590 million	(€89 million)	.	€2,572 million	€951 million	-63.0%
EBIT ²	€445 million	(€600 million)	.	€2,003 million	(€28 million)	.
Cash flows from operating activities ³	€665 million	€563 million	-15.3%	€1,875 million	€1,091 million	-41.8%
Cash outflows for additions to property, plant, equipment and intangible assets	€168 million	€187 million	11.3%	€488 million	€547 million	12.1%
Free operating cash flow³	€497 million	€376 million	-24.3%	€1,387 million	€544 million	-60.8%

¹ In accordance with internal reporting to the Board of Management since July 1, 2022, these figures also include sales recognized in the amount of cost of goods sold. To ensure comparability, the segment data is presented on a consistent basis.

² EBITDA and EBIT include the effect on earnings of intersegment sales.

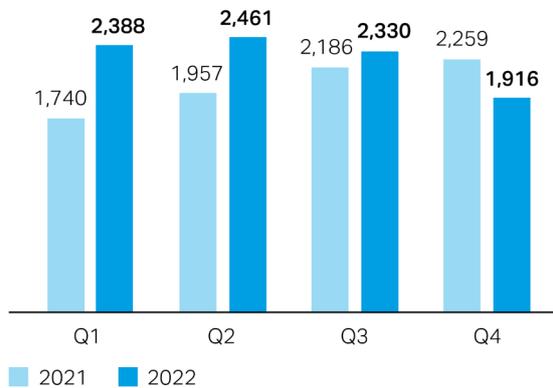
³ Since the year 2022, an imputed tax rate of 25% has been used to calculate taxes paid by the reportable segments (previous year: expected effective tax rate); see note 4 "Segment and Regional Reporting" in the Notes to the Consolidated Financial Statements.

Sales in the Performance Materials segment were up 11.7% to €9,095 million in fiscal 2022 (previous year: €8,142 million). Contributing factors were both the higher selling price level, which added 10.9%, and changes in exchange rates, which accounted for an increase of 5.8%. In contrast, a decline in volumes sold, mainly because of a downturn in demand, reduced sales by 5.0%.

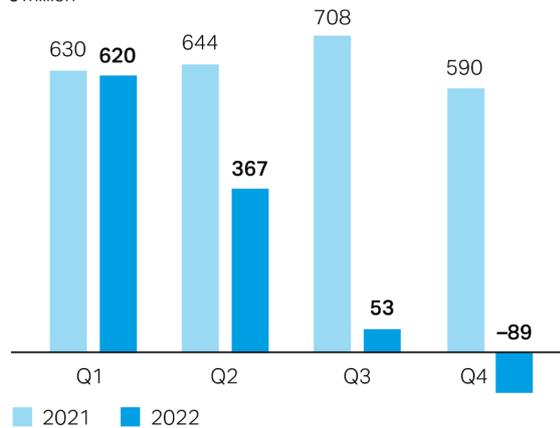
The EMLA region's sales increased by 7.1% to €4,152 million (previous year: €3,878 million), driven by higher average selling prices, which led to a significant increase in sales. A decline in volumes sold, in contrast, resulted in a considerable decrease in sales. Exchange rate movements had no notable effect on sales. Sales in the NA region were up 27.1% to €2,447 million (previous year: €1,926 million). Changes in exchange rates and a higher selling price level both had a significant positive effect on sales. The trend in volumes sold had a neutral effect on sales overall. In the APAC region, sales climbed by 6.8% to €2,496 million (previous year: €2,338 million). Exchange rate movements drove up sales considerably. At the same time, the expansion of volumes sold had a slight positive effect on sales. This was offset by a decline in average selling prices, which reduced sales slightly.

Performance Materials**Quarterly sales**

€ million

**Performance Materials****Quarterly EBITDA**

€ million



EBITDA in the Performance Materials segment fell by 63.0% over the prior-year period to €951 million (previous year: €2,572 million). This was primarily driven by a decline in margins, since higher selling prices offset increased raw material and energy prices only to a small extent. This change was primarily attributable to the energy crisis, which is affecting Europe in particular. At the same time, the drop in volumes sold also reduced earnings. In contrast, lower provisions for short-term variable compensation and exchange rate movements both boosted earnings.

EBIT declined to €-28 million (previous year: €2,003 million), tracking mainly a reduction in EBITDA. Moreover, impairment losses of €387 million, recognized primarily as a result of impairment tests, weighed on the EBIT of Performance Materials in the year under review.

Free operating cash flow was down 60.8% to €544 million (previous year: €1,387 million), due mainly to lower EBITDA. The change in working capital, by contrast, had a positive effect on free operating cash flow, where cash tied up in the previous year is set against cash freed up in the year under review, mainly stemming from inventories and trade accounts receivable.

Solutions & Specialties

Solutions & Specialties key data

	4th quarter 2021	4th quarter 2022	Change	2021	2022	Change
Sales (external)	€2,005 million	€1,975 million	-1.5%	€7,554 million	€8,558 million	13.3%
Intersegment sales ¹	€8 million	€7 million	-12.5%	€27 million	€35 million	29.6%
Sales (total)	€2,013 million	€1,982 million	-1.5%	€7,581 million	€8,593 million	13.3%
Change in sales (external)						
Volume	-3.4%	-8.9%		11.8%	-6.3%	
Price	25.6%	3.3%		21.3%	9.4%	
Currency	4.1%	4.1%		-0.9%	6.0%	
Portfolio	19.9%	0.0%		17.1%	4.2%	
Sales by region (external)						
EMLA	€722 million	€676 million	-6.4%	€2,835 million	€3,198 million	12.8%
NA	€457 million	€533 million	16.6%	€1,594 million	€2,140 million	34.3%
APAC	€826 million	€766 million	-7.3%	€3,125 million	€3,220 million	3.0%
EBITDA^{2,3}	€112 million	€108 million	-3.6%	€751 million	€825 million	9.9%
EBIT ^{2,3}	€41 million	(€37 million)	.	€503 million	€461 million	-8.3%
Cash flows from operating activities ^{3,4}	€175 million	€514 million	193.7%	€418 million	€472 million	12.9%
Cash outflows for additions to property, plant, equipment and intangible assets	€122 million	€99 million	-18.9%	€273 million	€277 million	1.5%
Free operating cash flow^{3,4}	€53 million	€415 million	683.0%	€145 million	€195 million	34.5%

¹ In accordance with internal reporting to the Board of Management since July 1, 2022, these figures also include sales recognized in the amount of cost of goods sold. To ensure comparability, the segment data is presented on a consistent basis.

² EBITDA and EBIT include the effect on earnings of intersegment sales.

³ Since the year 2022, an imputed tax rate of 25% has been used to calculate taxes paid by the reportable segments (previous year: expected effective tax rate); see note 4 "Segment and Regional Reporting" in the Notes to the Consolidated Financial Statements.

Sales in the Solutions & Specialties segment were up 13.3% to €8,558 million in fiscal 2022 (previous year: €7,554 million). A rise in the selling price level had an increasing effect on sales amounting to 9.4%. At the same time, exchange rate movements and the portfolio effect resulting from the acquisition of the Resins & Functional Materials (RFM) business from Koninklijke DSM N.V., Heerlen (Netherlands), in the year 2021 both had a positive impact, increasing sales by 6.0% and 4.2% respectively. In contrast, a decline in volumes sold had a decreasing effect on sales amounting to 6.3%.

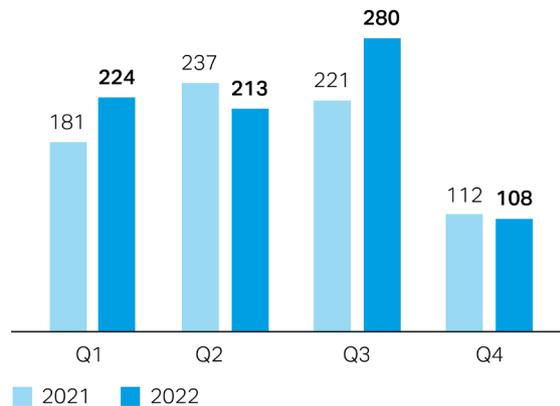
Sales in the EMLA region were up by 12.8% to €3,198 million (previous year: €2,835 million). This was largely driven by the increase in average selling prices and the aforementioned portfolio effect, both factors that increased sales significantly. This was set against a drop in volumes sold, which had a considerable negative effect on sales. Exchange rate movements had no notable effect on sales overall. The NA region grew sales by 34.3% to €2,140 million (previous year: €1,594 million). Exchange rate movements and the higher selling price level both drove up sales considerably. At the same time, the aforementioned portfolio effect had a slight positive effect on sales, while the change in volumes sold remained stable compared with the prior-year period. Sales in the APAC region were up 3.0% to €3,220 million (previous year: €3,125 million). This is primarily due to exchange rate movements, which drove up sales significantly, and the aforementioned portfolio effect, which had a slight impact. In contrast, a drop in total volumes sold had a significant negative effect on sales. Average selling prices remained stable compared with the prior-year period.

Solutions & Specialties**Quarterly sales**

€ million

**Solutions & Specialties****Quarterly EBITDA**

€ million



In fiscal 2022, EBITDA in the Solutions & Specialties segment was up 9.9% on the prior-year period, rising to €825 million (previous year: €751 million). Lower provisions for short-term variable compensation, exchange rate movements, and the share of business development subsidies received in China attributable to the segment were factors contributing to the increase in EBITDA. In connection with the acquisition of RFM, lower nonrecurring expenses and higher positive synergy effects than in the previous year, thanks in particular to an efficiency boost in sales, administration, and procurement activities, both had a positive effect on earnings in the mid-double-digit million euro range. A rise in raw material and energy prices was largely offset by higher selling prices, and this led to slightly lower margins. A decrease in total volumes sold additionally reduced earnings.

EBIT declined 8.3% to €461 million (previous year: €503 million). Impairment losses of €76 million recognized primarily as a result of impairment tests weighed on the EBIT of Solutions & Specialties in the year under review.

Free operating cash flow increased by 34.5% year over year to €195 million (previous year: €145 million). This was driven in particular by the rise in EBITDA, while a larger amount of cash was tied up in working capital.

Results of Operations, Financial Position, and Net Assets of Covestro AG

Covestro AG is the parent company and strategic management holding company of the Covestro Group. The principal management functions for the entire Group are performed by the Board of Management. These include strategic planning for the Group, resource allocation, and executive and financial management. Covestro AG's results of operations, financial position, and net assets are largely determined by the business performance of its subsidiaries.

The Financial Statements of Covestro AG are prepared in accordance with the German Commercial Code (HGB) and the German Stock Corporation Act (AktG). The company, headquartered in Leverkusen (Germany), is registered in the commercial register of the Local Court of Cologne under No. HRB 85281.

Covestro AG performs energy-specific services for Covestro Brunsbüttel Energie GmbH, Brunsbüttel (Germany), (affiliated power and gas grid operator) and therefore prepares activity reports in the areas of electricity supply and gas supply pursuant to Section 6b (3) Sentence 1 Nos. 2 and 4 of the German Energy Industry Act (EnWG).

There is a control and profit and loss transfer agreement between Covestro AG and Covestro Deutschland AG, Leverkusen (Germany). All profit not subject to a prohibition on transfer is transferred in full to Covestro AG at the end of the year. Losses are absorbed in full. Other retained earnings recognized during the term of the agreement must be released upon request by Covestro AG and used to compensate a net loss for the year or transferred as profit.

Results of Operations

Covestro AG income statement according to the German Commercial Code

	2021	2022
	€ million	€ million
Income from investments in affiliated companies – net	757	(153)
Interest expense – net	(23)	(15)
Other financial income – net	(7)	(8)
Net sales	22	23
Cost of services provided	(22)	(24)
General administration expenses	(80)	(56)
Other operating income	33	1
Other operating expenses	(3)	–
Result from operations	677	(232)
Income taxes	(29)	(84)
Net income/(loss)	648	(316)
Retained earnings brought forward from prior year	–	5
Allocation to/withdrawal from other retained earnings	9	311
Distributable profit	657	–

In fiscal 2022, Covestro AG generated a net loss of €316 million (previous year: net income of €648 million). The change compared with the prior year was largely attributable to the loss from investments in affiliated companies of €153 million (previous year: income of €757 million). Income from investments in affiliated companies was solely due to the loss absorbed under the control and profit and loss transfer agreement with Covestro Deutschland AG.

In addition to interest expense of €23 million (previous year: €23 million) for the euro bonds issued and interest expense on loans from third parties, the interest result included mainly interest income of €28 million (previous year: €2 million) on loans extended to Covestro Deutschland AG.

Other financial income and expenses mainly comprised bank fees totaling €7 million (previous year: €7 million). These included fees for the provision of credit lines and the pro rata reversal of the discount on the bonds issued, as well as nonrecurring fees relating to the issuance of the new bond and Schuldschein loans.

General administration expenses totaling €56 million (previous year: €80 million) mainly consisted of personnel expenses for the employees of the Group holding company and members of the Board of Management. The decline in general administration expenses in fiscal 2022 resulted mainly from lower expenses for short-term variable compensation, a decrease in costs associated with setting up the new organizational structure as of July 1, 2021, and a decline in expenses for the integration of the Resins & Functional Materials (RFM) business acquired from Koninklijke DSM N.V., Heerlen (Netherlands).

Other operating income related primarily to reversals of unutilized personnel-related provisions. In the previous year, other operating income had been materially affected by a one-time transfer of costs amounting to €33 million in connection with the acquisition of the RFM business to Group company Covestro (Netherlands) B.V., Nieuwegein (Netherlands).

The decrease in other operating expenses mainly resulted from nonrecurring expenses associated with the acquisition of the RFM business in the amount of €3 million incurred in the previous year.

The result of operations was €-232 million (previous year: €677 million) and led to income taxes of €84 million (previous year: €29 million). After adding retained earnings brought forward from the prior year of €5 million (previous year: €0 million) and withdrawing €311 million from other retained earnings (previous year: €9 million), distributable profit amounted to €0 million (previous year: €657 million). The Board of Management will not submit a proposal for the use of the distributable profit.

For fiscal 2022, net income was expected to far exceed the level in fiscal 2021 in line with our forecast from the Annual Report 2021. Given the net loss of €316 million for fiscal year 2022, business performance was different from the expectations at the end of the year 2021; this is mainly attributable to the Russian war against Ukraine and the resulting effects on energy prices. Moreover, a sharp decline in demand was recorded in the European market in the second half of 2022. This led in particular to a decrease in the investment income generated from the control and profit and loss transfer agreement with Covestro Deutschland AG.

Net Assets and Financial Position

Covestro AG statement of financial position according to the German Commercial Code

	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million
ASSETS		
Noncurrent assets	1,767	1,983
Intangible assets, property, plant and equipment	1	–
Financial assets	1,766	1,983
Current assets	5,371	5,361
Trade accounts receivable	67	36
Receivables from affiliated companies	5,219	5,281
Other assets	85	44
Deferred charges	12	13
Excess of plan assets over pension liability	5	1
Total assets	7,155	7,358
EQUITY AND LIABILITIES		
Equity	5,222	4,112
Issued capital	193	190
Capital stock	193	193
Own shares	–	(3)
Capital reserve	3,944	3,805
Other retained earnings	428	117
Distributable profit	657	–
Provisions	129	65
Provisions for pensions	9	21
Provisions for taxes	92	35
Other provisions	28	9
Liabilities	1,804	3,181
Bonds	1,500	2,000
Liabilities to banks	275	907
Trade accounts payable	12	11
Payables to affiliated companies	4	155
Other liabilities	13	108
Total equity and liabilities	7,155	7,358

Covestro AG had total assets of €7,358 million as of December 31, 2022 (previous year: €7,155 million). The net assets and financial position of Covestro AG are dominated by its role as a holding company in managing subsidiaries and financing corporate activities. This is primarily reflected in the levels of financial assets (27.0% of total assets), receivables from affiliated companies (71.8% of total assets), and bonds and liabilities to banks.

Receivables from affiliated companies were up €62 million to €5,281 million (previous year: €5,219 million). The rise was mainly attributable to an increase in the intercompany loan to Covestro Deutschland AG, which was set against the receivable from the control and profit and loss transfer agreement with Covestro Deutschland AG recognized in the previous year. In contrast, as of December 31, 2022, Covestro Deutschland AG's loss was reported under liabilities to affiliated companies.

All receivables and other assets have maturities of less than one year.

Intangible assets and property, plant and equipment were immaterial. Trade accounts receivable of €36 million (previous year: €67 million) and prepaid expenses of €13 million (previous year: €12 million) were also immaterial in relation to total assets. Other assets of €44 million (previous year: €85 million) mainly included income tax and VAT receivables.

Covestro AG's equity amounted to €4,112 million (previous year: €5,222 million). This corresponds to an equity ratio of 56.0% (previous year: 73.0%). Share buybacks in the first half of the year caused the capital reserve to decline by €139 million in the fiscal year. This was offset by the issuance of treasury shares to employees under the share-based participation program (Covestment). The net loss of €316 million was covered by the profit of €5 million carried forward from fiscal 2021 and a withdrawal of €311 million from retained earnings. The payment of dividends for fiscal 2021 in the amount of €651 million also reduced equity.

Equity was set against provisions of €65 million (previous year: €129 million) and liabilities of €3,181 million (previous year: €1,804 million).

Provisions comprised provisions for pensions of €21 million (previous year: €9 million), tax provisions of €35 million (previous year: €92 million), and other provisions of €9 million (previous year: €28 million).

The main reasons for the increase in liabilities was the issuance of a euro bond of €500 million in November 2022 and the raising of Schuldschein loans of around €550 million. The euro bonds totaling €2.0 billion have the following maturities: €1.0 billion mature in one to five years and another €1.0 billion mature in 2028 or later. Moreover, liabilities to banks totaling €131 million are due in 2023, €739 million are due in one to five years, and €37 million in the year 2028 or later. Other liabilities amounting to €107 million are due in fiscal 2023, and €1 million are due in one to five years. All other liabilities are due within one year.

REPORT ON FUTURE PERSPECTIVES AND ON OPPORTUNITIES AND RISKS

Report on Future Perspectives

Economic Outlook

Global Economy

Compared with the reporting year, under the weight of the continuing Russian war against Ukraine, the global economy is expected to experience persistently high inflation, further tightening of monetary policy, and weaker – yet slightly positive – growth in the year 2023. Our growth forecast for the year 2023 is 1.5%. Most of the leading industrialized countries are expected to fall into a mild recession in fiscal 2023. The relaxation of the zero-COVID policy in China offers opportunities for improved global growth prospects, but also risks if there are high rates of infection.

Economic growth¹

	Growth 2022	Growth ¹ forecast 2023
	%	%
World	3.1	1.5
Europe, Middle East, Latin America², Africa (EMLA)	3.6	0.6
of which Europe	3.3	0.2
of which Germany	1.9	-0.2
of which Middle East	6.0	2.7
of which Latin America ²	3.7	0.3
of which Africa	3.4	2.4
North America³ (NA)	2.2	-0.1
of which United States	2.1	0.0
Asia-Pacific (APAC)	3.3	3.4
of which China	3.0	4.5

¹ Real growth of gross domestic product; source: Oxford Economics, as of February 2023.

² Latin America (excluding Mexico).

³ North America (Canada, Mexico, United States).

We believe growth in the EMLA region will underperform the global pace. High inflation and the continuing energy crisis make a recession likely in Europe. Germany's export-oriented economy should see negative growth of 0.2% in the year 2023. In the Middle East, growth will likely outperform the global economic expansion. The oil industry is anticipated to be a driver of this development, with oil prices expected to persist at a high level for the time being. We anticipate that growth in Latin America will fall below the global level, because weaker global demand and tighter domestic policies are likely to have a negative effect on economic stability. In Africa, we forecast economic growth to outpace the global growth rate.

For the NA region, we anticipate a mild recession. In the United States, significant increases in the federal funds rate will lead to a continuing rise in the cost of borrowing and therefore weigh on companies' profits and capital expenditure. Consumer spending is likely to decline because of higher unemployment. Against this backdrop, we expect the United States to generate economic growth of 0.0% in the year 2023.

Economic growth in the APAC region will likely outperform the global economy. We anticipate economic growth of 4.5% for China in fiscal 2023. The relaxation of the zero-COVID policy and economic stimulus measures taken by the government in China should lead to a gradual recovery of macroeconomic performance in the region, even though risks to economic performance remain in the case of higher infection rates.

Main Customer Industries

In 2023, we forecast growth of 4.6% for the global automotive industry. High order backlogs will again counteract an economic downturn in the industry in the year 2023. Growth will likely be driven by the EMLA and NA regions, while the APAC region is expected to have only slightly positive growth.

We anticipate positive expansion of 0.8% in the global construction industry in the year 2023. Poor economic growth, the high cost of construction materials, labor shortages, and rising inflation will continue to weigh on the construction industry in the year 2023. We anticipate slightly positive growth for the APAC region, while the growth rate will be stable in the EMLA region and slightly negative in the NA region.

In the year 2023, we anticipate that the global electrical, electronics, and household appliances industry will grow by 2.0%. Due to shifts in consumer spending from goods to services, weak demand for electronics and electrical components is expected to continue in fiscal 2023. We anticipate negative performance for the EMLA and NA regions and slightly positive growth rates for the APAC region.

In 2023, we anticipate positive growth of 0.3% for the global furniture industry. High inflation, rising selling prices, a slowdown in consumer demand, and lower investments in the housing sector will again have a dampening effect on growth prospects in the year 2023. We anticipate negative performance for the EMLA and NA regions and slightly positive growth rates for the APAC region.

Growth in main customer industries¹

	Growth 2022	Growth forecast 2023
	%	%
Automotive	6.9	4.6
Construction	1.2	0.8
Electrical, electronics and household appliances	4.9	2.0
Furniture	-3.6	0.3

¹ Covestro's estimate, based on the following sources: LMC Automotive Limited, B+L, CSIL (Centre for Industrial Studies), Oxford Economics. We limited the economic data of our "automotive and transportation" and "furniture and wood processing" main customer industries to the automotive and furniture segments (excluding the transportation or wood processing segments). As of: February 2023.

Forecast for the Covestro Group and Covestro AG

Covestro Group

The following forecast for the 2023 fiscal year is based on the business development described in this Annual Report and takes into account the potential opportunities and risks.

In view of the continuing challenging economic conditions, the Board of Management of Covestro AG expects the key management indicators to change as presented below.

Forecast for key management indicators

	2022	Forecast 2023
EBITDA ¹	€1,617 million	Significantly down on previous year
Free operating cash flow ²	€138 million	Significantly down on previous year
ROCE above WACC ^{3,4}	-5.0% points	Significantly down on previous year
Greenhouse gas emissions ⁵	4.7 million metric tons of CO ₂ equivalents	Similar to previous year ⁶

¹ EBITDA: EBIT plus depreciation, amortization, and impairment losses; less impairment loss reversals on intangible assets and property, plant and equipment.

² Free operating cash flow (FOCF): cash flows from operating activities less cash outflows for additions to property, plant, equipment and intangible assets.

³ ROCE: ratio of EBIT after imputed income taxes to capital employed. Since the year 2022, imputed income taxes have been calculated by multiplying an imputed tax rate of 25% (previously: effective tax rate) by EBIT.

⁴ WACC: weighted average cost of capital reflecting the expected return on the company's equity and debt capital. A figure of 7.6% has been taken into account for the year 2023 (2022: 7.0%).

⁵ GHG emissions (Scope 1 and 2, GHG Protocol) at main production sites (responsible for more than 95% of our energy usage).

⁶ This may entail a variance in the single-digit percentage range.

As for EBITDA of the Covestro Group and the Performance Materials segment, we expect a figure well below that of the year 2022. In the Solutions & Specialties segment, we project an EBITDA on a level with the year 2022.*

We anticipate that FOCF will be significantly below the 2022 figure for both the Covestro Group and the Performance Materials segment. In the Solutions & Specialties segment, however, we project FOCF to be significantly higher than the amount of the year 2022.

We forecast ROCE above WACC to be well down on the year 2022.

We anticipate that the Covestro Group's GHG emissions, measured in CO₂ equivalents, will be similar to those recorded for the year 2022.*

Covestro AG

The earnings of Covestro AG, as the parent company of the Covestro Group, largely comprise the earnings of that company's subsidiaries. As a result of the profit and loss transfer agreement with Covestro Deutschland AG, net income of Covestro AG is particularly impacted by that company's income from equity investments in Germany and abroad. Due to higher equity investment income expected in fiscal 2023, we forecast that the net loss generated by Covestro AG will be significantly lower than that of the year 2022.

* This may entail a variance in the single-digit percentage range.

Opportunities and Risks Report

As a company with global operations, Covestro is exposed to opportunities and risks on a daily basis. Addressing them is an integral part of our business operations. We regard an opportunity as an internal or external development or event that could cause a positive change in the Group's forecasts or targets. Conversely, a development or event in or outside the company that could lead to a negative deviation from the Group's forecasts or targets is considered a risk.

Group-Wide Opportunities and Risk Management System

Conscientious management of opportunities and risks is part of responsible corporate governance and is the foundation of sustainable growth and financial success. This includes the ability to systematically identify and take advantage of opportunities while managing risks at the same time. The business decisions we make daily in the course of business processes are based on balancing opportunities and risks. We therefore regard the management of our opportunities and risks as an integral part of our overall business management system rather than as the task of a specific corporate function. Risk management at Covestro also includes nonfinancial risks.

Our opportunity and risk management begins with strategy and planning processes, from which relevant external and internal opportunities and risks of an economic, ecological, or social nature are derived. Financial and nonfinancial opportunities and risks are identified by observing and analyzing trends along with macroeconomic, industry-specific, regional, and local developments.

The identified opportunities and risks are subsequently evaluated and incorporated into our strategic and operational processes. We aim to avoid or mitigate risks by taking appropriate countermeasures, or to transfer them to third parties (such as insurers) to the extent possible and economically acceptable. At the same time, we strive to take maximum advantage of opportunities by incorporating them into our business decisions. We consciously accept and bear manageable and controllable risks that are in reasonable proportion to the anticipated opportunities. Covestro regards these as the general risks of doing business. Where we expect any opportunities and risks to materialize within the next 12 months, they will be included in the statements in the Report on Future Perspectives. Opportunities and risks are continuously monitored so that, for example, changes in the economic or legal environment can be identified at an early stage and suitable countermeasures can be initiated, if necessary.

To enable the Board of Management and the Supervisory Board to monitor material business risks as legally required, the following systems are in place:

- an internal control system,
- a compliance management system, and
- a risk management system pursuant to Section 91, Paragraph 2 of the German Stock Corporation Act (AktG).

The various management systems are based on different risk types, risk characteristics, and timelines. Different processes, methods, and IT systems are therefore applied to identify, evaluate, manage, and monitor risks. The principles underlying the various systems are documented in Group policies that are integrated into our central document control processes and are accessible to all employees via the intranet. Covestro's Board of Management is primarily responsible for supervising the Group's risk management.

The statement on the appropriateness and effectiveness of the internal control system, the risk management system, and the compliance management system, which is aligned with the company's risk situation, can be found in the Declaration on Corporate Governance:

→ See "[Declaration on Corporate Governance](#)."

The various systems are described below.

Main Features of the Internal Control System

An appropriate, effective internal control system (ICS) is essential for successfully mitigating risk in business processes. Covestro's ICS goes beyond controls in the accounting process and takes account of all business processes with a significant impact on financial indicators and, increasingly, nonfinancial indicators.

The implementation of the ICS at Covestro is based on the internationally recognized model of the Committee of Sponsoring Organizations of the Treadway Commission (COSO; 2013 version), and on the Control Objectives for Information and Related Technology (COBIT) for IT controls.

An ICS network has been established in the Group to identify and evaluate risk in a consistent and coordinated way and to develop and implement appropriate countermeasures. The network, which consists of local and regional ICS specialists and process owners from all parts of the company, is managed centrally by a team of global ICS managers. Binding ICS standards have also been established throughout the Group. The management of each Covestro Group company is responsible for implementing these standards at the local level.

In addition to controls that have to be regularly performed, the control environment also includes self-assessments relating to the controls as well as the underlying process. To ensure the effectiveness of the controls, the self-assessments are conducted at different levels – from the persons directly involved in the processes, through the principal managers responsible for the various operating processes, down to the Board of Management.

Continuous reviews and, where necessary, adjustments to the control environment ensure in this process that our ICS is consistently effective and appropriate, even when business models change, acquisitions or divestments are made, or technical specifications/IT systems are adapted.

(Group) accounting and financial reporting, which include the preparation of the Financial Statements and Consolidated Financial Statements of Covestro AG, are the responsibility of the corporate Accounting function. This function is also responsible for ensuring that all consolidated subsidiaries apply consistent accounting rules and for creating an ICS.

Accounting and financial reporting are based on a structured process with a corresponding organization and workflows and associated work instructions. In addition to the segregation of functions, the dual control principle and continual plausibility checks are fundamental control and monitoring measures in the process of preparing financial statements.

The preparation of the Consolidated Financial Statements under the International Financial Reporting Standards (IFRSs) is governed by the Covestro Directive on Consolidated Financial Statements. It specifies how the consolidated companies have to apply accounting policies in accordance with IFRSs and submit the data to the standard consolidation system.

Once submitted, this data runs through various checks to verify plausibility and accuracy. For example, system-integrated validation rules ensure on submission that the companies' data is consistent.

Appropriate controls have been implemented in the ICS to ensure proper accounting and financial reporting. The control environment has been designed to ensure that the requirements for reliable reporting can be met, i.e., that all relevant business processes and transactions are recorded in a correct, timely, and consistent manner. It is intended as a way to prevent material misrepresentations with reasonable assurance.

Internal Control System to Ensure Compliance

Compliance risks are systematically identified and assessed as part of Covestro’s Group-wide risk management. Risk owners assess the compliance risks that have been identified. A risk matrix is used to define focal points of compliance tasks at Covestro. The findings of a risk-based analysis enabled Covestro to identify four key topics: antitrust law, corruption, data protection, and foreign trade law. The General Counsel/Chief Compliance Officer is the risk owner responsible for breaches of antitrust law and corruption, while the Global Export Control Officer oversees the risk of breaches of foreign trade law, and the Group Data Protection Officer is assigned to handling the risk of loss and improper handling of personal data. With respect to corruption, areas including gifts and invitations, relationships with government officials, and relationships with certain business partners such as sales agents were identified as being especially risk-relevant. A corruption risk analysis was performed in the year under review for all companies in which Covestro holds a majority interest. If the risk profile changes, new controls are implemented if needed.

Many controls have been implemented at both the global and local levels to reduce the number of compliance risks. To the extent possible, we integrate the compliance controls into our internal control system. The effectiveness of the compliance controls is evaluated on the basis of a cascaded self-assessment system, as are the ICS processes for accounting and financial reporting. The results of the effectiveness evaluations are documented in the global system for the ICS processes. The Corporate Audit function regularly reviews the compliance activities in independent, objective audits as part of dedicated compliance checks in the larger companies. In the smaller companies, compliance aspects are part of a general review.

Risk Management System

Covestro has implemented a structured risk management process for the early identification of any potentially disadvantageous developments that could have a material impact on our business or endanger the continued existence of the company. This process satisfies the legal requirements regarding an early warning system for risks pursuant to Section 91, Paragraph 2 of the German Stock Corporation Act, and is aligned with the international risk management standard COSO II Enterprise Risk Management – Integrated Framework (2004).

Risk management system



Corporate Risk Management defines, coordinates, and monitors the framework and standards for this risk management system, ensuring adequate risk communication and reporting to both management and the risk managers. Covestro uses risk management software that simplifies the aggregation of risks, provides displays of various interdependencies, and compares individual risks to the risk bearing capacity.

Risks are identified, evaluated, and controlled in the operating divisions and corporate functions by the respective risk managers, who are organized in various global sub-committees. The Covestro Corporate Risk Committee met three times in fiscal 2022 to review the risk landscape as well as the various risk management and monitoring mechanisms that are in place, and to take any necessary measures. Additionally, we conduct an ad-hoc process for newly identified risks throughout the year so that these are immediately incorporated into the risk management system. These ad-hoc risks are identified and their handling is determined based on risk assessments and depending on the defined thresholds. In addition, the Corporate Audit function complements the monitoring process with process-independent monitoring.

Financial risks are evaluated using estimates of the potential impact after taking into account countermeasures and the likelihood of their occurrence. The potential economic losses are projected using the expected EBITDA loss and, in some individual cases, the FOCF loss. All material risks and the respective countermeasures are documented in the risk management software, which is used throughout the Group. The risk management system is reviewed regularly over the course of the year. Significant changes must be promptly entered in the software and reported to the Board of Management. In addition, a report on the risk portfolio is submitted to the Audit Committee several times a year and to the Supervisory Board at least once a year.

Nonfinancial risks associated with our own business activities, business relations, or products are also recorded. The extent of losses associated with these risks is evaluated on a quantitative and/or qualitative basis. In quantitative evaluation, any potential EBITDA loss is estimated. This also takes into consideration any countermeasures that have a mitigating effect on the potential extent of losses or the probability of the risk. A qualitative assessment of the impact is made on the basis of criteria such as strategic effect, influence on our reputation, or possible loss of confidence among groups of stakeholders.

The following matrix illustrates the quantitative and qualitative criteria for rating a risk as high, medium, or low. The same applies to the classification of nonfinancial risks.

Rating matrix

Potential accumulated impact (qualitative or quantitative in € million) ¹	Likelihood of occurrence within 1 year				
	Very low	Low	Medium	High	Very high
Critical/ >1,000					
Significant/ >300–1,000					
High/ >150–300					
Moderate/ ≥50–150					

Weighted risk occurrence: ■ Low ■ Moderate ■ High

¹ An individual risk that could have both a direct financial and an indirect financial impact of different severities is always classified based on the higher level of risk.

Process-Independent Monitoring

The effectiveness of our management systems is evaluated at regular intervals by the Corporate Audit function, which performs an independent and objective audit focused on verifying compliance with laws and policies. Corporate Audit also supports the company in achieving its goals by systematically evaluating the efficiency and effectiveness of governance, risk management, and control processes and helping to improve them. This includes internal monitoring of the appropriateness and effectiveness of the internal control system and the risk management system. The selection of audit targets follows a risk-based approach. Corporate Audit performs its duties according to internationally recognized standards. The Supervisory Board's Audit Committee is regularly informed about the results of audits and also receives an annual report on the internal control system and its effectiveness.

Risks in the areas of occupational health and safety, plant safety, environmental protection, and product quality are assessed through specific health, safety, environment, energy, and quality (HSEQ) audits.

The external auditor assesses the early warning system for risks as part of its audit of the financial statements, focusing on whether the system is fundamentally suitable for identifying at an early stage any risks that could endanger the company's continued existence so that suitable countermeasures can be taken. The auditor also reports at regular intervals to Covestro AG's Board of Management and the Audit Committee as well as the Supervisory Board on the results of the audit and any weaknesses identified in the internal control system. Audit outcomes are also taken into account in the continuous improvement of our management processes.

Opportunities and Risks

Overall Assessment of Opportunities and Risks

Particularly in the year 2022, Covestro's business environment was severely affected by geopolitical events, such as the Russian war against Ukraine, a rise in inflation trends around the world, higher energy and raw material prices, disrupted global supply chains, and the global acceleration in recessionary trends. However, the overall opportunity and risk position of the Group, has not changed significantly compared to the previous year. The latest assessment of financial and nonfinancial risks shows that none of the risks reported below endanger the company's continued existence. Nor could we identify any risk interdependencies that could combine to endanger the company's continued existence.

Based on our product portfolio, our know-how, and our innovation capability, we are confident that we can use the opportunities resulting from our business practices and successfully master the challenges resulting from the risks stated below.

Opportunities and Risks in General and in the Company's Business Environment

The risks outlined below may have material effects on EBITDA and, in individual cases, the FOCF of our Group within the one-year forecast period. In this context, risks are deemed material if the potential loss to Covestro is estimated at €50 million or more and/or they have at least a moderate potential qualitative impact. The likelihood of occurrence of the risks is used for internal management purposes to define focus areas for the Corporate Risk Committee. The risks are more highly aggregated in this report than in our internal documentation. Various individual risks are combined into risk categories we have defined for this purpose. The following overview shows the levels of risk allocated to the individual risks within each category. A risk category can therefore include more than one weighted risk occurrence level. The order in which the risk categories are listed does not reflect their significance. Unless explicit information to the contrary is provided, the opportunities and risks described below always refer to both segments of Covestro.

Financial opportunities and risks that affect neither EBITDA nor FOCF are presented separately at the end of the chapter.

Risk management considers risks that could threaten the attainment of the Group's objectives by having a negative impact on the existing business or strategic goals. They are included in our risk portfolio, which is in turn linked to the material sustainability topics and the topics of the Task Force on Climate-related Financial Disclosures (TCFD).

+ Additional information is available at: www.covestro.com/tcf22

Risk categories by weighted risk occurrence

Risk categories...	Weighted risk occurrence		
	Low	Medium	High
...in the business environment			
Geopolitical tensions and social upheavals		●	
Market development	●	●	
Laws and regulations		●	
...in the company-specific environment			
Procurement	●	●	
Information security, data protection, and information technology (IT)	●	●	
Employees	●		
Production, value creation, and safety	●	●	
Product stewardship	●	●	
Law and compliance	●	●	

● The risk category includes at least one individual risk with this weighted risk occurrence.

Business Environment

Geopolitical Tensions and Social Upheavals

In the year 2022, we saw geopolitical tensions between regional powers, whose effects included a decline in product demand, rising energy and raw material prices, and disruptions in the supply chains. There is great general uncertainty about how existing trade conflicts and tensions will develop, including the associated macroeconomic implications, which could also have an impact on Covestro's business situation.

Market Development

General economic conditions worldwide and, in particular, in the geographic regions in which Covestro operates are a significant factor affecting the company's earnings, since their effect on the industries in which Covestro's direct and indirect customers operate affects demand for our company's products.

Negative economic developments triggered by a variety of events may have a negative impact on the global economy and international financial markets in general. As a rule, this also adversely affects the sales markets for our products, which then usually decreases Covestro's sales volumes and earnings. However, the extent of the impact of economic developments on sales volumes and earnings also depends on capacity utilization rates in the industry, which in turn depend on the balance between supply and demand for the industry's products. Downturns in demand lead to reduced sales volumes and, ultimately, to reduced capacity utilization, which negatively impacts margins. Conversely, a positive economic environment characterized by growth and upward trends normally leads to improved business success.

Historically, the markets for most of our products have experienced periods of tight supply, causing prices and profit margins to increase. Periods of significant capacity additions, however, resulted in oversupply and declining prices and profit margins. These shifting supply cycles are often caused by capacity additions of new production facilities or the expansion of existing production facilities, which are necessary to create or sustain economies of scale in the industry. These are followed by a decline of industry-wide utilization rates.

Laws and Regulations

The international nature of Covestro's business exposes it to substantial changes in economic, political, and social conditions and the resulting statutory requirements of the countries in which Covestro operates. The associated opportunities and risks can have both a positive and negative effect on the company's business and significantly influence its prospects.

Competition

An economic downturn, changes in competitor behavior, or the emergence of new competitors can lead to greater competition and, as a result, overcapacities in the market or increased pressure on prices. These risks are rated lower at the moment than in the previous year.

Further opportunities and risks may also arise if actual market developments vary from those we predict in the "Economic Outlook" section. Where macroeconomic developments deviate from forecasts, this may either positively or negatively impact our sales and earnings expectations. Continuous analysis of the economic environment and of economic forecasts enables us to utilize the identified opportunities and to mitigate risks by adjusting our business strategy.

Company-Specific Environment

Procurement

Our Supplier Code of Conduct sets forth our sustainability principles and explains what we expect from our partners along the value chain. Covestro's overarching management approach to respecting human rights, and primarily the risk analysis conducted as part of the human rights due diligence, takes account of relevant laws such as the German Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains.

→ See "[Sustainability in the Supply Chain](#)" and "[Human Rights](#)."

The Code requires that our suppliers comply with environmental regulations as well as occupational health and safety rules, respect human rights and therefore, for example, avoid child labor in any form. Violations of the Code may harm our company's reputation. Through supplier assessments and audits, we verify whether our partners along the supply chain actually implement and adhere to our Code of Conduct. Covestro's Supplier Code of Conduct is based on the principles of the United Nations Global Compact and our position on human rights.

Covestro requires significant quantities of different energy forms and petrochemical raw materials for production processes. Procurement prices for these forms of energy and raw materials may fluctuate significantly due to market conditions or legislation, as they did in the year under review. Experience from the past has shown that higher production costs cannot always be passed on to our customers through price adjustments. Conversely, lower raw materials prices that do not directly reduce the selling price by the full amount can lead to improved margins.

We purchase important raw materials based on long-term supply agreements and pursue active supplier management to minimize procurement-related risks such as supply shortages or substantial price fluctuations.

In addition to watching energy price developments, Covestro has to make sure that it is adequately protected from power failures. Potential incidents could force energy utilities to power down their grids, which could lead to power failures at our production sites and infrastructure facilities at short notice.

Information Security, Data Protection, and Information Technology (IT)

Business and production processes as well as the internal and external communications of the Covestro Group are increasingly dependent on global IT systems. A significant technical disruption or failure of IT systems could severely impair our business and production processes.

Technical precautions such as data recovery and continuity plans are defined and continuously updated in close cooperation with our internal IT organization.

Confidentiality during data processing is of fundamental importance for Covestro. A loss of data and information confidentiality, integrity, or authenticity could lead to manipulation and/or the uncontrolled outflow of data and expertise. We have measures in place to counter these risks, including a sophisticated authorization system.

Covestro's Chief Information Technology Security Officer (CISO) and the department specially focused on this issue promote the IT security strategy and its implementation throughout the Group. These measures are designed to guarantee optimum protection based on state-of-the-art technology.

Innovation

We continually analyze global trends and develop innovative solutions to address them, thereby mastering the challenges and taking advantage of the opportunities that arise from these trends.

→ See "Innovation."

Customers are increasingly choosing sustainable products as a result of a growing environmental awareness and interest in environmental protection as well as increasing demands for fair working conditions. Our product portfolio offers such solutions for different areas of everyday life. We therefore see an opportunity here to expand our relevant market shares and to grow in these segments. A key focus of Covestro's strategy is sustainability and efficient production with the goal of making Covestro fully circular. To this end, we are developing new technologies, products, and business models that reduce energy usage and carbon emissions to unlock opportunities for Covestro.

The finite nature of natural resources and efforts to protect the climate are boosting the demand for innovative products and technologies that reduce resource consumption and lead to lower emissions. This trend is being reinforced by increasingly stringent regulatory requirements and growing consumer awareness of the need to use resources sustainably. Covestro is therefore developing new materials that help to further increase energy efficiency and lower emissions. For example, the polyurethane we manufacture is used in the construction industry for thermal insulation, thus improving its positive energy balance, while our polycarbonate is used in the automotive industry to reduce vehicle weight and thus fuel consumption.

Ongoing technological advancements are changing the world we live in and the way we do business. The use of cutting-edge digital technologies will help us add value along the entire value chain by optimizing the supply chain, stimulating growth, and developing new business models.

→ See "Circular Economy" and "Climate Neutrality."

Employees

Skilled and dedicated employees are essential for the company's success.

→ See "Employees."

In countries with full employment, there is keen competition among companies for highly qualified personnel and employees in key positions in particular. If we are unable to recruit a sufficient number of employees in these countries and retain them within Covestro, this could have significant adverse consequences for the company's future development. The risk of not knowing precisely when employees could leave the organization can potentially result in there not being sufficient run-up time for finding suitable replacements. We currently consider this a low-level risk.

Covestro has introduced appropriate employee recruitment and development measures based on the analysis of future requirements. We aim to convince our target groups of the advantages of working for Covestro through comprehensive human resources marketing, including an employer branding campaign. Our human resources policies are based on the principles enshrined in our position on human rights, the Corporate Compliance Policy, and our corporate values. Essential elements include competitive compensation containing performance-related components as well as an extensive range of training and development opportunities. In addition, our focus on diversity enables us to tap the full potential of the employment market.

Covestro cultivates good relationships with its employees, employee representatives, and unions so that all issues concerning HR policy, working conditions, and change processes can always be resolved by management and labor in a collaborative manner.

Production, Value Creation, and Safety

We place great importance not only on product safety but also on protecting our employees and the environment.

→ See ["Health and Safety."](#)

Risks associated with the production, filling, storage, or shipping of products are mitigated using an integrated health, safety, environmental, energy, and quality management system.

→ See ["Integrated Management System for Health, Safety, Environment, Energy, and Quality."](#)

If these risks were to materialize, this could result in personal injury, property and environmental damage, production stoppages, business interruptions and liability for compensation payments.

Covestro uses large quantities of hazardous substances, generates hazardous wastes, and emits wastewater and air pollutants in its production operations.

→ See ["Environmental Impact of Own Operations."](#)

Consequently, its operations are subject to extensive environmental, health, and safety (EHS) laws, regulations, rules, and ordinances at the international, national, and local levels in multiple jurisdictions. The company must dedicate substantial resources to complying with these EHS regulations and the additional voluntary commitments. Costs relating to the implementation of and compliance with EHS requirements are part of Covestro's operating costs and must therefore be covered by the prices at which the company is able to sell its products. Competitors of Covestro that are not affected by equally strict EHS requirements may have lower operating costs and, as a consequence, their products may be priced lower than those of Covestro.

Operations at our sites may be disrupted by external influences such as natural disasters, fires/explosions, sabotage, or supply shortages for our principal raw materials or intermediates. We mitigate this risk to the extent possible and economically feasible by distributing production of certain products among multiple sites and by building up safety stocks. Furthermore, a security and crisis management system has been implemented for all our production sites as a mandatory component of our HSEQ management activities. It is aimed at protecting employees, neighbors, the environment, and production facilities from the risks described. The "Corporate Security" and "Crisis Management" Group Regulations forms the foundation for this.

Covestro operates in markets in which the long-term trend is toward a balance between supply and demand. However, in the event of planned or unplanned closures, interruptions, or even the elimination of one of our competitors, Covestro may have the opportunity to capture more of the market in terms of profitability and growth in the short to medium term.

Increased ecological awareness creates opportunities for Covestro in two ways. On the one hand, the development of innovative materials for our customers opens up market potential. On the other hand, if we succeed in increasing the energy efficiency of our own production processes, we can mitigate environmental impacts and achieve cost savings at the same time. By developing new production technologies and applying internationally recognized energy management systems, we aim to help meet increasing environmental requirements, further reduce emissions and waste, and increase energy efficiency. In this way, we not only contribute to sustainable climate protection and the conservation of natural resources, but also achieve cost and competitive advantages.

Organic growth through investment projects may involve risks in relation to the overall project scope, location, and timing. These risks are addressed through established processes that involve a variety of internal and external stakeholders. A robust investment assessment process helps to ensure that we are capitalizing on organic growth opportunities at the right time. These projects are reviewed throughout the project timeline so that any potential changes in the market situation are considered, enabling us to react in a timely manner, if necessary.

Product Stewardship

The Covestro Group is exposed to the risk of negative publicity, press speculation, and potential or actual legal proceedings in connection with its business, which may harm its reputation. The development of a negative social perception of the chemical industry in general or Covestro's processes, products, or external communications in particular could additionally have a negative impact on the company. The incorrect use and handling of our products by third parties can also harm the company's reputation.

In addition, concerns about product safety and environmental protection could influence public perceptions of Covestro's products and operations, the viability of certain products, its reputation, and its ability to attract and retain employees. Due to the technical expertise required to fully understand the possible effects of the chemical constituents of our products, the company's reputation may suffer due to claims that such compounds are of a harmful nature, even if these claims can be disproved by experts. Such statements may lead to changes in consumer preferences or additional governmental regulations even before any harm is scientifically substantiated and possibly despite scientific evidence to the contrary.

→ See "Product Stewardship."

Law and Compliance

Ethical conduct is a matter of essential importance for society. Many stakeholders evaluate companies according to whether they conduct themselves not just "legally" but also "legitimately." The Covestro Group is committed to sustainable development in all areas of its commercial activity. Any violations of this corporate commitment can result in adverse media reporting and thus lead to a negative public perception of the Covestro Group. We counter this risk through responsible corporate management that is geared toward generating not only economic but also ecological and societal benefit.

The Covestro Group is exposed to risks from legal disputes or proceedings to which we are currently a party or that could arise in the future, particularly in the areas of product liability, competition and antitrust law, patent law, tax law, and environmental protection.

Investigations of possible legal or regulatory violations, such as potential infringements of antitrust law or the use of certain marketing and/or sales methods, may result in the imposition of civil or criminal penalties – including substantial monetary fines – and/or other adverse financial consequences. They can also harm Covestro's reputation and ultimately hamper our commercial success.

Legal proceedings currently considered to involve material risks are described in the Notes to the Consolidated Financial Statements.

→ See note 26 "Legal Risks" in the Notes to the Consolidated Financial Statements.

Financial Opportunities and Risks

The Covestro Group is exposed to liquidity risks, foreign currency and interest-rate opportunities and risks, credit risks, and risks resulting from obligations for pensions and other post-employment benefits. Appropriate processes to manage financial opportunities and risks have been established and documented. One component of this is financial planning, which serves as the basis for establishing liquidity needs and foreign currency risk. Financial planning comprises a planning horizon of 12 months and is regularly updated.

The section below and the Notes to the Consolidated Financial Statements present the financial opportunities and risks material to the Covestro Group – independent of their likelihood of occurrence.

→ See note 24.2 “Financial Risk Management and Information on Derivatives” in the Notes to the Consolidated Financial Statements.

Liquidity Risk

Liquidity risk is the risk of not being able to meet existing or future payment obligations. The liquidity status of all material Group companies is continuously planned and monitored. Liquidity is secured by cash pooling agreements as well as internal and external financing. A syndicated revolving credit facility totaling €2.5 billion, increased and renewed with a maturity to March 2027 in fiscal 2020 offers additional financial flexibility.

Foreign Currency Opportunities and Risks

For the Covestro Group, foreign currency opportunities and risks result from changes in exchange rates and the related changes in value.

Material foreign currency exposures from operating and financial activities are fully hedged through forward exchange contracts.

Anticipated foreign currency exposures were not hedged in the reporting year. These exposures are also hedged using forward exchange contracts if the foreign currency risk increases significantly.

Interest Rate Opportunities and Risks

Interest rate opportunities and risks for the Covestro Group result from changes in capital market interest rates, which could lead to changes in the fair value of fixed-rate financial instruments and in interest payments in the case of floating-rate instruments. To minimize adverse effects, interest rate risk is managed centrally based on an optimized debt maturity structure.

Credit Risks

Credit risks arise from the possibility that the value of receivables or other financial assets of the Covestro Group may be impaired because counterparties cannot meet their payment or other performance obligations. To manage credit risks from receivables, credit managers are appointed who regularly analyze customers' creditworthiness and set credit limits.

Risk to Pension Obligations from Capital Market Developments

The Covestro Group has obligations to current and former employees related to pensions and other post-employment benefits. Changes in relevant measurement parameters such as interest rates, mortality rates, and salary increase rates may raise the present value of these obligations, resulting in increased costs for pension plans. A proportion of the Covestro Group's pension obligations is covered by plan assets. Declining or even negative returns on the investment of the plan assets may adversely affect their future fair value. Both these effects may negatively impact the company's earnings and may necessitate additional payments by the company.

We address the risk of market-related fluctuations in the value of plan assets through balanced strategic investments and by constantly monitoring investment risks with regard to pension obligations. In addition, funding measures for pension obligations are regularly reviewed, taking into account country-specific regulatory requirements and liquidity to reduce funding gaps and thereby limit this risk.

→ See note 20 “Provisions for Pensions and Other Post-Employment Benefits” in the Notes to the Consolidated Financial Statements.

CORPORATE GOVERNANCE

Covestro's corporate governance is characterized by a sense of responsibility as well as ethical principles. Covestro places great importance on responsible corporate governance. This promise to shareholders, business partners, and our employees is based on our commitment to the German Corporate Governance Code (GCGC) and Articles of Incorporation that reflect these standards. In pursuing our business activities, we follow company principles that exceed the requirements of the law and the GCGC. A key concern is combining business success with environmental and social goals, so when making any business decision, we always consider the three dimensions of sustainability – people, planet, profit. The principles guiding our actions, which are also based on these dimensions, are documented in six policies applicable throughout the Group. These provide our employees with guidance in the areas of value creation; sustainability; innovation; employees; health, safety, environment, energy, and quality (HSEQ); and compliance. The standards contained in these policies are mandatory for all employees worldwide.

+ Additional information is available at: www.covestro.com/en/sustainability/service-downloads/policies-commitments

The Board of Management and Supervisory Board provide information pertaining to corporate governance in the sections that follow, including a Declaration on Corporate Governance for Covestro AG pursuant to Section 289f and for the Covestro Group pursuant to Section 315d of the German Commercial Code (HGB). Pursuant to Section 317, Paragraph 2, Sentence 6 HGB, the disclosures in the Declaration on Corporate Governance are not included in the financial statement audit.

Declaration on Corporate Governance

Declaration of Conformity by the Board of Management and the Supervisory Board of Covestro AG on the German Corporate Governance Code Pursuant to Section 161 of the German Stock Corporation Act (AktG)

The Board of Management and Supervisory Board issued the Declaration of Conformity with the GCGC pursuant to Section 161 AktG in December 2022:

Declaration of Conformity by the Board of Management and Supervisory Board
of Covestro AG on the German Corporate Governance Code Pursuant to Section 161 AktG

The recommendations of the Commission of the German Corporate Governance Code, as amended on December 16, 2019, published by the Federal Ministry of Justice and Consumer Protection on March 20, 2020 in the official part of the Federal Gazette have been complied with since the last Declaration of Conformity was issued in December 2021. The recommendations of the Commission of the German Corporate Governance Code, as amended on April 28, 2022, published by the Federal Ministry of Justice and Consumer Protection on June 27, 2022 in the official part of the Federal Gazette are being complied with. Covestro AG will continue to comply with these recommendations in the future.

Leverkusen, December 2022

For the Board of Management

For the Supervisory Board

Dr. Markus Steilemann

Dr. Richard Pott

Corporate governance disclosures and supplementary information on the Board of Management and Supervisory Board, along with the declaration of conformity with the GCGC of December 2022 and those of the past five years are published on Covestro's website.

+ [Additional information on the declaration of conformity is available at: \[ww.covestro.com/en/company/management/corporate-governance\]\(https://www.covestro.com/en/company/management/corporate-governance\)](https://www.covestro.com/en/company/management/corporate-governance)

Compensation Report/Compensation System

The compensation system applicable to members of the Board of Management, which was approved by the Annual General Meeting (AGM) on April 21, 2022, and the compensation of the members of the Supervisory Board set out in Section 12 of the Articles of Incorporation of Covestro AG, which was also approved by the AGM on April 21, 2022, are available on our website. The Compensation Report, the auditor's report in accordance with Section 162 Paragraph 3 AktG, and the corresponding results of the latest AGM are also made accessible there. The Compensation Report for fiscal 2022 is also part of this Annual Report.

+ [Additional information is available at: \[www.covestro.com/en/company/management/corporate-governance\]\(https://www.covestro.com/en/company/management/corporate-governance\)](https://www.covestro.com/en/company/management/corporate-governance)

Composition, Duties and Activities of the Board of Management and Supervisory Board

Board of Management

Duties and Activities of the Board of Management

The Board of Management runs the company on its own responsibility with the goal of sustainably increasing the company's enterprise value and achieving defined corporate objectives. In doing so, it takes into account the interests of shareholders, employees, and other stakeholders. The Board of Management performs its duties according to the law, the Articles of Incorporation, the Board of Management's rules of procedure, and the recommendations of the GCGC as stated in the Declaration of Conformity. It ensures compliance with the law and internal company policies, and works with the company's other governance bodies in a spirit of trust.

+ The current rules of procedure of the Board of Management are available at: <https://www.covestro.com/rulesofprocedure2022>

The Board of Management defines the long-term goals and strategy for the company and sets forth the principles and policies for the resulting corporate policies. Furthermore, it coordinates and monitors the most important activities, defines the company's portfolio, develops and deploys managerial staff, allocates resources, and decides on the management and reporting of the Covestro Group. In this context, the Board of Management ensures that both, the risks and opportunities for the company associated with social and environmental factors, and the ecological and social impact of the company's activities are systematically identified and assessed. In addition to the long-term economic goals, the corporate strategy also takes ecological and social goals into account. Corporate planning incorporates appropriate financial and sustainability-related goals.

During their period of service for Covestro, Board of Management members are subject to a comprehensive non-compete clause. They are obligated to work in the company's interests at all times and may not pursue any personal interests in making decisions for the company or take advantage of the company's business opportunities for themselves. All Board of Management members are required to disclose any conflicts of interest to the Chair of the Supervisory Board's Human Resources Committee and the Board of Management Chair, and inform the other Board of Management members of this fact. Other duties, particularly holding seats on Supervisory Boards or comparable governing bodies at companies outside the Group, may only be assumed with the approval of the Supervisory Board.

The members of the Board of Management bear joint responsibility for running the business as a whole. However, the individual members manage the areas assigned to them on their own responsibility within the framework of the decisions made by the full Board. The allocation of duties among the members of the Board of Management is defined in a written schedule appended to its rules of procedure and listed in the following table. The full Board of Management makes decisions on all matters of fundamental importance and in cases where a decision of the full Board is prescribed by law or otherwise mandatory. The rules of procedure of the Board of Management contain a list of topics that must be dealt with and resolved by the full Board.

Board of Management meetings are held regularly and are convened by the Chair of the Board of Management. Any member of the Board of Management may also request that a meeting be convened, notifying the other members of the matter for discussion. The Board of Management makes decisions by a simple majority of the votes cast, except where unanimity is required by law. In the event of a tie, the Chair casts the deciding vote.

According to the Board of Management's rules of procedure, the Chair bears particular responsibility for functional coordination of all Board of Management areas. The Chair represents the Board of Management as well as Covestro AG and the Group in dealings with the public and other third parties.

Composition of the Board of Management

The Supervisory Board appoints the Board of Management of Covestro AG and its Chair. The Board of Management currently has no committees. In the fiscal year 2022, the composition of the Board of Management was as follows:

Areas of responsibility¹

Name	Position	Areas of responsibility	Memberships ²
Dr. Markus Steilemann	Chief Executive Officer	<ul style="list-style-type: none"> • Communications • Corporate Audit • Human Resources • Strategy • Sustainability & Public Affairs • Group Innovation 	<ul style="list-style-type: none"> • Member of the Supervisory Board of Fuchs Petrolub SE³ (since May 2022)
Sucheta Govil	Chief Commercial Officer	<ul style="list-style-type: none"> • Performance Materials • Tailored Urethanes • Coatings & Adhesives • Engineering Plastics • Specialty Films • Elastomers • Thermoplastic Polyurethanes • Supply Chain & Logistics EMLA, NA, APAC 	<ul style="list-style-type: none"> • Independent non-executive director of Eurocell plc (United Kingdom)³ (until July 2022)
Dr. Klaus Schäfer	Chief Technology Officer	<ul style="list-style-type: none"> • Engineering • Process Technology • Group Health, Safety and Environment • Group Procurement 	<ul style="list-style-type: none"> • Member of the Supervisory Board of TÜV Rheinland AG⁴
Dr. Thomas Toepfer	Chief Financial Officer Labor Director	<ul style="list-style-type: none"> • Accounting • Controlling • Finance & Insurance • Information Technology & Digitalization • Investor Relations • Law, Intellectual Property & Compliance • Portfolio Development • Taxes 	<ul style="list-style-type: none"> • Member of the Supervisory Board of CLAAS KGaA mbH⁴ (since January 2022) • Member of the General Partners' Committee of CLAAS KGaA mbH⁴ (CLAAS-group)

¹ As of December 31, 2022.

² Memberships on supervisory boards and memberships in comparable supervising bodies of German or foreign corporations.

³ Listed.

⁴ Non-listed.

Objectives and Concept for the Composition of the Board of Management

Assisted by the Human Resources Committee and the Board of Management, the Supervisory Board arranges long-term succession planning for individual Board of Management members. It conducts a systematic process for selecting candidates for the Board of Management, while following the recommendations of the GCGC. In accordance with Covestro's corporate values, it also observes the diversity principle, i.e., balancing the Board's composition in terms of age, educational and professional background as well as a balanced gender ratio among members. Board of Management members will generally not be appointed if they are over the age of 63. The Board of Management as a whole should represent a variety of backgrounds and possess extensive experience in corporate strategy, innovation, production and technology, marketing and sales, finance, leadership and sustainability management. Members of the Board of Management are initially appointed for a maximum of three years.

When filling specific Board of Management positions, the Human Resources Committee also develops a skills profile that is based on the diversity criteria and used to evaluate candidates from within and outside the company. The Human Resources Committee conducts structured individual interviews with the eligible shortlisted candidates determined in this way. The committee then submits a proposed resolution to the Supervisory Board. Both the Human Resources Committee and the Supervisory Board make decisions in the company's interest, taking into account all the circumstances of each individual case. When necessary, external advisors support the Supervisory Board in preparing and executing specific succession decisions.

Implementation Status of the Objectives

Covestro AG's Board of Management currently has four members. The goals regarding age structure and function-specific expertise were generally met in fiscal 2022. The Board of Management additionally meets the education and professional background requirements. The Board of Management's members ranged in age from 50 to 60 in fiscal 2022. As a whole, the Board of Management features members with a range of different educational backgrounds. In particular, they possess many years of experience in the following areas: engineering, physics and chemistry, business administration, and finance. The members of the Board of Management have gathered extensive professional experience in Germany and abroad as well as in the petroleum and chemical industries. In the course of their careers, they have held leadership positions in marketing and sales, innovation, corporate strategy, production and technology, and finance, among others, and possess extensive experience in human resources management and project management.

Promotion of Equal Participation of Women and Men in Leadership Positions

The Act Supplementing and Amending the Law on Equal Participation of Women and Men in Leadership Positions in the Private and Public Sectors of August 7, 2021, (FüPoG II) requires listed companies in Germany that are subject to codetermination rules and whose boards of management have more than three members to appoint at least one woman and one man to the board in future. The obligation stipulated as a general rule by the First Leadership Positions Act (FüPoG I) as far back as 2015 remains in effect: these companies are required to define target quotas for appointing women to their Supervisory Boards, Boards of Management, and the two management levels below, and to establish dates by which this quota is to be achieved in each case. If quotas are newly set in percent since FüPoG II entered into force, these may not correspond to fractions.

In accordance with Section 96, Paragraph 2 AktG, the Supervisory Board of a company which is both listed and subject to codetermination rules should be composed of at least 30% women and at least 30% men. Although no targets need to be specified in this case, it is in the Supervisory Board's general interest to try to achieve gender parity in the Board of Management and Supervisory Board of Covestro AG. As of December 31, 2022, the Supervisory Board of Covestro AG comprised six women and six men. The minimum legal requirement has thus been met.

At the end of the first target attainment period on June 30, 2017, the Supervisory Board had decided on a target quota of at least 40% for women on the Board of Management of Covestro AG and an implementation period through June 30, 2022. As of June 30, 2022, the Board of Management had four members, including one woman. Two new members were appointed to Board of Management functions during the implementation period through June 30, 2022. In the selection for and appointment to these functions, the main consideration was the best possible professional and technical qualification, taking the appropriate skills profile into account; in cases of equal qualification, the Supervisory Board acts on the understanding that preference should be to the underrepresented gender. Against this backdrop, Dr. Thomas Toepfer was first appointed as Chief Financial Officer in 2018 and Sucheta Govil as Chief Commercial Officer in 2019. During the implementation period through June 30, 2022, the Supervisory Board saw no reason to doubt the professional and technical qualifications of the respective Board of Management members or to appoint new candidates to these Board of Management positions, including when employment contracts with members of the Board of Management were extended. Nevertheless, on the basis of having one female member of the Board of Management, Covestro AG met the legal minimum quota in accordance with Section 76 (3a) AktG as of June 30, 2022.

At the end of the second target attainment period on June 30, 2022, the Supervisory Board resolved, in accordance with the legal minimum quota, a target quota of one woman on the Board of Management of Covestro AG, which has four members, so that women account for 25% of its members, with an implementation period through December 31, 2023. The resolution on the new target and implementation period were passed, taking account of FüPoG II and the Supervisory Board's duty to guarantee that the statutory minimum gender quota is met or to specify targets for the proportion of women on the Board of Management in compliance with legal requirements. As of December 31, 2022, one woman and three men served on the Board of Management. Women therefore made up 25% of the Board of Management.

In fiscal 2017, the Board of Management had set new targets for the first two management levels below the Board of Management. For the period through June 30, 2022, the goal of Covestro AG and the Covestro Group was to achieve a minimum of 30% women at both levels.

Target setting for proportion of women in the first two management levels below the Board of Management as of June 30, 2022

	Covestro AG		Covestro Group	
	As of June 30, 2022	Target by June 30, 2022	As of June 30, 2022	Target by June 30, 2022
	%	%	%	%
Proportion of women in management level 1 ¹	0	30	24	30
Proportion of women in management level 2 ²	26	30	24	30

¹ Direct reports to the Board of Management with management responsibilities.

² Direct reports to management level 1 with management responsibilities.

Since the target was set in the year 2017, the proportion of women in the Covestro Group increased considerably overall on both management levels (management level 1: from 13% in fiscal 2017 to 24% in fiscal 2022 and management level 2: from 20% in fiscal 2017 to 24% in fiscal 2022). At Covestro AG, the proportion of women on management level 2 increased from 26% in fiscal 2017 to 30% in fiscal 2022. However, some conditions changed, especially in the second half of the implementation period, and this had an effect on the management structure. This included a challenging economic environment caused, for example, by the coronavirus pandemic, various reorganizations, and restructuring. This also led to adjustments to the hiring policy. Due to reorganizations, vacancies on the first management level were not filled at Covestro AG. Overall, this meant that Covestro AG's and the Covestro Group's targets were not met by June 30, 2022.

In the year 2022, the Board of Management set new differentiated targets for the first two management levels below the Board of Management for the period through June 30, 2027, for both Covestro AG and the Covestro Group.

Target setting for proportion of women in the first two management levels below the Board of Management as of June 30, 2027

	Covestro AG		Covestro Group	
	As of Dec. 31, 2022	Target by June 30, 2027 ³	As of Dec. 31, 2022	Target by June 30, 2027 ³
	%	%	%	%
Proportion of women in management level 1 ¹	0.0	25.0	24.1	31.0
Proportion of women in management level 2 ²	23.5	31.6	23.6	30.2

¹ Direct reports to the Board of Management with management responsibilities.

² Direct reports to management level 1 with management responsibilities.

³ The percentages are based on the following employee numbers: Covestro AG, management level 1: 1 woman out of a total of 4 employees, management level 2: 6 women out of a total of 19 employees; Covestro Group, management level 1: 9 women out of a total of 29 employees, management level 2: 54 women out of a total of 179 employees.

Covestro considers the development and promotion of women a global task – independent of individual Group companies or management levels – and strives therefore to increase the percentage of women overall.

→ See "Promoting Diversity, Equity, and Inclusion."

Supervisory Board

Duties and Activities of the Supervisory Board

The Supervisory Board advises and oversees the Board of Management. The Supervisory Board is directly involved in decisions on matters of fundamental importance to the company, regularly conferring with the Board of Management on the strategic alignment of Covestro AG and the Covestro Group, and on the implementation status of the business strategy. Monitoring and consulting also include sustainability issues that are dealt with not only in meetings of the full Supervisory Board, but also in committee meetings. The Supervisory Board Chair coordinates its work and presides over the meetings. The Chair also represents the Supervisory Board outside the company and holds discussions with investors on topics that fall within the Supervisory Board's tasks and responsibilities. In accordance with the Articles of Incorporation, the Supervisory Board has issued rules of procedure governing its activity. These rules of procedure are applicable to the Supervisory Board as a whole as well as to individual Supervisory Board committees. They also include rules concerning the composition and work of the committees.

+ Rules of Procedure for the Supervisory Board are available at: <https://www.covestro.com/en/company/management/corporate-governance>

The Supervisory Board members are obligated to work in the company's interests at all times and may not pursue any personal interests in making decisions for the company or take advantage of the company's business opportunities for themselves. They are required to immediately disclose any conflicts of interest to the Chair of the Supervisory Board, in particular including those resulting from executive functions or consulting activities at customers, suppliers, lenders, or other third parties. If the conflict of interest is material and of more than a temporary nature, the Supervisory Board member must step down. In its report to the Annual General Meeting, the Supervisory Board discloses any conflicts of interest and how they were handled.

The effectiveness and efficiency review of the Supervisory Board was for the first time conducted with external support in the reporting year 2022. As a supplement to the regular review performed as a self-assessment based on a written questionnaire answered by Supervisory Board members, this year's review comprised in particular a written survey of the individual Board of Management members conducted by external parties as well as individual interviews with all members of the Board of Management and Supervisory Board. The main topics covered were the members' understanding of their roles; the objectives and values of the Supervisory Board; the organization of, and provision of information to, the Supervisory Board; cooperation with the Board of Management; and the Supervisory Board's debate culture. The findings obtained from this process were discussed in an externally facilitated two-day workshop of the Supervisory Board in October 2022. The workshop also included an in-depth discussion of cooperation between shareholder and employee representatives, the agenda for the year 2023, and additionally the Supervisory Board's skills profile and qualification matrix. The resulting actions include, for example, the introduction of a feedback round at the end of Supervisory Board meetings during which members comment on the content and process of the meeting and make suggestions for future meetings. This action has already been implemented. On the whole, the Supervisory Board's activity was evaluated and found to be effective and efficient.

+ See Capital Market, section "Meetings of the Full Supervisory Board and Member Attendance."

The Board of Management informs the Supervisory Board about business policy, corporate planning, and strategy in regular and open discussions. Further details of how the Board of Management provides information to the Supervisory Board, including ongoing information of the Chair of the Supervisory Board by the Chair of the Board of Management, are governed by the Board of Management's rules of procedure.

+ Additional information is available at: www.covestro.com/rulesofprocedure2022

The Supervisory Board approves the corporate planning and financing framework. It also approves the Financial Statements of Covestro AG and the Consolidated Financial Statements of the Covestro Group, along with the Group Management Report, taking into account the auditor's reports and explanations. The Board of Management and Supervisory Board issue an annual compensation report in accordance with Section 162 of the German Stock Corporation Act. The Supervisory Board also regularly meets without the Board of Management in attendance. The members of the Supervisory Board representing employees regularly hold structured discussions with members of the Board of Management prior to Supervisory Board meetings. Prior meetings of shareholder representatives are held on a case-by-case basis when necessary.

Composition of the Supervisory Board

The Supervisory Board has 12 members, half of whom are shareholder representatives and half employee representatives pursuant to the German Codetermination Act. The members of the Supervisory Board representing shareholders are elected individually by the Annual General Meeting. On April 21, 2022, the Annual General Meeting elected Dr. Sven Schneider as successor to Prof. Rolf Nonnenmacher, who stepped down from the Supervisory Board. The six employee representatives comprise four Covestro employees and two union representatives; they are elected in accordance with the provisions of the German Codetermination Act. The meeting of delegates accordingly elected Dr. Christoph Gürtler and Frank Löllgen as first-time members and reelected Petra Kronen, Irena Küstner, Petra Reinbold-Knape, and Marc Stothfang to the Supervisory Board; their terms of office also began on April 21, 2022. After assuming office, the new members elected to the Supervisory Board of Covestro AG took part in the onboarding process, during which they were given key information on the company as well as further information on the business and structure of the company, depending on individual needs.

The Supervisory Board discussed the requirements stipulated by Section 100, Paragraph 5 AktG. Based on its composition, the Supervisory Board as a whole has in-depth industry expertise in the chemical and polymer sector in which Covestro operates. This industry knowledge was acquired by the members either through their jobs or the requisite continuing education. In addition, the Supervisory Board has at least one member with expertise in the area of accounting and at least one other member with expertise in the area of auditing.

Supervisory Board members¹

Name/function	Membership on the Supervisory Board	Position	Memberships ²
Dr. Richard Pott (Chair)	Member of the Supervisory Board since August 2015	<ul style="list-style-type: none"> Member of various supervisory boards 	<ul style="list-style-type: none"> Chair of the Supervisory Board of Covestro Deutschland AG^{4,5} Member of the Supervisory Board of Freudenberg SE⁴ Member of the Supervisory Board of SCHOTT AG⁴
Petra Kronen (Vice Chair)	Member of the Supervisory Board since October 2015	<ul style="list-style-type: none"> Chair of the General Works Council of Covestro Vice Chair of Covestro-European Forum Member of the Works Council of Covestro at the Uerdingen site Employee of Covestro Deutschland AG 	<ul style="list-style-type: none"> Vice Chair of the Supervisory Board of Covestro Deutschland AG^{4,5} Member of the Supervisory Board of Covestro Deutschland AG^{4,5} Member of the Supervisory Board of MTU Aero Engines AG³ Member of the Supervisory Board of TÜV SÜD AG⁴ Member of the Supervisory Board of Siemens Energy AG³ Member of the Supervisory Board of Siemens Energy Management GmbH⁴ (Siemens Energy group)
Dr. Christine Bortenlänger	Member of the Supervisory Board since October 2015	<ul style="list-style-type: none"> Executive Member of the Board of Deutsches Aktieninstitut e.V. 	
Dr. Christoph Gürtler	Member of the Supervisory Board since April 2022	<ul style="list-style-type: none"> Chair of the Managerial Employees' Committees of Covestro Deutschland AG and of the Covestro Group (since April 2022) Managerial Employee of Covestro Deutschland AG 	<ul style="list-style-type: none"> Member of the Supervisory Board of Covestro Deutschland AG^{4,5}
Lise Kingo	Member of the Supervisory Board since April 2021	<ul style="list-style-type: none"> Member of various supervisory boards, governing bodies and committees Chair of the Works Council of Covestro at the Leverkusen site Chair of the Group Works Council of Covestro Vice Chair of the General Works Council of Covestro 	<ul style="list-style-type: none"> Member of the Supervisory Board of Covestro Deutschland AG^{4,5} Independent Board Director of Sanofi SA³, France Independent Board Director of Aker Horizons ASA³, Norway Independent Board Director of Danone SA³, France (since December 2022)
Irena Küstner	Member of the Supervisory Board since October 2015	<ul style="list-style-type: none"> Employee of Covestro Deutschland AG 	<ul style="list-style-type: none"> Member of the Supervisory Board of Covestro Deutschland AG^{4,5}
Dr. Ulrich Liman	Member of the Supervisory Board from January 2018 until April 2022	<ul style="list-style-type: none"> Chair of the Managerial Employees' Committee of Covestro Deutschland AG (until April 2022) Managerial employee of Covestro Deutschland AG 	<ul style="list-style-type: none"> Member of the Supervisory Board of Covestro Deutschland AG^{4,5} (until April 2022)
Frank Löllgen	Member of the Supervisory Board since April 2022	<ul style="list-style-type: none"> North Rhine District Secretary of the German Mining, Chemical and Energy Industrial Union (IGBCE), Düsseldorf 	<ul style="list-style-type: none"> Member of the Supervisory Board of Covestro Deutschland AG^{4,5} Member of the Supervisory Board of Bayer AG³
Prof. Dr. Rolf Nonnenmacher	Member of the Supervisory Board from August 2015 until April 2022	<ul style="list-style-type: none"> Member of various supervisory boards 	<ul style="list-style-type: none"> Member of the Supervisory Board of Covestro Deutschland AG^{4,5} (until April 2022) Member of the Supervisory Board of Continental AG³ Member of the Supervisory Board of ProSiebenSat.1 Media SE³
Petra Reinbold-Knape	Member of the Supervisory Board since January 2020	<ul style="list-style-type: none"> Secretary at IG BCE Chair of the Board of August-Schmidt-Stiftung 	<ul style="list-style-type: none"> Member of the Supervisory Board of Covestro Deutschland AG^{4,5} Member of the Supervisory Board of Bayer AG³ (until April 2022)

(Continued on next page)

Dr. Sven Schneider	Member of the Supervisory Board since April 2022	<ul style="list-style-type: none"> • Chief Financial Officer at Infineon Technologies AG 	<ul style="list-style-type: none"> • Member of the Supervisory Board of Covestro Deutschland AG^{4,5} • Member of the Supervisory Board of Infineon Technologies Austria AG⁴, Austria (Infineon Group) • Member of the Board of Directors, Infineon Technologies China Co., Ltd.⁴, China (Infineon Group) • Member of the Board of Directors, Infineon Technologies Asia Pacific Pte., Ltd.⁴, Singapore (Infineon Group) • Member of the Board of Directors, Infineon Technologies Americas Corp.⁴, USA (Infineon Group) • Member of the Board of Directors, Infineon Technologies Japan K.K.⁴, Japan (Infineon Group)
Regine Stachelhaus	Member of the Supervisory Board since October 2015	<ul style="list-style-type: none"> • Member of various supervisory boards • Chair of the Works Council of Covestro at the Brunsbüttel site 	<ul style="list-style-type: none"> • Member of the Supervisory Board of Covestro Deutschland AG^{4,5} • Member of the Supervisory Board of CECONOMY AG³ (until February 2022) • Member of the Supervisory Board of Leoni AG³ (until May 2022) • Director of SPIE SA³, France • Member of the Supervisory Board of SPIE Deutschland und Zentraleuropa GmbH⁴ (SPIE Group)
Marc Stothfang	Member of the Supervisory Board since February 2017	<ul style="list-style-type: none"> • Member of Covestro-European Forum • Employee of Covestro Deutschland AG 	
Patrick Thomas	Member of the Supervisory Board since July 2020	<ul style="list-style-type: none"> • Member of various supervisory boards 	<ul style="list-style-type: none"> • Member of the Supervisory Board of Covestro Deutschland AG^{4,5} • Non-Executive Director (Chair) of Johnson Matthey plc³, United Kingdom • Non-Executive Director of Akzo Nobel N.V.³, Netherlands
Frank Werth	Member of the Supervisory Board from September 2016 until April 2022	<ul style="list-style-type: none"> • District Manager of the German Mining, Chemical and Energy Industrial Union (IG BCE) – district Dortmund-Hagen 	<ul style="list-style-type: none"> • Member of the Supervisory Board of Covestro Deutschland AG^{4,5} (until April 2022)

¹ As of December 31, 2022, for members stepping down during fiscal year, the information relates to the leaving date.

² Memberships on other supervisory boards and memberships in comparable supervising bodies of German or foreign corporations.

³ Listed.

⁴ Non-listed.

⁵ Covestro Group membership.

Committees of the Supervisory Board

The Supervisory Board currently has the following committees:

Presidial Committee: The Presidial Committee comprises the Supervisory Board Chair and Vice Chair along with an additional shareholder representative and an additional employee representative. The Presidial Committee serves primarily as the mediation committee pursuant to the German Codetermination Act. It has the task of submitting proposals to the Supervisory Board on the appointment of members of the Board of Management if the necessary two-thirds majority is not achieved in the first vote at a plenary meeting. Certain decision-making powers in connection with capital measures, including the power to amend the Articles of Incorporation, have also been delegated to this committee.

Members: Dr. Richard Pott (Chair), Petra Kronen, Petra Reinbold-Knape, and Regine Stachelhaus

Audit Committee: The Audit Committee has six members of the Supervisory Board, with shareholders and employees equally represented. The requirements of the AktG and the GCGC for the expertise of members of the Audit Committee are met. Due to his many years of experience as Chief Financial Officer of international DAX-listed companies, the Chairman of the Audit Committee, Dr. Sven Schneider, has the required accounting expertise, i.e., special know-how and experience in the application of accounting policies and internal control and risk management systems, as well as auditing expertise. This also covers sustainability reporting and auditing. Dr. Sven Schneider meets the requirements of the GCGC for the qualifications and independence of the Chair of the Audit Committee. Dr. Christine Bortenlänger also has the required auditing expertise, primarily due to many

years of experience as a member of other audit committees of international listed companies. The accounting expertise also includes know-how in relation to sustainability reporting and auditing.

The Audit Committee's main responsibilities include auditing the accounts; monitoring the accounting and financial reporting process; monitoring the effectiveness of the internal control system, the risk management system, and the internal audit system; financial statement audits; and compliance. The accounting comprises in particular the Consolidated Financial Statements and the Group Management Report. The Audit Committee is responsible for conducting a preliminary examination of the Financial Statements, Consolidated Financial Statements, and Management Reports, including the nonfinancial Group statement, and for discussing the quarterly and half-yearly reporting with the Board of Management. On the basis of the auditor's report, the Audit Committee develops proposals for resolutions by the Supervisory Board relating to the confirmation of the Financial Statements, the approval of the Consolidated Financial Statements, and the use of the distributable profit.

The Audit Committee is also responsible for the company's relationship with the external auditor. It submits a proposal to the full Supervisory Board concerning the auditor's appointment and is authorized to award the audit contract to the audit firm appointed on behalf of the Supervisory Board and to agree the auditor's remuneration. It also suggests areas of focus for the audit and monitors the quality of the audit as well as the independence and qualifications of the auditor. To this end, the Audit Committee has obtained a statement of independence from the auditor, who is required to immediately inform the Audit Committee about all possible grounds for exclusion or lack of impartiality arising during the audit or review, and all findings and incidents material to the Supervisory Board's responsibilities, particularly suspected accounting irregularities. The Audit Committee discusses the audit risk assessment, audit strategy and audit planning, and the audit results with the auditor. Moreover, the Audit Committee has requested that the auditor informs the Committee and make a note in the audit report if facts are identified during the financial statement audit process that indicate an error in the Declaration of Conformity with the GCGC submitted by the Board of Management and Supervisory Board. The Chairman of the Audit Committee has regular feedback sessions with the auditor on the audit progress and reports on this to the committee. During the respective meetings, the Audit Committee also has regular discussions with the auditor without the Board of Management.

Members: Dr. Sven Schneider (Chair) (since April 2022), Prof. Dr. Rolf Nonnenmacher (Chair) (until April 2022), Dr. Christine Bortenlänger, Petra Kronen, Irena Küstner, Petra Reinbold-Knape, and Patrick Thomas

Human Resources Committee: On the Human Resources Committee, too, there is parity of representation between shareholders and employees. It consists of the Supervisory Board Chair and three other members. The Committee prepares the personnel decisions of the full Supervisory Board, which resolves on appointments or dismissals of members of the Board of Management. The Human Resources Committee resolves on behalf of the Supervisory Board on the service contracts of the members of the Board of Management. However, it is the responsibility of the full Supervisory Board, based on the recommendations submitted by the Human Resources Committee, to resolve on the total compensation of the individual members of the Board of Management and the respective compensation components, as well as to regularly review the compensation system. The Human Resources Committee also discusses the long-term succession planning for the Board of Management.

Members: Dr. Richard Pott (Chair), Petra Kronen, Dr. Christoph Gürtler (since April 2022), Dr. Ulrich Liman (until April 2022), and Regine Stachelhaus

Nomination Committee: The Nomination Committee carries out preparatory work when an election of shareholder representatives to the Supervisory Board is to be held. It suggests suitable candidates for the Supervisory Board to propose to the Annual General Meeting for election. The committee comprises the Supervisory Board Chair, the other Supervisory Board member representing shareholders on the Presidial Committee, and another elected Supervisory Board member representing shareholders.

Members: Dr. Richard Pott (Chair), Regine Stachelhaus, Patrick Thomas

Sustainability Committee: The Sustainability Committee has four Supervisory Board members with parity of representation between shareholders and employees. The Chair of the Sustainability Committee is elected by the Supervisory Board from between the two shareholder representatives elected to the Committee. The committee advises the Supervisory Board, its committees, and the Board of Management, as well as working on sustainable corporate governance and the company's environmental, social, and governance (ESG) activities in particular. It supports, monitors, and issues recommendations on the Board of Management's ESG strategies, targets, and initiatives, including the environmental, social, societal, ethical, and circular economy aspects of Covestro's business along the entire value chain.

The Sustainability Committee additionally helps the Audit Committee examine sustainability-related statements in the context of the audit of the (Group's) nonfinancial statement. Furthermore, it advises the Human Resources Committee on setting ESG targets for Board of Management compensation.

Members: Lise Kingo (Chair), Dr. Christoph Gürtler (since April 2022), Dr. Ulrich Liman (until April 2022), Marc Stothfang, Patrick Thomas

Details on the Supervisory Board's activities and its committees are provided by the Supervisory Board in its Report. The resumes of the members of the Supervisory Board are published on the company's website and updated annually.

→ See Capital Market, section "Report of the Supervisory Board."

+ Additional information is available at: <https://www.covestro.com/en/company/management/supervisory-board>

Objectives for the Composition of the Supervisory Board and Diversity Concept

The composition of the Supervisory Board should be such that its members jointly possess the necessary expertise, skills, and professional experience to properly perform their duties, and are sufficiently independent. The Supervisory Board assesses the independence of its members according to the recommendation contained in the GCGC.

Covestro AG's Supervisory Board has agreed the following specific goals for its composition that align with the recommendations of the GCGC and at the same time provide for diversity in terms of age, independence, professional experience, and expertise in the sustainability topics important to the company, including particularly the circular economy, climate neutrality, and good corporate governance:

- The Supervisory Board has resolved that 75% of its members and more than half of the shareholder representatives on the Supervisory Board are to be independent.
- Absent of special circumstances, a Supervisory Board member should not serve more than three full terms of office and should not hold office beyond the end of the next Annual General Meeting following their 72nd birthday or, at the latest, the end of the Annual General Meeting following their 74th birthday.
- The Supervisory Board should not include more than two former members of the company's Board of Management. Supervisory Board members may not perform executive functions or consulting activities for major competitors of the company or any Group company, and they must not be exposed to other significant conflicts of interest.
- At least one member of the Supervisory Board should have accounting expertise and at least one other member should have auditing expertise.

- At least two Supervisory Board members must have function-specific knowledge in each of the following areas:
 - Strategy, mergers and acquisitions, capital markets
 - Marketing, sales, supply chain
 - Research and development, innovation
 - Sustainability (environment), circular economy and new technologies
 - Digitalization
 - Human resources, change management, sustainability (social)
 - Corporate governance, compliance
- The Supervisory Board must have at least two members with experience in industries, sales markets, and/or divisions of importance to Covestro, e.g., (polymer) chemistry, production, and technology.
- Taking into account the specific situation and international operations of Covestro and its affiliated companies, the Supervisory Board should strive to ensure sufficient diversity among its members. Moreover, at least three members should have managerial experience in an international enterprise and/or experience serving on other supervisory boards or supervisory bodies, and experience in relation to corporate culture and employee engagement.

The objectives described refer to the Supervisory Board as a whole unless resolved otherwise. However, since the Supervisory Board can only nominate candidates for election as shareholder representatives, it can only consider the objectives in making these nominations.

Implementation Status of the Objectives and Qualification Matrix

The Supervisory Board has several members with international business experience and an international background. The objectives pertaining to age limits, length of service, and independence are being met. In the opinion of the Supervisory Board, the shareholder representatives Dr. Richard Pott, Dr. Christine Bortenlänger, Lise Kingo, Dr. Sven Schneider, Regine Stachelhaus, and Patrick Thomas are independent pursuant to the GCGC. In principle, the requirements relating to function-specific knowledge are met.

+ Additional information about Covestro AG's current Supervisory Board members is available at: www.covestro.com/en/company/management/supervisory-board.

Qualification matrix¹

		Supervisory Board members											
Category	Field of expertise	C. Bortenlänger ²	C. Gürtler ³	L. Kingo ²	P. Kronen ³	I. Küstner ³	F. Löligen ³	R. Pott ²	P. Reinbold-Knappe ³	S. Schneider ²	R. Stachelhaus ²	M. Stothfang ³	P. Thomas ²
Industry- and company-specific knowledge/experience	(Polymer-)chemistry												
	Production and technology												
Function-specific knowledge	Strategy, M&A, capital market												
	Marketing/sales/supply chain												
	R&D, innovation												
	Sustainability (environment)/circular economy/new technologies												
	Digitalization												
	Human resources/change management/sustainability (social)												
	Corporate governance/compliance												
	Accounting												
	Financial statement audit												
	Management- and leadership experience	Leadership in an international enterprise											
Corporate culture and employee engagement (Covestro focus)													
Membership in supervisory boards and governing bodies													
Further information													
Terms of office/appointments	Initial appointment	2015	2022	2021	2015	2015	2022	2015	2020	2022	2015	2017	2020
	Re-appointment	2020			2017	2017		2020	2022		2020	2022	
	Re-appointment				2022	2022							
	End of term of office	2025	2027	2025	2027	2027	2027	2025	2027	2026	2025	2027	2025
Diversity	Age (reporting year 2022 minus year of birth)	56	55	61	58	56	61	69	63	56	67	56	65
	Gender (male, female, diverse)	F	M	F	F	F	M	M	F	M	F	M	M
	Nationality	D	D	DK	D	D	D	D	D	D	D	D	UK
	Independence ⁴	Yes	n. a.	Yes	n. a.	n. a.	n. a.	Yes	n. a.	Yes	Yes	n. a.	Yes
Professional activity	Professional status/ 'work stage' (executive vs. post-executive)	Exec	Exec	Post	Exec	Exec	Exec	Post	Exec	Exec	Post	Exec	Post
	Overboarding	No	No	No	No	No	No	No	No	No	No	No	No

¹ Based on a self-assessment by the Supervisory Board, incorporating the individual assessments of individual Supervisory Board members and the recommendations of the Nomination Committee and Presidial Committee to the full Supervisory Board. The three shades of color refer to the levels of know-how, from basic know-how (light) through extensive know-how (medium) down to profound know-how (dark).

² Members representing shareholders.

³ Members representing employees.

⁴ In accordance with GCGC 2022.

Securities Transactions by Members of Governing Bodies

In the reporting year, members of the Board of Management and Supervisory Board were required by law to report proprietary transactions in shares or debt instruments of Covestro AG or in related derivatives or other related financial instruments to Covestro AG and the German Federal Financial Supervisory Authority (BaFin) without undue delay, no later than three business days after the date of the transaction, if the total value of the transactions is equal to or exceeds €20,000 in the calendar year. Covestro publishes the details of reportable transactions in suitable media in the European Union and on its website without delay, but no later than two business days after receipt of the disclosure, and also provides this information to the company register for archiving.

+ Additional information on securities transactions by members of the Board of Management or Supervisory Board is available at: www.covestro.com/en/investors/share-details/disclosure-of-securities-transactions

Systematic Risk Management

Covestro's enterprise risk management system ensures early identification of any financial or nonfinancial risks. We attempt to avoid or mitigate identified risks, or to transfer them to third parties (such as insurers) to the extent possible and economically acceptable.

The internal control system (ICS) for accounting and financial reporting enables the timely monitoring of risks to prevent or correct potential errors in accounting for business transactions. It thus ensures the availability of reliable data on the company's financial situation.

However, the control and risk management system cannot provide absolute protection against losses arising from business risks or fraudulent actions.

Based on regular reports by the expert functions and audits conducted by Internal Audit (Corporate Audit function), the Board of Management is not aware of any matters that would lead to the assessment that the internal control system and the risk management system, which comprise a compliance management system aligned to the company's risk situation, are not largely appropriate and effective.

The main features of the internal control system, the risk management system, and the compliance management system, which is aligned with the company's risk situation, are described in the sections below.

→ See "Main Features of the Internal Control System," "Internal Control System to Ensure Compliance," and "Risk Management System."

Detailed Reporting

We provide regular and timely information on the Covestro Group's position and significant changes in business activities to shareholders, financial analysts, shareholders' associations, the media, and the general public to maximize transparency. Four times a year, we report to our shareholders about the company's business performance and financial situation as well as on changes in the business prospects and risk situation. Covestro's reporting thus complies with the provisions of the GCGC.

In line with statutory requirements, the members of the company's Board of Management provide assurance that, to the best of their knowledge, the Financial Statements of Covestro AG, the Consolidated Financial Statements of the Covestro Group, and the Combined Management Report provide a true and fair view.

The Financial Statements of Covestro AG, the Consolidated Financial Statements of the Covestro Group, and the Combined Management Report are published within 90 days following the end of each fiscal year. During the fiscal year, Covestro additionally informs shareholders and other interested parties about developments by means of the half-year financial report and interim reports for the first and third quarters. The half-year financial report is voluntarily subjected to a review by the auditor appointed by the Annual General Meeting.

Covestro also provides information about the current corporate strategy, important growth areas, the financial position and results of operations, and financial targets at regular press conferences and analysts' meetings. The company uses the internet as a platform for the timely disclosure of information, with major publications, such as annual reports, half-year financial reports, and quarterly statements, and the dates of events, such as Annual General Meetings, posted on the Group's website.

In line with the principle of fair disclosure, Covestro treats all shareholders and other key stakeholders equally as regards the communication of valuation-relevant information. All significant new facts are disclosed immediately to the general public. In addition to our regular reporting, we issue ad-hoc statements on developments that otherwise might not become publicly known but have the potential to materially affect the price of Covestro shares.

Shareholders and Annual General Meeting

Covestro's shareholders exercise their rights within the scope provided for by the law and the Articles of Incorporation at the Annual General Meeting and there exercise their right to vote. Each share of Covestro AG confers the same rights and carries one vote at the Annual General Meeting. Shareholders can exercise their voting rights by way of a proxy, e.g., a credit institution, a shareholders' association, or another third party. Shareholders can issue and revoke proxies in respect of the company electronically using the company's online proxy system. The company also makes it easier for its shareholders to exercise their personal rights by appointing voting proxies to cast their votes, subject to their instructions. They are also available during the Annual General Meeting. The Board of Management can enable shareholders to take part in the Annual General Meeting without in-person attendance and without a proxy, and exercise all of their rights or individual rights in whole or in part through electronic means of communication. All of the company's shareholders and interested members of the public may watch the opening of the Annual General Meeting by the meeting chair and follow the report of the Board of Management live online.

The Annual General Meeting on April 21, 2022, was held virtually due to the ongoing coronavirus pandemic. In that year, all of the company's shareholders and interested members of the public could watch the entire Annual General Meeting live online. All documents and information on the Annual General Meeting such as the invitation, including the agenda, and the annual report are available on Covestro's website as well.

+ The live feed of the opening of the Annual General Meeting and the report of the Supervisory Board are available at: <https://www.covestro.com/en/investors/financial-calendar/annual-general-meeting>

Takeover-Relevant Information

Disclosures Pursuant to Sections 289a, 315a of the German Commercial Code (HGB) Investments in Capital Interest Held, Exceeding 10% of Total Voting Rights

We have received no notification nor are we otherwise aware of direct or indirect investments in the capital of Covestro AG, equal to or exceeding 10% of the voting rights.

+ Additional information on Covestro's ownership structure is available at: <https://www.covestro.com/en/investors/stock-details/shareholder-structure>

Board of Management

Appointment and Dismissal of Members of the Board of Management, Changes to the Articles of Incorporation

The appointment and dismissal of members of the Board of Management are subject to the provisions of Sections 84 and 85 of the German Stock Corporation Act, Section 31 of the German Codetermination Act, and Article 6 of the Articles of Incorporation of Covestro AG. Pursuant to Section 84, Paragraph 1 of the German Stock Corporation Act, the members of the Board of Management are appointed and dismissed by the Supervisory Board. The maximum term of service for a Board of Management member appointed for the first time is three years. Since Covestro AG falls within the scope of the German Codetermination Act, the appointment or dismissal of members of the Board of Management requires a majority of two-thirds of the votes of the members of the Supervisory Board on the first ballot pursuant to Section 31, Paragraph 2 of that act. If no such majority is achieved, the appointment is resolved pursuant to Section 31, Paragraph 3 of the Codetermination Act on a second ballot by a simple majority of the votes of the members of the Supervisory Board. If the required majority still is not achieved, a third ballot is held. Here again, a simple majority of the votes of the members suffices, but in this ballot, the Supervisory Board Chair has two votes pursuant to Section 31, Paragraph 4 of the Codetermination Act. Under Article 6, Paragraph 1 of the Articles of Incorporation, the number of members of the Board of Management is determined by the Supervisory Board but must be at least two. The Supervisory Board may appoint one member of the Board of Management to be its Chair and one member to be the Vice Chair pursuant to Section 84, Paragraph 2 of the German Stock Corporation Act and Article 6, Paragraph 1 of the Articles of Incorporation of Covestro AG.

Any amendments to the Articles of Incorporation are made pursuant to Section 179 of the German Stock Corporation Act and Articles 10 and 17 of the Articles of Incorporation. Under Section 179, Paragraph 1 of the German Stock Corporation Act, amendments to the Articles of Incorporation require a resolution of the Annual General Meeting. Pursuant to Section 179, Paragraph 2 of the German Stock Corporation Act, this resolution must be passed by a majority of three-quarters of the voting capital represented at the meeting, unless the Articles of Incorporation provide for a different majority. However, where an amendment relates to a change in the object of the company, the Articles of Incorporation may only specify a larger majority. Article 17, Paragraph 2 of the Articles of Incorporation utilizes the scope for deviation pursuant to Section 179, Paragraph 2 of the German Stock Corporation Act and provides that resolutions may be passed by a simple majority of the votes cast or, where a capital majority is required, by a simple majority of the capital represented. Pursuant to Article 10, Paragraph 9 of the Articles of Incorporation, the Supervisory Board may resolve on amendments to the Articles of Incorporation that relate solely to their wording.

Capital

Composition of the Capital Stock

The capital stock of Covestro AG amounted to €193,200,000 as of December 31, 2022, and is composed of 193,200,000 no-par value bearer shares. Each share confers equal rights and one vote at the Annual General Meeting (AGM).

Board of Management's Authorizations to Issue Shares

The AGM adopted a resolution on April 16, 2021, authorizing the Board of Management, with the approval of the Supervisory Board, to increase the capital stock of the company by up to € 57,960,000 in the period through April 15, 2026, by issuing new, no-par value bearer shares against cash contributions and/or contributions in kind (Authorized Capital 2021).

On July 30, 2020, the AGM additionally authorized the Board of Management to issue bonds with conversion or exchange rights or warrants, or with conversion obligations, or a combination of these instruments on up to 18,300,000 no-par value bearer shares of Covestro AG. Based on this authorization, convertible/warrant bonds can be issued up to a total nominal value of €2,000,000,000 by the company or a Group company in the period through July 29, 2025. The 2020 AGM also resolved to conditionally increase the capital stock by up to €18,300,000 by issuing up to 18,300,000 no-par value bearer shares to grant shares to the holders or creditors of such convertible/warrant bonds (Conditional Capital 2020). New shares from Authorized Capital 2021 and the aforementioned bonds can be issued against cash contributions or contributions in kind. They must generally be offered to the shareholders for subscription. The Board of Management is authorized, with the approval of the Supervisory Board, to disapply shareholders' subscription rights when instruments are issued against contributions in kind. When issuing instruments against cash contributions, subscription rights can be disapplied with the approval of the Supervisory Board in the following cases:

- Subscription rights must be disapplied where the subscription ratio gives rise to fractional amounts.
- Subscription rights are disapplied to provide compensation for dilution in connection with convertible/warrant bonds already issued.
- The issue price of the new shares or bonds will not be significantly lower than their share market price or the theoretical fair value of the bonds calculated using recognized financial valuation methods (disapplication of subscription rights limited to 10% of the capital stock under or in accordance with Section 186, Paragraph 3, Sentence 4 of the German Stock Corporation Act).

Additional restrictions, which are described in greater detail in the respective authorization, may apply to the new shares issued or to be issued against cash contributions or contributions in kind while disapplying the subscription rights of shareholders. In addition, the Board of Management declared in a Corporate Commitment ending no later than April 15, 2026, that it will not increase the company's capital stock from Authorized Capital 2021 and Conditional Capital 2020 by a total of more than 10% of the amount of capital stock at the time of the AGM on April 16, 2021, insofar as capital increases are implemented from Authorized Capital 2021 against cash contributions or contributions in kind while disapplying subscription rights, or for the purpose of servicing convertible/warrant bonds issued under the authorization resolved on July 30, 2020, while disapplying subscription rights.

Acquisition and Use of Treasury Shares

By a resolution adopted by the Annual General Meeting on April 12, 2019, the Board of Management is authorized to acquire and use treasury shares, also using derivatives. The individual details of the resolution are as follows:

1. Authorization Granted to the Board of Management to Acquire and Use Treasury Shares

- 1.1 The Board of Management is authorized until April 11, 2024, to acquire treasury shares with a proportionate interest in the capital stock totaling up to 10% of the company's capital stock existing at the date of the resolution, or if this amount is lower, at the time the authorization is exercised, subject to the proviso that the shares acquired as a result of this authorization, together with other shares of the company that the company has already acquired and still holds, or which are attributable to it under Sections 71a et seqq. of the German Stock Corporation Act, at no time exceed 10% of the capital stock of the company. The provisions in Section 71, Paragraph 2, Sentences 2 and 3 of the German Stock Corporation Act must be complied with.

Exercising the authorization to acquire treasury shares, the Board of Management resolved on February 28, 2022, that the company would acquire treasury shares in a total amount of €500 million (excluding transaction costs).

The acquisition may only take place via the stock exchange or by means of a public purchase offer and must satisfy the principle of the equal treatment of shareholders (Section 53a of the German Stock Corporation Act). If the acquisition takes place via the stock exchange, the purchase price paid by the company (excluding transaction costs) may neither exceed, nor be lower than, the company's share price as determined by the opening auction in Xetra trading (or a comparable successor system) on the Frankfurt Stock Exchange on the trading day, by more than 10%. If the acquisition takes place by means of a public purchase offer, the offer price paid by the company (excluding transaction costs) may neither

exceed, nor be lower than, the company's share price as determined by the closing auction in Xetra trading (or a comparable successor system) on the Frankfurt Stock Exchange on the last trading day before the publication of the purchase offer, by more than 10%. If the total number of the shares tendered in response to a public purchase offer exceeds the offer volume, purchases may be made in proportion to the number of shares tendered (tender ratios); in addition, preferential acceptance of small numbers of shares (up to 50 shares per shareholder), as well as rounding in accordance with commercial principles to avoid notional share fractions, may be provided for. Any further shareholder tender rights are disappplied to this extent.

- 1.2 The authorization may be exercised in full, or in a number of partial amounts split across several acquisition dates, until the maximum purchase volume has been reached. The acquisition may also be carried out by Group companies that are dependent on the company within the meaning of Section 17 of the German Stock Corporation Act, or by third parties on behalf of the company or such Group companies. The authorization may, subject to compliance with the statutory requirements, be exercised for any purpose permissible in law, especially in pursuit of one or more of the purposes listed in 1.3, 1.4, 1.5, and 1.6. Trading in treasury shares is not permitted.

If the treasury shares acquired are used for one or more of the purposes described under 1.3 or 1.4, the shareholders' subscription rights are disappplied. The Board of Management is authorized to disapply subscription rights if the treasury shares acquired are used for the purpose specified in 1.6. Shareholders likewise do not have any subscription rights if the treasury shares acquired are sold via the stock exchange. In the event that the treasury shares acquired are sold by means of a public offer to shareholders, and this public offer complies with the principle of equal treatment, the Board of Management is authorized to disapply the shareholders' subscription rights for fractions.

- 1.3 The Board of Management is authorized to also sell the treasury shares acquired on the basis of the above or an earlier authorization in a manner other than via the stock exchange or by way of an offer to all shareholders, provided that the sale takes place against cash payment and at a price which, at the date of the sale, is not significantly lower than the market price for the same class of shares in the company. This authorization governing the use of shares is restricted to shares whose proportionate interest in the capital stock may not in total exceed 10% of the capital stock either at the date this authorization becomes effective or, if this amount is lower, at the date the present authorization is exercised. The upper limit of 10% of the capital stock is reduced by the proportionate interest in the capital stock that is attributable to those shares which are issued or sold during the term of this authorization while disapplying subscription rights under or in accordance with Section 186, Paragraph 3, Sentence 4 of the German Stock Corporation Act. The upper limit of 10% of the capital stock is further reduced by the proportionate interest in the capital stock that is attributable to those shares which are to be issued to service bonds with warrants or conversion rights or obligations, provided that these bonds are issued during the term of this authorization while disapplying subscription rights in application of Section 186, Paragraph 3, Sentence 4 of the German Stock Corporation Act, with the necessary modifications.
- 1.4 The Board of Management is authorized to transfer the treasury shares acquired under the above or an earlier authorization to third parties, provided this is done for the purpose of acquiring companies, parts of companies, equity interests in companies, or other assets, or to effect business combinations.
- 1.5 The Board of Management is authorized to retire the treasury shares acquired under the above or an earlier authorization without a further resolution by the Annual General Meeting. The shares may also be retired without reducing the capital by adjusting the proportionate interest of the remaining no-par value shares in the capital stock of the company. In this case, the Board of Management is authorized to amend the number of no-par value shares in the Articles of Incorporation.
- 1.6 The Board of Management is authorized to use the treasury shares acquired under the above or an earlier authorization to pay a scrip dividend.
- 1.7 The Board of Management may only use the authorizations in 1.3, 1.4, and 1.6 with the approval of the Supervisory Board. Moreover, the Supervisory Board may determine that the measures taken by the

Board of Management on the basis of this resolution by the Annual General Meeting may only be implemented with its approval.

- 1.8 Overall, the above authorizations governing the use of shares may be utilized on one or several occasions, individually or together, in relation to partial volumes of the treasury shares, or all treasury shares held in total.

Under the share buyback program, the company acquired 3,479,956 treasury shares in two tranches at a total cost of €150 million (excluding transaction costs) in the period from March 21, 2022, up to and including June 23, 2022; this corresponds to a proportional share of 1.8% of the company's registered capital stock in an amount of €193,200,000.

2. Authorization for Acquisition Using Derivatives

- 2.1 Treasury shares being acquired as part of the authorization under 1.1 may also be acquired using put or call options. In this case, the option transactions must be entered into with a credit institution, or a company which operates in accordance with Section 53, Paragraph 1, Sentence 1 or Section 53b, Paragraph 1, Sentence 1 or Paragraph 7 of the German Banking Act, that is independent of the company (financial institution), provided that this financial institution, when the option is exercised, only delivers shares which were previously acquired via the stock exchange at a market-driven price in compliance with the principle of equal treatment.
- 2.2 The acquisition of shares using put or call options is limited to a maximum of 5% of the capital stock in existence either at the date of the resolution by the Annual General Meeting or, if this amount is lower, at the date the authorization is exercised.
- 2.3 The option premium paid by the company in the case of call options may not be materially higher and the option premium received in the case of put options may not be materially lower than the theoretical fair value of the options concerned calculated using accepted financial valuation methods. The exercise price agreed in the option transaction (in each case not including transaction costs, but taking into account the option premium received or paid) may not be more than 10% higher or lower than the price of the company's shares as determined by the opening auction in Xetra trading (or a comparable successor system) on the Frankfurt Stock Exchange on the trading day on which the option transaction was entered into.
- 2.4 The term of the individual derivatives may not, in each case, exceed 18 months; it must end at the latest on April 11, 2024, and must be selected so that the shares are not acquired using derivatives after April 11, 2024.
- 2.5 The provisions under 1. also apply to the use of company shares acquired on the basis of the authorization under 2. using derivatives.

Material Conditional Agreements

Some debt financing instruments contain clauses that refer to cases of change of control. Such clauses grant the respective investor additional rights of termination, which may be restricted by additional conditions – such as a rating being downgraded. Our syndicated credit line and our bonds, for example, are governed by change-of-control agreements.

For the case of a takeover offer for Covestro AG, agreements are in place that impose limits on the financial benefits in the event of early termination of the service contract of a Board of Management member due to a change of control. Such payments are subject to the severance cap set out in the German Corporate Governance Code as amended on April 28, 2022, and may not exceed compensation for the remaining term of the contract.

Compliance

Compliance Management System

Our corporate conduct is characterized by a sense of responsibility as well as ethical principles. Compliance with legal and regulatory requirements is integral to our operations. It is only in this manner that we can sustainably increase the company's enterprise value and safeguard our reputation.

Compliance Culture and Targets

In its Corporate Compliance Policy, Covestro has specified a Group-wide code of conduct that mandates fundamental principles and rules for all employees. This code of conduct details our commitment to fair competition, integrity in business dealings, the principles of sustainability and product stewardship, data protection, upholding of foreign trade and insider dealing laws, the separation of business and private interests, proper record-keeping and transparent financial reporting, as well as to providing fair, respectful, and nondiscriminatory working conditions. These requirements apply within the company as well as to all interactions with external partners and the general public. Our code of conduct provides a framework for all decisions by the company and our employees. The Corporate Compliance Policy is available on our intranet and on our website, and is part of an information packet distributed to new employees when they are hired.

+ Additional information is available at: www.covestro.com/en/company/profile/procurement/sustainability-in-procurement/supplier-code-of-conduct

Covestro is aware that employees will likely embrace and exhibit integrity if managers are excellent role models. The Board of Management states very clearly in its Corporate Compliance Policy for all staff that, above and beyond any legal requirements, Covestro elects not to conduct any business activities that would violate our rules and that management staff is prohibited from instructing employees otherwise. In this way, management continuously fosters our compliance culture by, for example, regularly drawing employees' attention to compliance topics and their significance to the company. At Covestro town hall meetings, for example, Board of Management members regularly present recent compliance cases to employees and underscore the importance of complying with statutory requirements and internal regulations.

↳ See "Corporate Commitments."

We want to utilize our compliance management system in order to:

- Foster and reinforce conduct per compliance requirements,
- Minimize or even eliminate compliance violations,
- Identify risks for potential violations,
- Implement preventive measures, and
- Uncover, halt, and proactively eliminate a repeat occurrence of any compliance violations committed by individuals acting without authorization and in breach of clear rules.

We have taken steps to meet our targets, including implementing an internal control system to ensure compliance rules are followed. The insights gained from our annual evaluation of effectiveness are leveraged in our efforts to continually improve our compliance management system.

→ See "Internal Control System to Ensure Compliance."

Compliance Organization

The Chief Compliance Officer is in charge of all compliance activities at Covestro, and in this function reports directly to the Board of Management. The corporate Law, Intellectual Property & Compliance function is the single point of contact that coordinates Group-wide compliance activities. Chaired by the Chief Financial Officer (CFO) of Covestro, the Compliance Committee is the Group's top-level decision-making body on these issues. The Committee's responsibilities include the following: exercising a Group-wide compliance governance function, initiating and approving compliance-related regulations, and approving the annual training plan. In the reporting period, the Compliance Committee met a total of four times. The suitability and effectiveness of compliance activities are regularly reviewed by the Corporate Audit function in independent, objective audits.

→ See "Process-Independent Monitoring."

Data privacy is under the responsibility of the corporate Law, Intellectual Property & Compliance function and is coordinated Group-wide. By defining controls and processes, the function works to ensure compliance with legal requirements (in particular the EU General Data Protection Regulation, GDPR) and legal judgments to protect personal data of employees, as well as of business partners, media representatives, etc. Local Data Privacy Officers have been appointed for each country in which Covestro has employees. They serve as local points of contact for employees on all questions regarding data privacy. The Board of Management is informed regularly about activities in the company relating to data privacy law.

A local Compliance Officer has also been appointed for each country in which Covestro has employees. This person serves as a local point of contact for employees on all questions regarding legally and ethically correct conduct in business situations. The country organizations also have local compliance committees.

Communications and Compliance

Covestro systematically conducts training courses on compliance. Once focus areas have been specified, target groups are defined for each content category and the employees (including managerial staff) are invited.

Covestro expressly encourages its employees to openly address any doubts about proper conduct in business situations and to solicit advice. We inform all employees whom they can contact if they have any doubts or questions. Covestro has also set up a whistleblowing tool. Employees and third parties can report potential compliance violations through a hotline accessible worldwide or use an online tool that also permits anonymous reports. In addition, employees can also report any compliance incidents to their supervisors or to the Compliance organization.

+ Additional information is available at: www.covestro.com/en/company/management/compliance

An internal policy sets out the principles for handling compliance incidents at Covestro. All suspected compliance incidents are recorded in a central database. Confirmed violations are evaluated, and organizational, disciplinary, or legal measures are taken if necessary.

Compliance incidents are regularly reported to the Supervisory Board, the Board of Management, and the business entities' management teams. Moreover, a current overview of incidents, including additional information on various aspects and developments related to this topic, is published in a monthly Compliance Telegram on the intranet. This ensures a high degree of transparency for all employees.

On a quarterly basis, all companies document risks arising from pending or current legal or administrative proceedings. Relevant cases are reported on a regular basis to the Board of Management and to the Audit Committee of the Supervisory Board. The material legal risks are disclosed in the Notes to the Consolidated Financial Statements.

→ See note 26 "Legal Risks" in the Notes to the Consolidated Financial Statements.

[Supplementary information >](#)

Tax Compliance

Principles and Targets of Tax Compliance

Covestro takes seriously its responsibility to pay the statutory tax liability in accordance with the rules set by each government as well as to meet all registration, documentation, disclosure, and licensing requirements in all the applicable countries and/or tax jurisdictions. Ensuring that tax payments are made in the appropriate amount is a core element of Covestro's responsibility to society, because this is a major source of revenue for governments that is used to carry out economic and social policies.

Our tax principles are as follows:

- Zero tolerance for violations, especially tax fraud/evasion;
- Tax payments in line with the value created in the relevant countries/territories;
- Cooperation with tax authorities.

These principles are also published online.

+ [Additional information is available at: www.covestro.com/en/sustainability/service-downloads/policies-commitments](http://www.covestro.com/en/sustainability/service-downloads/policies-commitments)

Our principles are at the heart of a tax policy applicable to the entire Group, which was reviewed and approved by the corporate Taxes function and the Chief Financial Officer (CFO). The tax policy also includes our tax strategy in alignment with our Group strategy and our C³ corporate values. The tax strategy is discussed and amended as necessary in regular exchanges with the CFO.

→ [See "Strategy."](#)

In addition, we are interested in keeping abreast of ongoing developments in tax law and therefore participate in political discussions in trade association committees. All of our activities rest on compliance with our ethical principles. The aim of our participation in trade associations is fair, transparent, and administratively streamlined evolution of tax law.

Tax Compliance Organization

Responsibility for implementing and continually improving the appropriate tax processes lies with the corporate Taxes function, which reports to the CFO. Local tax experts in Covestro's subsidiaries implement tax processes or support this effort. To the extent that third-party professionals are tasked with tax-related responsibilities in certain countries, they agree to adhere to our principles and compliance rules.

Covestro expressly encourages employees to openly discuss any concerns about proper conduct by the company regarding taxes with their supervisors or local tax departments, and to obtain assistance or advice. Our whistleblower tool is also available to employees and third parties.

→ [See "Communications and Compliance."](#)

A standardized process is used to report tax risks worldwide to the corporate Taxes function once a year. Tax risks are monitored on an ongoing basis in cooperation with the subsidiaries and, if necessary, the risk reports are amended. Financial reporting comprises tax risks, which are integrated into the internal control system for the (Group) accounting and financial reporting process and the risk early warning system.

→ [See "Main Features of the Internal Control System" and "Risk Management System."](#)

[< Supplementary information](#)

DISCLOSURES ON SUSTAINABILITY REPORTING AND GRI INDEX

Covestro aims to help protect the environment, conserve limited resources, advance society, and create value, all by firmly integrating sustainability into our Group strategy and management.

Our sustainability reporting is based on recognized standards. We report on material topics and nonfinancial performance indicators pursuant to Section 315 (3) of the German Commercial Code (HGB) in our Group Management Report and supplement this information with additional content, which meets the requirements of the "with reference to" reporting option of the Global Reporting Initiative's (GRI) Sustainability Reporting Standards (SRS); this option has been available since the year 2022. We voluntarily report the management approaches for material topics in accordance with GRI 3-3 (2021). We plan to check whether the use of voluntary GRI reporting under the "in accordance with GRI" option is appropriate against the backdrop of regulatory developments.

Nonfinancial Group Statement

We publish the nonfinancial Group statement pursuant to Sections 315b and 315c in conjunction with Sections 289c through 289e HGB as an integrated part of the Group Management Report. The respective sections include the strategies we pursue in addressing environmental, labor, and social issues as well as protecting human rights and fighting corruption and bribery, including the due diligence processes followed and measures implemented, as well as the outcomes of these strategies.

We applied the GRI standards as a framework for preparing the nonfinancial Group statement.

Key topics relevant to the nonfinancial Group statement are identified in an internal process and in consideration of their significance and implementation within the company. The starting point for this is the materiality assessment and the material sustainability topics identified or updated as a result, i.e., the topics that are of medium or high relevance to Covestro and on the aspects of which Covestro's business activities have a medium or high impact. The following table provides an overview of the key sustainability topics with an eye to the relevant aspects and contains references to the specific sections in the Group Management Report. In order to identify and address current developments and sustainability-related opportunities and risks at an early stage, we also review whether there are any new findings relevant to opportunity and risk management. No material risks have been identified in connection with Covestro's own business activities, business relationships, or products that have or are very likely to have a severely negative impact on the nonfinancial aspects of the company's business.

→ [See "Opportunities and Risks Report."](#)

Key sustainability topics of the Group's nonfinancial statement (HGB)

Key topics of the Group's nonfinancial statement (German Commercial Code)	Relevant aspects in accordance with the Group's nonfinancial statement (German Commercial Code)	Section reference in the Group Management Report
Circular economy	Environmental matters, social matters	"Strategy," "Circular Economy," "Innovation."
Climate neutrality	Environmental matters, social matters	"Strategy," "Management," "Climate Neutrality."
Sustainable R&D based innovation portfolio	Environmental matters, social matters	"Management," "Innovation."
Sustainable products & product stewardship	Environmental matters, social matters	"Strategy," "Sustainable Products and Product Stewardship."
Employer attractiveness	Employee matters	"Employees."
Compliance	Environmental matters, fighting corruption and bribery, respect for human rights	"Opportunities and Risks Report," "Compliance."
Diversity, equity & inclusion	Employee matters, respect for human rights, social matters	"Employees."
Inclusive business	Social matters	"Social Responsibility."
Human rights	Respect for human rights, social matters	"Social Responsibility."
Sustainability in sourcing	Environmental matters, social matters, fighting corruption and bribery, respect for human rights	"Procurement," "Sustainability in the Supply Chain."
Health & safety	Employee matters, environmental matters, social matters	"Integrated Management System for Health, Safety, Environment, Energy, and Quality," „Health & Safety."

As an integral part of the Group Management Report, the nonfinancial Group statement was audited by the financial statement auditor, KPMG AG Wirtschaftsprüfungsgesellschaft, Düsseldorf (Germany), as part of the audit of the Consolidated Financial Statements based on an expansion of the audit engagement.

A nonfinancial statement or nonfinancial report does not have to be provided at this time for Covestro AG.

EU Taxonomy

The European Union's Taxonomy Regulation 2020/852 (EU Taxonomy), and particularly its delegated acts, are the basis for various current and future initiatives by the European Union (EU) to facilitate sustainable financial reporting. The Covestro Group is required to submit a nonfinancial statement and must therefore, in accordance with Article 8(1) of the Taxonomy Regulation, disclose information about how and the extent to which our activities are associated with economic activities which qualify as environmentally sustainable economic activities based on the Taxonomy Regulation. To this end, the Taxonomy Regulation introduces key performance indicators (KPIs) to enable and improve performance measurement.

In fiscal 2022, our report includes information in line with the Taxonomy Regulation and its delegated acts applicable at the reporting date. For fiscal 2021, we exercised the exemptions that allowed us initially to report only on our taxonomy-eligible economic activities associated with the first two environmental objectives. Taxonomy-aligned activities are reported for the first time for the year 2022. Some legal concepts in the EU Taxonomy have not been defined conclusively, which has led to continuing uncertainty regarding their interpretation.

Taxonomy-Eligible Economic Activities

In the fiscal year under review, we centrally identified at Group level the following taxonomy-eligible economic activities associated with the environmental objective of climate change mitigation: 3.10 – Manufacture of hydrogen, 3.13 – Manufacture of chlorine, 3.14 – Manufacture of other organic basic chemicals, 3.16 – Manufacture of nitric acid, and 3.17 – Manufacture of plastics in primary form. In addition, in accordance with Commission Delegated Regulation (EU) 2022/1214 of 9 March 2022 (Complementary Climate Delegated Act), the following taxonomy-eligible economic activity associated with the environmental objective of climate change mitigation was identified in certain energy sectors: 4.30 – High-efficiency co-generation of heat/cool and power from fossil gaseous fuels. Taxonomy-eligible economic activities result in connection with CapEx and operating expenditure (OpEx) (categories b and c): 6.5 – Transport by motorbikes, passenger cars and light commercial vehicles, 7.1 – Construction of new buildings, and 7.7 – Acquisition and ownership of buildings.

No taxonomy-eligible economic activities associated with the climate change adaptation environmental objective were identified, since our business model in the activities covered by the Taxonomy Regulation are aimed at climate change mitigation. Parts of our portfolio are not covered by the EU Taxonomy at present, e.g., the manufacture of diisocyanates such as diphenylmethane diisocyanate (MDI), toluylene diisocyanate (TDI), etc., which are required for processing into polyurethane.

Taxonomy-Aligned Economic Activities

The move to taxonomy-aligned activities can only be made if, in addition to the description of the activity that determines whether an economic activity is taxonomy-eligible, a testing scheme of technical screening criteria (TSCs) is applied to each environmental objective. One component of these TSCs is criteria for making a substantial contribution to meeting the environmental objective. Secondly, it has to be ensured that no harm is done to any of the five other environmental objectives at the same time (do no significant harm, DNSH). The TSCs contain specific guidance for this as well and specific TSCs have been defined for each of the environmental objectives. For fiscal 2022, the TSCs for the environmental objectives of climate change mitigation and climate change adaptation were in force. The European Commission is expected to publish the TSCs for the other environmental objectives in the course of the year 2023. In addition, compliance with the minimum safeguards pursuant to Article 18 of the Taxonomy Regulation must be examined.

Substantial Contribution

In the year 2021, Covestro assessed whether its economic activities are taxonomy-eligible; in fiscal 2022 we conducted an analysis centrally to determine taxonomy-aligned activities. In this process, we examined the taxonomy-eligible products identified to determine whether they make a substantial contribution to the environmental objective of climate change mitigation. To assess whether the criteria of substantial contribution (and furthermore also the criteria relating to doing no significant harm) are met, the analysis was conducted centrally at the level of the sites. The reason is that the review of the criteria for the same product can deliver different results, depending on the production site (e.g., because power consumption or the energy mix is different at the sites). In such cases, the taxonomy-aligned proportions are allocated to the KPIs according to the production volume at the sites.

For economic activity 3.10 – Manufacture of hydrogen, we potentially make a substantial contribution to the environmental objective of climate change mitigation for selected sites. However, we are not yet able at present to fully meet the stringent quality requirements (e.g., product-related lifecycle assessments [LCAs] that go beyond externally certified methodology assessments) that the EU Taxonomy imposes on the evidence to be provided.

Do No Significant Harm (DNSH)

For an activity to qualify as a substantial contribution to one environmental objective, the EU Taxonomy requires that it does not cause significant harm to the five other environmental objectives. In connection with the environmental objective of climate change mitigation, a climate risk and vulnerability assessment was conducted for activity 3.10 – Manufacture of hydrogen at site level, using Representative Concentration Pathways RCP 2.6, 4.5, and 8.5. With regard to the environmental objective of sustainable use and protection of water and marine resources, a risk assessment was likewise performed to establish any possible environmental damage at site level. For the environmental objective of transition to a circular economy, no criteria had been defined for the economic activity analyzed at the time of publication of this report. As a result, compliance is currently not bound by any criteria. The criteria for ensuring that no significant harm is done for the environmental objective of pollution prevention and control were reviewed in two steps. Employees with the relevant professional expertise examined compliance with the requirements for the environmental objective of climate change mitigation set out in Appendix C of Annex 1 of the Commission Delegated Regulation on climate change mitigation in connection with the specified guidelines and regulations. At the same time, compliance with the emission values in connection with the best available techniques (BATs) was verified for the sites at which products are manufactured with which we make a substantial contribution to meeting the environmental objective of climate change mitigation. Finally, a check was performed at site level to make sure that no significant harm is done to the environmental objective of protection and restoration of biodiversity and ecosystems.

For activity 3.10 – Manufacture of hydrogen, proof could be provided for the environmental objective of climate change mitigation that no significant harm was done to the other five environmental objectives. The only exception is Appendix C of Annex 1 of the Commission Delegated Regulation for the environmental objective of climate change mitigation due to interpretation uncertainty about the provision of evidence, especially in relation to subitem g. Taxonomy-eligible products that either do not make a substantial contribution to meeting the environmental objective of climate change mitigation or cause significant harm to at least one environmental objective are not classified as taxonomy-aligned.

Minimum Safeguards

Article 18 of the Taxonomy Regulation requires companies to establish processes and procedures to ensure compliance with different rules and regulations. They relate in particular to human rights (including labor and consumer rights), corruption and bribery, taxation, and fair competition. These requirements correspond to Covestro's culture, which we have made an integral part of our actions on the basis of existing Corporate Commitments, the Supplier Code of Conduct, and various Group regulations. To ensure compliance with all legal and Group-wide provisions, regulations, guidelines, and standards, including those relevant to the minimum safeguards of the EU Taxonomy, we have implemented processes and controls (e.g., as part of the compliance management system, the internal control system, or the integrated Health, Safety, Environment, Energy and Quality management system).

→ See ["Corporate Policies," "Health and Safety," "Sustainability in the Supply Chain," "Human Rights," "Compliance," and note 26 "Legal Risks" in the Notes to the Consolidated Financial Statements.](#)

The review of the minimum safeguards for human rights relates to Covestro's overarching management approach to respecting human rights, and primarily to the risk analysis conducted as part of the human rights due diligence. In addition to the company's own business activities, this also covers our direct suppliers. It also considers the upstream supply chain, especially if there are specific allegations. The comprehensive and ongoing risk analysis covers all of Covestro's own sites, the supply chain, as well as the use phase and end-of-life of our products. Depending on the respective risk assessments, various measures are agreed with the suppliers, e.g., supplier assessments under the TFS initiative* or special human rights training.

→ See "[Sustainability in the Supply Chain](#)" and "[Human Rights](#)."

In addition, as part of the review to establish compliance with the minimum safeguards, we verified at Group level that no final court judgments have been handed down against Covestro in connection with the above issues. Although no economic activities were reported as taxonomy-aligned in the year 2022, there are no indications based on the review described above to suggest that Covestro does not meet the minimum safeguards under Article 18 of the EU Taxonomy Regulation.

We are planning further activities to be undertaken by our cross-functional Human Rights Task Force, such as additional training for buyers, the completion of guidance for buyers with various measures for suppliers prioritized during the risk analysis, or the introduction of a Group-wide guideline on our human rights-related management system.

Result of the Alignment Check

In fiscal 2022, we did not identify any taxonomy-aligned economic activities associated with the environmental objective of climate change mitigation.

Calculation of Taxonomy KPIs

We calculate taxonomy KPIs and report on the nature of taxonomy-eligible and taxonomy-aligned economic activities in accordance with Article 10(3) and Article 11(3) of the Taxonomy Regulation. We are required to report the share of turnover, capital expenditure (CapEx), and operating expenditure (OpEx) that are generated by taxonomy-eligible and taxonomy-aligned activities. The way in which we define and document these KPIs and run the data queries for the calculations prevents double-counting amounts when allocating turnover, CapEx, and OpEx to our economic activities. Where data could not be definitively allocated or KPIs had to be split between economic activities, we applied allocation models appropriate for the particular process to reflect the technical circumstances in the KPI calculation. The taxonomy KPIs are determined with system support in processes established for the purpose. Validation steps are taken and the data is checked against the figures in the Group's Consolidated Financial Statements to ensure the data is complete and correct. Controls in our Internal Control System are used to support the underlying systems and processes.

→ See "[Main Features of the Internal Control System](#)."

Turnover

In order to determine the turnover generated by Covestro from taxonomy-eligible economic activities, we allocated the relevant Covestro products to these activities. The corresponding turnover for fiscal 2022 was then calculated for the identified products and a ratio derived using the Covestro Group's sales reported in the Income Statement (denominator). Turnover generated from the activity of high-efficiency co-generation of heat/cool and power from fossil gaseous fuels is calculated in the same way.

→ See "[Covestro Group Consolidated Income Statement](#)."

* STOXX Europe 600 Chemicals: Sector index by index issuer STOXX; the STOXX Europe 600 comprises 600 European companies.

Capital Expenditure

In order to determine capital expenditure (CapEx) associated with taxonomy-eligible economic activities as defined in the Taxonomy Regulation, we use the investments in and acquisitions of property, plant and equipment and intangible assets, excluding acquired goodwill, as reported in the Notes to the Consolidated Financial Statements in this Annual Report (denominator). This must be used as the basis for determining the proportion of taxonomy-eligible and taxonomy-aligned CapEx relating primarily to additions to noncurrent assets (numerator). To this end, the products identified as originating from these economic activities were allocated to the corresponding CapEx (category a). Furthermore, taxonomy-eligible and taxonomy-aligned CapEx could be identified that is part of a plan to expand taxonomy-eligible and taxonomy-aligned economic activities or a plan to allow taxonomy-eligible economic activities to become taxonomy-aligned (category b). In addition, individual capital expenditure from the acquisition of products from taxonomy-eligible and taxonomy-aligned economic activities and individual measures implemented to reduce greenhouse gas (GHG) emissions had to be taken into account (category c). We cannot provide proof of the purchase of taxonomy-aligned category c products because we have no documentary evidence from suppliers. CapEx associated with the activity of high-efficiency co-generation of heat/cool and power from fossil gaseous fuels is calculated in the same way.

→ See note 13 “Goodwill and Other Intangible Assets” and note 14 “Property, Plant and Equipment” in the Notes to the Consolidated Financial Statements.

Operating Expenditure

In order to determine operating expenditure (OpEx) as defined in the Taxonomy Regulation, we use the Covestro Group’s expenditure on maintenance and repairs, renovations, research and development, and short-term leasing costs (nominator). Of these, the share of taxonomy-eligible or taxonomy-aligned OpEx must be determined (numerator). To this end, the products identified as originating from the corresponding economic activities were allocated to the respective OpEx (category a). Furthermore, taxonomy-eligible OpEx was identified that is part of a plan to expand taxonomy-eligible and taxonomy-aligned economic activities or a plan to allow taxonomy-eligible economic activities to become taxonomy-aligned (category b). In addition, individual operating expenditure from the acquisition of products from taxonomy-eligible and taxonomy-aligned economic activities and individual measures implemented to reduce GHG emissions and renovate buildings had to be taken into account (category c). We cannot provide proof of the purchase of taxonomy-aligned category c products because we have no documentary evidence from suppliers. The OpEx data determined in this way is gathered exclusively for taxonomy reporting. OpEx associated with the activity of high-efficiency co-generation of heat/cool and power from fossil gaseous fuels is calculated in the same way.

Other Information

In fiscal 2022, Covestro published a Green Financing Framework under which the company can issue green bonds and other green debt instruments. These financing instruments are to be used to finance products or projects with a clear benefit for the environment and/or society. Under the Green Financing Framework, a bond amounting to €500 million was issued in fiscal 2022. No taxonomy-aligned CapEx or OpEx is currently being financed with the green bond.

+ Further information at: www.covestro.com/en/investors/debt/green-financing-framework

Reporting of Taxonomy KPIs

The purpose of the EU Taxonomy is to set out details for the EU’s Sustainable Finance Action Plan. It outlines objectives and steering options to inspire companies to develop sustainable products. The Taxonomy Regulation classifies the chemical industry, for example, as a sector with transitional activities because it operates at a point of transition from fossil-based raw materials toward renewable and alternative raw materials.

Covestro’s portfolio contains a small proportion of potentially taxonomy-aligned activities. Some activities in our portfolio are not covered by the taxonomy at present, e.g., the manufacture of diisocyanates such as diphenylmethane diisocyanate (MDI), toluylene diisocyanate (TDI), etc., which are required for processing into polyurethane. In the case of activities relevant to Covestro in support of the environmental objective of climate change mitigation, the Taxonomy defines sustainability in particular with regard to the carbon footprint of the production process. However, this process does not consider the entire lifecycle of our products, with the result that the positive effect of our products, known as handprint, does not become apparent during application and use of the Covestro products. Low taxonomy KPIs do not mean, therefore, that we do not make any contribution to achieving a circular economy and climate neutrality. Our objectives are reflected in particular in our vision of becoming fully circular, from which our Group’s Sustainable Future strategy and our sustainability targets –

including a focus on climate neutrality – are derived. The review of sustainability in accordance with this vision and with our sustainability targets relates to Covestro's entire product portfolio.

→ See "Organization and Business Model," "Management," "Sustainability," "Circular Economy," "Climate Neutrality," "Sustainable Products," and "Innovation."

The calculation of the KPIs considers separately the activities of the Resins & Functional Materials business (RFM) acquired from Koninklijke DSM N.V., Heerlen (Netherlands), in the year 2021. Due to the ongoing systems integration process, they could not be analyzed in detail in fiscal 2021 and were therefore not included in the taxonomy-eligible share of Covestro's activities. The share attributable to RFM (for OpEx only where available) was included in the denominator of all of KPIs for the year 2021. Completion of the system integration in June 2022 meant that RFM's products could also be fully included in the OpEx denominator. In the assessment of taxonomy-eligible and taxonomy-aligned activities (numerator), RFM's products could be included for turnover for the full year and for CapEx and OpEx from the date of completion of the system integration. Since the system integration was completed, RFM has been reflected in full.

The year-over-year rise in the taxonomy-eligible share of CapEx is primarily due to the fact that the acquisition of the RFM business was included in the numerator and denominator in the previous year.

The KPIs below were calculated according to the abovementioned methods:

Proportion of turnover from products or services associated with Taxonomy-aligned economic activities – disclosure covering fiscal 2022

Economic activities	Code(s)	Absolute turnover	Proportion of turnover	Substantial contribution criteria							Do no significant harm (DNSH) criteria					Taxonomy-aligned proportion of turnover in 2022	Taxonomy-aligned proportion of turnover in 2021	Category "enabling activity"	Category "transitional activity"
				Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems				
		€ million	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A Taxonomy-eligible activities																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
Manufacture of hydrogen	3.10	48	0.3																
Manufacture of chlorine	3.13	145	0.8																
Manufacture of organic basic chemicals	3.14	< 1	< 0.1																
Manufacture of nitric acid	3.16	21	0.1																
Manufacture of plastics in primary form	3.17	5,699	31.7																
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	4.30	8	< 0.1																
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		5,921	33.0													-		-	-
Total (A.1 + A.2)		5,921	33.0													-		-	-
B Taxonomy-non-eligible activities		12,047	67.0																
Turnover of Taxonomy-non-eligible activities (B)		12,047	67.0																
Total (A+B)		17,968	100.0																

Proportion of CapEx from products or services associated with Taxonomy-aligned economic activities – disclosure covering fiscal 2022

Economic activities	Code(s)	Absolute CapEx	Proportion of CapEx	Substantial contribution criteria							Do no significant harm (DNSH) criteria						Taxonomy-aligned proportion of CapEx in fiscal 2022	Taxonomy-aligned proportion of CapEx in fiscal 2021 ¹	Category "enabling activity"	Category "transitional activity"
				Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Minimum safeguards				
		€ million	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A Taxonomy-eligible activities ²																				
A.1 Environmentally sustainable activities (Taxonomy-aligned)																				
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																				
Manufacture of hydrogen	3.10	< 1	< 0.1																	
Manufacture of chlorine	3.13	53	5.5																	
Manufacture of organic basic chemicals	3.14	< 1	< 0.1																	
Manufacture of nitric acid	3.16	18	1.9																	
Manufacture of plastics in primary form	3.17	152	15.6																	
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	4.30	6	0.7																	
Transport by motorbikes, passenger cars and light commercial vehicles	6.5	1	0.1																	
Construction of new buildings	7.1	1	0.1																	
Acquisition and ownership of buildings	7.7	30	3.1																	
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		262	26.9														-		-	-
Total (A.1 + A.2)		262	26.9														-		-	-
B Taxonomy-non-eligible activities		711	73.1																	
CapEx of Taxonomy-non-eligible activities (B)		711	73.1																	
Total (A+B)		973	100																	

¹ Based on recent findings, the CapEx denominator does not include the proportion of acquired goodwill. This results in a proportion of 10.2% for the year 2021. The numerator remains unchanged.

² Due to the completion of the systems integration in the course of the year under review, the analysis of activities includes those of the Resins & Functional Materials business (RFM) acquired from Koninklijke DSM N.V., Heerlen (Netherlands), in the year 2021 in the numerator only from June 1, 2022, onward.

Proportion of OpEx from products or services associated with Taxonomy-aligned economic activities – disclosure covering fiscal 2022

Economic activities	Code(s)	Absolute OpEx	Proportion of OpEx	Substantial contribution criteria						Do no significant harm (DNSH) criteria						Minimum safeguards	Taxonomy-aligned proportion of OpEx in fiscal 2022	Taxonomy-aligned proportion of OpEx in fiscal 2021	Category "enabling activity"	Category "transitional activity"
				Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems					
		€ million	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A Taxonomy-eligible activities ¹																				
A.1 Environmentally sustainable activities (Taxonomy-aligned)																				
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																				
Manufacture of hydrogen	3.10	8	0.6																	
Manufacture of chlorine	3.13	54	4.2																	
Manufacture of organic basic chemicals	3.14	< 1	< 0.1																	
Manufacture of nitric acid	3.16	16	1.3																	
Manufacture of plastics in primary form	3.17	272	21.1																	
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	4.30	< 1	< 0.1																	
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		350	27.2														-		-	-
Total (A.1 + A.2)		350	27.2														-		-	-
B Taxonomy-non-eligible activities		939	72.8																	
OpEx of Taxonomy-non-eligible activities (B)		939	72.8																	
Total (A+B)		9,386	100.0																	

¹ Due to the completion of the systems integration in the course of the year under review, the analysis of activities includes those of the Resins & Functional Materials (RFM) business acquired from Koninklijke DSM N.V., Heerlen (Netherlands), in the year 2021 in the respective denominator and the costs of building renovation projects, short-term leases, maintenance, and repairs in the respective numerator only from June 1, 2022 onward.

Activities covered by separate reporting requirements in the Complementary Climate Delegated Act must be disclosed on the basis of templates. In this context, Covestro has identified the economic activity of high-efficiency co-generation of heat/cool and power from fossil gaseous fuels. Following completion of the alignment check, Covestro has only taxonomy-eligible activities to report here. For this reason, templates 2 and 3, which relate to taxonomy-aligned activities, are not reported separately.

Template 1: Nuclear- and fossil-gas-related activities¹

Row	Nuclear-energy-related activities	Result
1	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	No
2	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	No
3	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades	No
Row	Fossil-gas-related activities	Result
4	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	No
5	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	Yes
6	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	No

¹ Based on our understanding, the activities presented in template 1 refer to the activities defined in the Complementary Climate Delegated Act.

Template 2: Taxonomy-aligned economic activities (denominator)

Row	Economic activity	Amount and proportion of turnover						Amount and proportion of CapEx						Amount and proportion of OpEx					
		Climate change mitigation		Climate change adaptation		CCM + CCA ¹		Climate change mitigation		Climate change adaptation		CCM + CCA ¹		Climate change mitigation		Climate change adaptation		CCM + CCA ¹	
		€ million	%	€ million	%	€ million	%	€ million	%	€ million	%	€ million	%	€ million	%	€ million	%	€ million	%
1	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Total applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ Climate change mitigation (CCM) and climate change adaptation (CCA)

Template 3: Taxonomy-aligned economic activities (numerator)

Row	Economic activity	Amount and proportion of turnover						Amount and proportion of CapEx						Amount and proportion of OpEx					
		Climate change mitigation		Climate change adaptation		CCM + CCA ¹		Climate change mitigation		Climate change adaptation		CCM + CCA ¹		Climate change mitigation		Climate change adaptation		CCM + CCA ¹	
		€ million	%	€ million	%	€ million	%	€ million	%	€ million	%	€ million	%	€ million	%	€ million	%	€ million	%
1	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ Climate change mitigation (CCM) and climate change adaptation (CCA)

Template 4: Taxonomy-eligible but not taxonomy-aligned economic activities

Row	Economic activity	Amount and proportion of turnover						Amount and proportion of CapEx						Amount and proportion of OpEx					
		Climate change mitigation		Climate change adaptation		CCM + CCA ¹		Climate change mitigation		Climate change adaptation		CCM + CCA ¹		Climate change mitigation		Climate change adaptation		CCM + CCA ¹	
		€ million	%	€ million	%	€ million	%	€ million	%	€ million	%	€ million	%	€ million	%	€ million	%	€ million	%
1	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	8	0.1	0	0.0	8	0.1	6	2.3	0	0.0	6	2.3	<1	<0.1	0	0.0	<1	<0.1
6	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	5,913	99.9	0	0.0	5,913	99.9	256	97.7	0	0.0	256	97.7	350	100.0	0	0.0	350	100.0
8	Total amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI	5,921	100.0	0	0.0	5,921	100.0	262	100.0	0	0.0	262	100.0	350	100.0	0	0.0	350	100.0

¹ Climate change mitigation (CCM) and climate change adaptation (CCA)

Template 5: Taxonomy-non-eligible activities

Row	Economic activity	Turnover		CapEx		OpEx	
		Amount	Proportion	Amount	Proportion	Amount	Proportion
		€ million	%	€ million	%	€ million	%
1	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-
2	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-
3	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-
4	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-
5	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-
6	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	-	-	-	-	-	-
7	Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	12,047	100.0	711	100.0	939	100.0
8	Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI	12,047	100.0	711	100.0	939	100.0

GRI Index

General Disclosures

Disclosure number	Disclosure title	Section in Annual Report	Section in supplementary information on sustainability	Explanation/omission
GRI 1 – Foundation (2021)				
GRI 2 – General Disclosures (2021)				
2-7	Information on employees and other workers	<ul style="list-style-type: none"> • Employees • Employees – Human Resources Guiding Principles and Strategy – “Proud to Belong” Action Area - Employee Metrics on Diversity and Internationality 		
2-8	Workers who are not employees			<p>Around the world, Covestro has about 350 temporary employees, corresponding to approximately 2.0% of our workforce.</p> <p>In addition, a number of people work for Covestro externally through contracts for work or service agreements.</p> <p>It is not possible to determine the precise number, since performance is defined via trades or in service-level agreements rather than by the number of people or the hours worked.</p>
2-22	Statement from the most senior decision-maker	<ul style="list-style-type: none"> • Foreword 		
2-23	Policy Commitments	<ul style="list-style-type: none"> • Management – Corporate Policies 	<ul style="list-style-type: none"> • Management – Corporate Policies; Corporate Commitments 	The policies applicable throughout the Group have been approved by the Board of Management. Communications are conducted via the internet, intranet, and site-specific communication channels.
2-27	Compliance with laws and regulations	<ul style="list-style-type: none"> • Opportunities and Risks Report – Opportunities and Risks • Compliance – Compliance Management System 		In fiscal 2022, no significant administrative or court-ordered sanctions (fines, nonmonetary sanctions) for noncompliance with laws and regulations were reported through internal reporting.
2-28	Membership of associations	<ul style="list-style-type: none"> • Circular Economy – Global and Regional Promotion and Advocacy of the Circular Economy • Sustainable Products and Product Stewardship – Product Stewardship 	<ul style="list-style-type: none"> • Sustainability – Sustainability Management – Stakeholder Dialogue 	
2-29	Approach to stakeholder engagement	<ul style="list-style-type: none"> • Sustainability- Materiality Assessment – Materiality Assessment Process • Sustainability – Sustainability Management – Monitoring 	<ul style="list-style-type: none"> • Sustainability – Sustainability Management – Stakeholder Dialogue 	
2-30	Collective bargaining agreements	<ul style="list-style-type: none"> • Employees - Human Resources Guiding Principles and Strategy – “Committed to Perform” Action Area 	<ul style="list-style-type: none"> • Employees - Human Resources Guiding Principles and Strategy – “Committed to Perform” Action Area 	

Specific Standard Disclosures

Disclosure number	Disclosure title	Section in Annual Report	Section in supplementary information on sustainability	Explanation/omission
GRI 200 – Economic topics				
GRI 201 – Economic Performance (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Strategy – Group Strategy • Management – Management System 		
201-1	Direct economic value generated and distributed	<ul style="list-style-type: none"> • Consolidated Financial Statements and Notes 		
GRI 204 – Procurement Practices (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Company Profile – Procurement • Sustainability – Materiality Assessment • Sustainability in the Supply Chain • Social Responsibility – Human Rights • Opportunities and Risks Report – Opportunities and Risks 		
204-1	Proportion of spending on local suppliers	<ul style="list-style-type: none"> • Company Profile – Procurement 		Since our locations in Germany, the United States and China cover most of our procurement volume, the sites located in these countries are referred to as main sites within the meaning of the GRI terminology. Local procurement is regarded as purchasing from suppliers located in the same country as the legal entity they supply.
GRI 205 – Anti-corruption (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Sustainability – Materiality Assessment • Compliance – Compliance Management System 	<ul style="list-style-type: none"> • Management – Corporate Policies 	
205-1	Operations assessed for risks related to corruption	<ul style="list-style-type: none"> • Opportunities and Risks Report – Group-wide Opportunities and Risk Management System • Compliance – Compliance Management System 		A risk analysis was conducted for every country/every company in the year 2022. Definition of location of operations as a legal entity.
GRI 206 – Anti-competitive Behavior (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Opportunities and Risks Report – Opportunities and Risks • Compliance – Compliance Management System 	<ul style="list-style-type: none"> • Management – Corporate Policies 	
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices			No actions were reported through internal reporting in fiscal 2022.
GRI 207 – Tax (2019)				
3-3	Management Approach		<ul style="list-style-type: none"> • Compliance – Tax Compliance 	
207-1	Approach to tax		<ul style="list-style-type: none"> • Compliance – Tax Compliance 	
207-2	Tax governance, control, and risk management	<ul style="list-style-type: none"> • Opportunities and Risks Report – Group-wide Opportunities and Risk Management System 	<ul style="list-style-type: none"> • Compliance – Tax Compliance 	
207-3	Stakeholder engagement and management of concerns related to tax	<ul style="list-style-type: none"> • Compliance – Compliance Management System 	<ul style="list-style-type: none"> • Compliance – Tax Compliance 	
207-4	Country-by-country reporting			A country-by-country report is not currently provided.

Specific Standard Disclosures

Disclosure number	Disclosure title	Section in Annual Report	Section in supplementary information on sustainability	Explanation/omission
GRI 300 – Environmental topics				
GRI 302 – Energy (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Sustainability – Materiality Assessment • Climate Neutrality • Opportunities and Risks Report – Opportunities and Risks 	<ul style="list-style-type: none"> • Management – Corporate Policies 	
302-1	Energy consumption within the organization	<ul style="list-style-type: none"> • Climate Neutrality – Energy Usage 		
302-3	Energy intensity	<ul style="list-style-type: none"> • Climate Neutrality – Energy Usage 		
302-4	Reduction of energy consumption	<ul style="list-style-type: none"> • Climate Neutrality – Energy Usage 		In 2005, Covestro began to introduce a certified energy management system. This requires that we compare our performance with a designated base year, and that year was 2005.
GRI 303 – Water (2018)				
3-3	Management Approach	<ul style="list-style-type: none"> • Sustainability – Materiality Assessment • Environmental Impact of Own Operations – Water and Wastewater 	<ul style="list-style-type: none"> • Environmental Impact of Own Operations – Water Usage 	
303-1	Interactions with water as a shared resource	<ul style="list-style-type: none"> • Environmental Impact of Own Operations – Water and Wastewater 	<ul style="list-style-type: none"> • Environmental Impact of Own Operations – Water Usage 	
303-2	Management of water discharge-related impacts	<ul style="list-style-type: none"> • Environmental Impact of Own Operations – Water and Wastewater 	<ul style="list-style-type: none"> • Environmental Impact of Own Operations – Water Usage 	The standards to be applied are oriented to local laws. Water withdrawal is measured in m ³ (cubic meters) since this is the more common approach to measurement. Here, 1 megaliter (ML) corresponds to 1,000 m ³ . Usage of other than fresh water <1,000 mg of total dissolved solids (TDS)/l: Pursuant to ISO 14046, Covestro uses no water from sea water sources, thus there is no figure for this in the water balance. At some facilities, it is possible that brackish water >1,000 mg TDS/l is used as cooling water. These amounts are included in the water balance and not reported separately. This water can be returned to the water cycle without further treatment in line with the relevant official permits.
303-3	Water withdrawal	<ul style="list-style-type: none"> • Environmental Impact of Own Operations – Water and Wastewater 	<ul style="list-style-type: none"> • Environmental Impact of Own Operations – Water Usage 	
GRI 305 – Emissions (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Sustainability – Materiality Assessment • Climate Neutrality • Opportunities and Risks Report 		
305-1	Direct (Scope 1) GHG emissions	<ul style="list-style-type: none"> • Climate Neutrality – Greenhouse Gas Emissions 		Biogenic CO ₂ emissions are not reported because they are irrelevant.
305-2	Energy indirect (Scope 2) GHG emissions	<ul style="list-style-type: none"> • Climate Neutrality – Greenhouse Gas Emissions 		
305-3	Other indirect (Scope 3) GHG emissions	<ul style="list-style-type: none"> • Climate Neutrality – Greenhouse Gas Emissions 		
305-4	GHG emissions intensity	<ul style="list-style-type: none"> • Climate Neutrality – Greenhouse Gas Emissions 		Disclosure as CO ₂ equivalent of specific GHG. Emissions of sulfur hexafluoride (SF ₆) have been recorded.
305-5	Reduction of GHG emissions	<ul style="list-style-type: none"> • Climate Neutrality – Greenhouse Gas Emissions 		Greenhouse gas emissions are reported separately for Scopes 1 and 2. When considering GHG reductions, the specific greenhouse gas emissions are calculated using the total emissions for Scopes 1 and 2 because otherwise any shifts between the categories would lessen the informative value of the results.

Specific Standard Disclosures

Disclosure number	Disclosure title	Section in Annual Report	Section in supplementary information on sustainability	Explanation/omission
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions		<ul style="list-style-type: none"> Environmental Impact of Own Operations – Air Quality 	Reporting focuses on significant air emissions; persistent organic pollutants (POPs) and hazardous organic pollutants (HAPs) are not reported. Air emissions are generally measured directly at the source of the emission or are calculated from the stoichiometric determination of the formula mass.
GRI 306 – Waste (2020)				
3-3	Management Approach	<ul style="list-style-type: none"> Sustainability – Materiality Assessment Circular Economy Environmental Impact of Own Operations – Waste 	<ul style="list-style-type: none"> Environmental Impact of Own Operations – Waste and Recycling 	
306-1	Waste generation and significant waste-related impacts	<ul style="list-style-type: none"> Environmental Impact of Own Operations – Waste 	<ul style="list-style-type: none"> Environmental Impact of Own Operations – Waste and Recycling 	
306-2	Management of significant waste-related impacts	<ul style="list-style-type: none"> Circular Economy Environmental Impact of Own Operations – Waste 	<ul style="list-style-type: none"> Environmental Impact of Own Operations – Waste and Recycling 	
306-3	Waste generated		<ul style="list-style-type: none"> Environmental Impact of Own Operations – Waste and Recycling 	
306-5	Waste diverted from disposal		<ul style="list-style-type: none"> Environmental Impact of Own Operations – Waste and Recycling 	The distinction of hazardous and non-hazardous waste is only drawn for landfill waste; no differentiation is made for other disposal methods.
GRI 308 – Supplier Environmental Assessment				
3-3	Management Approach	<ul style="list-style-type: none"> Sustainability in the Supply Chain Opportunities and Risks Report – Opportunities and Risks 		
308-2	Negative environmental impacts in the supply chain and actions taken	<ul style="list-style-type: none"> Sustainability in the Supply Chain – Supplier Evaluation Results 	<ul style="list-style-type: none"> Sustainability in the Supply Chain – Detailed Results of the Supplier Evaluations 	
GRI 400 – Social topics				
GRI 401 – Employment (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> Management – Corporate Policies Employees – Corporate Values and Corporate Culture; Human Resources Guiding Principles and Strategy - "Place to Be" Action Area Opportunities and Risks Report – Opportunities and Risks 		
401-1	New employee hires and employee turnover		<ul style="list-style-type: none"> Employees – Human Resources Guiding Principles and Strategy - "Place to Be" Action Area 	In fiscal 2022, the gender distribution of new hires and the attrition rate was broken down into male and female, as the company was not aware of any employees with other gender identities. Reference is made in the footnote to the small number of employees who did not state their gender. If this should change, the tables will be adjusted accordingly in future.

Specific Standard Disclosures

Disclosure number	Disclosure title	Section in Annual Report	Section in supplementary information on sustainability	Explanation/omission
GRI 403 – Occupational Health and Safety (2018)				
3-3	Management Approach	<ul style="list-style-type: none"> • Management – Integrated Management System for Health, Safety, Environment, Energy, and Quality • Employees – Human Resources Guiding Principles and Strategy - "Proud to Belong" Action Area • Health and Safety – Health and Safety of Our Workforce • Opportunities and Risks Report – Opportunities and Risks 		
403-1	Occupational health and safety management system	<ul style="list-style-type: none"> • Management – Integrated Management System for Health, Safety, Environment, Energy, and Quality • Health and Safety – Occupational Health and Safety 		A list of the legal requirements has been dispensed with. The integrated management system for occupational health and safety covers all our employees across the Group and in some cases also our contractors, regardless of the type of work environment or activity performed.
403-2	Hazard identification, risk assessment, and incident investigation	<ul style="list-style-type: none"> • Health and Safety – Occupational Health and Safety • Compliance – Compliance Management System 		Every employee, contractor or – as appropriate – visitor must comply with the applicable occupational safety procedures, rules, and relevant protective measures. Employees are authorized to withdraw from work situations that seem to them to represent a direct and serious threat to their lives or health. They are obligated to report such situations to their supervisors immediately. Employees may not be sanctioned for such actions.
403-3	Occupational health services	<ul style="list-style-type: none"> • Employees – Human Resources Guiding Principles and Strategy - "Proud to Belong" Action Area 		Depending on site-specific local circumstances, there are dedicated occupational health staff or occupational health services are provided in conjunction with external parties. A country-specific description of the functions of the occupational health services has been dispensed with.
403-4	Worker participation, consultation, and communication on occupational health and safety	<ul style="list-style-type: none"> • Health and Safety 		Depending on legal requirements, some sites have formal employer-employee committees for occupational health and safety that hold regular meetings. In Germany, for instance, this is the occupational safety and health committee as legally required by Section 11 of the Act on Occupational Physicians, Safety Engineers and Other Occupational Safety Specialists (AsiG). All sites are networked in corresponding regional HSE communities. A country-specific list and a description of the committees has been dispensed with.
403-5	Worker training on occupational health and safety	<ul style="list-style-type: none"> • Health and Safety 		Our employees receive the applicable statutorily required training as well as further training that exceeds these requirements depending on the individual circumstances at our sites. Our contractors receive site-specific safety instructions.
403-6	Promotion of worker health	<ul style="list-style-type: none"> • Employees – Human Resources Guiding Principles and Strategy - "Proud to Belong" Action Area • Health and Safety – Occupational Health and Safety 		Voluntary services for the promotion and maintenance of health are made available only to Covestro employees.

Specific Standard Disclosures

Disclosure number	Disclosure title	Section in Annual Report	Section in supplementary information on sustainability	Explanation/omission
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	<ul style="list-style-type: none"> • Management – Integrated Management System for Health, Safety, Environment, Energy, and Quality • Health and Safety • Sustainability in the Supply Chain 		
403-9	Work-related injuries	<ul style="list-style-type: none"> • Health and Safety – Occupational Health and Safety 		We record the most important types and frequency of work-related injuries for all employee groups according to the ASTM standard E2920-14, "Severe Incidents and Fatalities" (A. deaths, B. life-changing/life-altering cases, C. other).
GRI 404 – Training and Education (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Management – Corporate Policies • Employees – Human Resources Guiding Principles and Strategy - "Ready to grow" Action Area • Opportunities and Risks Report – Opportunities and Risks 		
404-2	Programs for upgrading employee skills and transition assistance programs	<ul style="list-style-type: none"> • Employees – Human Resources Guiding Principles and Strategy - "Ready to grow" Action Area 	<ul style="list-style-type: none"> • Employees – Human Resources Guiding Principles and Strategy - "Committed to Perform" Action Area 	
GRI 405 – Diversity and Equal Opportunity (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Sustainability – Materiality Assessment • Employees – Human Resources Guiding Principles and Strategy - "Proud to Belong" Action Area • Opportunities and Risks Report – Opportunities and Risks 		
405-1	Diversity of governance bodies and employees	<ul style="list-style-type: none"> • Declaration on Corporate Governance – Composition, Duties and Activities of the Board of Management and Supervisory Board 	<ul style="list-style-type: none"> • Employees – Human Resources Guiding Principles and Strategy - "Proud to Belong" Action Area 	At the end of the year 2022, the Supervisory Board consisted of six women (50%) and six men (50%). The age structure is as follows: 0% are 30-50 years old, and 100% are over 50. Membership in a minority is not recorded for legal reasons. In fiscal 2022, the gender distribution of employees was broken down into male and female, as the company was not aware of any employees with other gender identities. Reference is made in the footnote to the small number of employees who did not state their gender. If this should change, the tables will be adjusted accordingly in future.
GRI 406 – Non-discrimination (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Sustainability – Materiality Assessment • Employees – Human Resources Guiding Principles and Strategy - "Proud to Belong" Action Area • Opportunities and Risks Report – Opportunities and Risks 		
406-1	Incidents of discrimination and corrective actions taken			For confidentiality reasons, we do not disclose the type and scope of the incidents reported.

Specific Standard Disclosures

Disclosure number	Disclosure title	Section in Annual Report	Section in supplementary information on sustainability	Explanation/omission
GRI 407 – Freedom of Association and Collective Bargaining				
3-3	Management Approach	<ul style="list-style-type: none"> • Sustainability in the Supply Chain • Social Responsibility – Human Rights • Compliance – Compliance Management System 		
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	<ul style="list-style-type: none"> • Sustainability in the Supply Chain – Supplier Evaluation Results 	<ul style="list-style-type: none"> • Sustainability in the Supply Chain – Detailed Results of the Supplier Evaluations 	In fiscal 2022, no significant cases were reported using formal grievance mechanisms. There was no high risk for the sites in the year 2021, as the local heads of Human Resources and the local managing directors are required by internal rules to maintain a regular exchange of information with unions and employee representatives.
GRI 414 – Supplier Social Assessment (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Sustainability in the Supply Chain • Opportunities and Risks Report – Opportunities and Risks 		
414-2	Negative social impacts in the supply chain and actions taken	<ul style="list-style-type: none"> • Sustainability in the Supply Chain – Supplier Evaluation Results 	<ul style="list-style-type: none"> • Sustainability in the Supply Chain – Detailed Results of the Supplier Evaluations 	
GRI 415 – Public Policy (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Sustainability – Materiality Assessment 	<ul style="list-style-type: none"> • Management – Corporate Policies 	
415-1	Political contributions		<ul style="list-style-type: none"> • Management – Corporate Policies 	
GRI 416 – Customer Health and Safety (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Sustainability – Materiality Assessment • Management – Integrated Management System for Health, Safety, Environment, Energy, and Quality • Sustainable Products and Product Stewardship - Product Stewardship • Opportunities and Risks Report – Opportunities and Risks • Compliance – Compliance Management System 		
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	<ul style="list-style-type: none"> • Sustainable Products and Product Stewardship - Product Stewardship 		No significant incidents were reported through internal reporting in fiscal 2022.

Specific Standard Disclosures

Disclosure number	Disclosure title	Section in Annual Report	Section in supplementary information on sustainability	Explanation/omission
GRI 417 – Marketing and Labeling (2016)				
3-3	Management Approach	<ul style="list-style-type: none"> • Company Profile – Marketing and Sales • Sustainability – Materiality Assessment 		
417-1	Requirements for product and service information and labeling	<ul style="list-style-type: none"> • Management – Integrated Management System for Health, Safety, Environment, Energy, and Quality • Sustainable Products and Product Stewardship - Product Stewardship • Opportunities and Risks Report – Opportunities and Risks • Compliance – Compliance Management System 		
417-2	Incidents of non-compliance concerning product and service information and labeling	<ul style="list-style-type: none"> • Sustainable Products and Product Stewardship – Product Stewardship 		No significant incidents were reported through internal reporting in fiscal 2022.

COMPENSATION REPORT

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Compensation Report

The Compensation Report outlines the principles for determining the compensation for the members of the Board of Management and the Supervisory Board of Covestro AG and explains the compensation of the individual members. The Report was prepared by the Board of Management and the Supervisory Board in accordance with the requirements of section 162 of the German Stock Corporation Act (AktG) and conforms to the recommendations of the German Corporate Governance Code (GCGC) as amended on April 28, 2022. Relevant information is published on Covestro's website. Moreover, in terms of content and structure, the report is based on the Compensation Report for the year 2021, which was approved by the Annual General Meeting (AGM) on April 21, 2022 with a majority of 92.57%.

+ Additional information on the details of the compensation system, the report on the audit of the compensation report, and the resolution of the Annual General Meeting approving the compensation system is available at: www.covestro.com/en/company/management/corporate-governance

The AGM had approved the compensation system for Board of Management members on April 16, 2021. The Supervisory Board of Covestro AG resolved in December 2021 to propose to the AGM, effective January 1, 2022, to revise the system on one point, by adjusting the performance criteria for short-term variable compensation for the years 2022 to 2024 in line with Covestro's new strategy and by adding, among other criteria, a sustainability component for this purpose. The revised compensation system for the Board of Management members was approved by the AGM on April 21, 2022, with a majority of 88.75%; it is available on the company's website.

+ Additional information is available at: www.covestro.com/compensation-system

Compensation of the Board of Management

The following section reports the compensation of the Board of Management of Covestro AG for fiscal 2022. The members of the Board of Management of Covestro AG are the same as the members of the Board of Management of Covestro Deutschland AG, which is a wholly owned subsidiary of Covestro AG. Compensation is not paid for the members' work on the Board of Management of Covestro Deutschland AG.

Guiding Principles for Compensation

The compensation system for the Board of Management of Covestro AG is based on the corporate strategy and designed to facilitate a long-term increase in the company's value and responsible corporate governance. We aim to position Covestro as an attractive employer in the competition for highly qualified executives and, at the same time, ensure statutory and regulatory compliance. Board of Management compensation is in line with the basic principles of the Covestro Group's compensation structure, which is standardized for all Covestro employees in line with our "We are 1" corporate culture:

- The variable compensation of the Board of Management and all participating employees is based on a uniform system and identical criteria.
- Differences exist only in the target percentages related to fixed compensation.

The variable compensation is based on Covestro's corporate performance, which is measured based on financial and environmental targets and share performance:

- The system and criteria for short-term variable compensation are closely aligned to Covestro's annual performance.
- The system and the criteria are agreed upon and binding for a three-year period. The Covestro Profit Sharing Plan (Covestro PSP) is a bonus system based on the company's average expected performance. The Covestro PSP is designed in such a way that an average payout level of 100% can be achieved over a period of up to 10 years. Effective January 1, 2022, a sustainability component is for the first time included in addition to the financial performance indicators.

- In very successful years, high payout percentages are achieved (such as 239.5% for fiscal 2021), while in challenging years they are significantly lower, or no short-term variable compensation is paid at all (such as for fiscal 2022).
- The Prisma share-based compensation program for long-term variable compensation is based on the absolute performance of Covestro AG shares, including the dividend, as well as the relative performance compared with the STOXX Europe 600 Chemicals* index; since fiscal 2021, it has also included a sustainability component.

The determination of variable compensation is simple, transparent, and based on objective criteria:

- The relation between target attainment and payout has been defined for the criteria used and documented in the Compensation Report.
- The payout is calculated on the basis of financial criteria and sustainability targets that are also included in the company's Management Report; the calculation is also documented in the Compensation Report.

Compensation system and structure at a glance

	% of total direct compensation ¹ (figures in % rounded)	Target compensation in € thousand	Modifiers / target compensation	Further components
Approx. 30% fixed	Approx. 30% Fixed annual compensation²	CEO ³ : 1,246 OBM ³ : 628–762	Fixed	Fringe benefits
Approx. 70% variable	Approx. 30% Covestro PSP	CEO: 1,246 OBM: 628–762	$\frac{1}{4} \text{ EBITDA } 0\text{--}300\% + \frac{1}{4} \text{ ROCE over WACC } 0\text{--}300\% + \frac{1}{4} \text{ FOCF } 0\text{--}300\% + \frac{1}{4} \text{ ESG criteria } 0\text{--}300\%$ <p style="text-align: center;">↓ Cap: 250%</p>	Malus (100%) Clawback (up to 3 years)
	Approx. 40% Prisma	CEO: 1,620 OBM: 816–991	$\text{Prisma target} \times \text{Total shareholder return factor} \times \left[\frac{25\%}{\text{CO}_2 \text{ factor}} + \frac{75\%}{\text{Outperformance factor}} \right]$ <p style="text-align: center;">↓ Cap: 200%</p>	
	100%¹	CEO: 4,112 OBM: 2,072–2,515	Severance cap: 2 times annual compensation	Share ownership guidelines: 100% of fixed annual compensation within 3 years (CEO & OBM)
	Pension benefits⁴	CEO: 328 OBM: 168–246	Defined Benefit Plan with fixed contributions (company pension): 8–10% of total direct compensation ¹	
	Total target compensation⁵	CEO: 4,440 OBM: 2,240–2,761	Max. compensation limit (incl. fringe benefits and pension): €9,000 thousand (CEO); €5,500 thousand (OBM)	

¹ Fixed compensation plus variable target values.

² Excluding fringe benefits.

³ Chief Executive Officer (CEO), ordinary Board of Management member (OBM).

⁴ Expected pension service cost (IFRSs).

⁵ Fixed compensation plus variable target values.

* STOXX Europe 600 Chemicals: Sector index by index issuer STOXX; the STOXX Europe 600 comprises 600 European companies.

Basic Principles for Determining Compensation

Determining Target Compensation

The Supervisory Board determines the total target compensation for the upcoming fiscal year for each Board of Management member in accordance with the compensation system. This compensation is appropriate in view of the Board of Management member's duties and takes into account Covestro's financial situation, performance, and future prospects.

As of January 1, 2022, the fixed compensation of Board of Management members was increased based on the change in the previous year's consumer price index (2.21% from November 2020 to October 2021). The target compensation of individual Board of Management members based on the compensation system in effect is outlined below.

Total target compensation of individual Board of Management members¹

	Dr. Markus Steilemann (Chair)				Sucheta Govil (Sales and Marketing)				Dr. Klaus Schäfer (Technology)				Dr. Thomas Toepfer (Finance and Labor Director)			
	2021		2022		2021		2022		2021		2022		2021		2022	
	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%
Fixed annual compensation	1,219	25.8	1,246	27.9	614	27.4	628	27.3	614	26.3	628	27.7	746	27.4	762	27.3
Fringe benefits ²	30	0.6	30	0.7	30	1.3	30	1.3	30	1.3	30	1.3	30	1.1	30	1.1
Total	1,249	26.4	1,276	28.5	644	28.8	658	28.6	644	27.6	658	29.0	776	28.5	792	28.4
Short-term variable compensation ³																
for fiscal 2021	1,219	25.8			614	27.4			614	26.3			746	27.4		
for fiscal 2022			1,246	27.9			628	27.3			628	27.7			762	27.3
Long-term variable compensation ⁴																
2021–2024 Prisma tranche	1,585	33.5			798	35.7			798	34.2			970	35.6		
2022–2025 Prisma tranche			1,620	36.2			816	35.5			816	35.9			991	35.5
Pension expense ⁵	679	14.3	328	7.3	182	8.1	198	8.6	280	12.0	168	7.4	235	8.6	246	8.8
Total target compensation	4,732	100.0	4,470	100.0	2,238	100.0	2,300	100.0	2,336	100.0	2,270	100.0	2,727	100.0	2,791	100.0

¹ Due to commercial rounding, percentages do not always add up to exactly 100%.

² Included: Annual mobility allowance of €24 thousand and normally expected costs (e.g., of a health screening examination, and maintenance and repair of security systems installed).

³ Target value: 100% of fixed annual compensation.

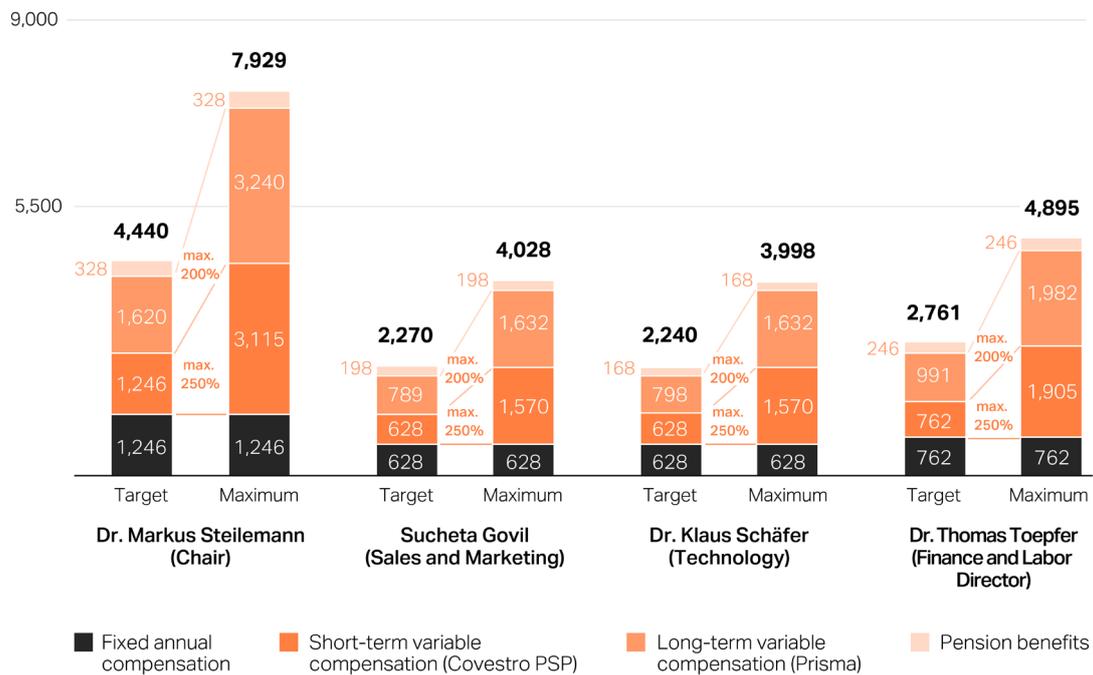
⁴ Target value: 130% of fixed annual compensation.

⁵ Expected pension service cost (employer portion) under IFRSs.

Compliance with Maximum Compensation Limit

Pursuant to Section 87a, Paragraph 1, Sentence 2, No. 1 of the German Stock Corporation Act (AktG), the Supervisory Board stipulated maximum total compensation for the Board of Management members for the first time for fiscal 2021. The absolute amount in euros for the maximum possible payout includes fixed compensation, fringe benefits (e.g., mobility allowance, payments toward the cost of security equipment, screening examinations, etc.), capped variable compensation components, and pension expenses. As a result, the maximum total compensation for a full fiscal year for the Chair of the Board of Management amounts to €9.0 million, while this amount for the regular Board of Management members is €5.5 million.

A report cannot be provided on compliance with this maximum compensation limit until fiscal 2025, when the Board of Management members are entitled to receive a payout from the 2021–2024 tranche of the Prisma long-term variable compensation program. The possible maximum compensation for fiscal 2022, taking into account the respective caps of 250% for short-term and 200% for long-term variable compensation, is outlined below. Based on these two caps and the fact that fringe benefits do not normally exceed an amount of €30 thousand, the aforementioned amounts are guaranteed not to exceed the maximum total compensation for Board of Management members.

Target compensation and maximum compensation for the Board of Management for fiscal 2022 (€ thousand)¹

¹ For purposes of clarity, fringe benefits are not included, but since these generally do not exceed €30 thousand, they do not contribute to meeting or surpassing the maximum thresholds.

Review of Appropriateness

The Supervisory Board commissioned an expert opinion from an independent third-party consultant firm to ensure the compensation is appropriate compared to other companies. Since on the basis of relevant KPIs (sales, employees, and market capitalization), Covestro is positioned in the bottom quartile of DAX-listed companies and was included in the MDAX prior to its admission to the DAX in the year 2018, the entire group of DAX and MDAX companies was used as the peer group. Banks and insurance companies were, however, excluded because of their limited comparability. Based on these equally weighted KPIs, Covestro ranks 37th (out of 84), or in the 57th percentile of this group. The following Board of Management compensation components were compared with the market value for each, i.e., the compensation of board of management members in the peer group:

- Fixed annual compensation
- Target cash compensation = Fixed annual compensation + Target value for short-term variable compensation
- Target direct compensation = Target cash compensation + Target value for long-term variable compensation
- Total target compensation = Target direct compensation + Company pension plan

The costs of the company pension plan were determined by using actuarial methods to calculate a company pension plan premium. This premium indicates the amount that would have to be paid to a third-party pension plan to purchase the relevant pension benefits. Using the same parameters for the calculation, the premium amount, and therefore the costs, can be compared to the pension benefits of the board of management members of other companies.

Based on the expert opinion, the target and maximum compensation of the Board of Management was deemed to be in line with the market standard on the whole and therefore appropriate within the meaning of the AktG.

Furthermore, the Supervisory Board reviewed the company's compensation structure and, for this purpose, compared the fixed annual compensation, target cash compensation, and target direct compensation of the Board of Management members with the corresponding compensation components of the Executive Leadership Team (executives at the two highest contract levels below of the Board of Management) and the workforce as a whole (employees subject and not subject to collective bargaining agreements, including the Executive Leadership Team) at Covestro in Germany. The internal compensation structure was also determined to be appropriate in view of this comparison, which covered the period from the year 2016 to the year 2022. No adjustment was therefore made to the compensation structure or maximum compensation, except for the aforementioned increase in fixed annual compensation.

Application of the Compensation System in the Reporting Period

The application of the compensation system in fiscal 2022 is presented below.

Nonperformance-Related Components

Fixed Annual Compensation, Fringe Benefits

The adjustment to fixed annual compensation at the start of the fiscal year was described above in "Determining Target Compensation." Fringe benefits mainly comprise a mobility allowance, maintenance and repair of security installations, as well as reimbursement of the cost of an annual screening examination. Sucheta Govil additionally received reimbursement of the cost of tax preparation by an external consulting firm. Fringe benefits are reported at cost or the amount of the taxable benefit gained.

Post-Employment Benefits

Dr. Markus Steilemann and Dr. Klaus Schäfer, who were appointed to the Board of Management in the year 2015, will receive lifelong pension benefits after they step down from the Covestro Group, but not before they reach the age of 62. These pension payments will be made monthly. The arrangements for surviving dependents basically provide for a widow's/widower's pension amounting to 60% of the member's pension entitlement, and an orphan's pension amounting to 12% of the member's pension entitlement for each child.

The annual pension entitlement is based on defined contributions. From September 1, 2015, onward, Covestro has provided a hypothetical benefit amounting to 33% of the respective fixed compensation beyond the relevant income threshold in the statutory pension plan. This percentage comprises a 6% basic contribution and an additional amount of three times the personal contribution chosen by the Board of Management member. This contribution is limited to a maximum of 9% so that the matching contribution by the company can be no higher than 27%. The total annual contribution is converted into a pension module according to the annuity table for the applicable tariff of the Rheinische Pensionskasse VVaG, Leverkusen (Germany), pension fund. The annual pension entitlement upon retirement is the total amount of the accumulated pension modules, including an investment bonus.

Dr. Klaus Schäfer has additionally been granted a vested entitlement to a fixed annual pension of €126,750.

The actual pension entitlement cannot be precisely determined in advance. It depends on the development of the member's compensation, the number of years of service on the Board of Management, and the return on the assets contributed to the Rheinische Pensionskasse VVaG. Certain assets are administered under a pension trust, providing additional insolvency protection for pension entitlements resulting from direct commitments for the members of the Board of Management in Germany. As a rule, future pension payments are adjusted by at least 1% per year. Depending on the pension obligation, an additional adjustment may be made if the investment bonus of the Rheinische Pensionskasse VVaG or the consumer price index exceeds 1% per year.

Since April 1, 2021, Sucheta Govil and Dr. Thomas Toepfer have earned pension benefits under a defined contribution plan. Covestro and the Board of Management members will each contribute 3% of their fixed annual compensation up to the social security contribution ceiling to a statutory pension plan. For the portion of compensation exceeding the contribution ceiling, Covestro will provide a basic contribution of 6% and a match of up to 30%, three times the Board of Management member's own contribution of up to 10%. Covestro invests the capital contributed on the capital market according to an age-based lifecycle model. The contributions made are guaranteed. On leaving the Board of Management, but not before the age of 62, the accumulated capital is paid out to the Board member, normally as a one-time payment. The aforementioned pension arrangement, which continues to apply for Dr. Markus Steilemann and Dr. Klaus Schäfer, applied to these two members for the period from the date they joined Covestro to March 31, 2021.

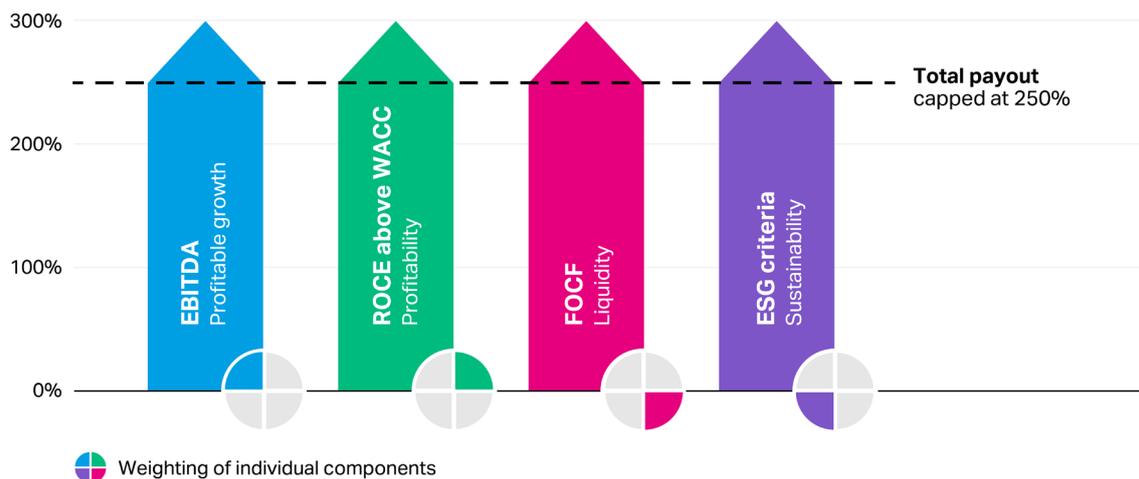
Short-Term Variable Compensation

The target value of the short-term variable compensation is currently 100% of the fixed annual compensation. The award is based on the four criteria of profitable growth, liquidity, profitability, and sustainability, which are used as part of Covestro's management system to plan, manage, control, and report on business performance. This means that short-term variable compensation is directly linked to the Covestro Group's success.

These performance indicators are applied to the Group-wide short-term Covestro Profit Sharing Plan (Covestro PSP). The Covestro PSP was introduced in fiscal 2016 and is applicable to all of Covestro's employees worldwide (with a few exceptions due to stipulations in collective bargaining agreements). Board of Management members also currently participate in the Covestro PSP. The four components are taken into account in this process on an equally weighted basis: Profitable growth measured in terms of EBITDA (earnings before interest, taxes, depreciation and amortization), liquidity measured in terms of free operating cash flow (FOCF), profitability measured in terms of return on capital employed (ROCE) above the weighted average cost of capital (WACC), and sustainability measured in terms of selected environmental, social, and governance (ESG) criteria. In the year 2022, the sustainability component was determined by direct and indirect Scope 1 and 2 greenhouse gas (GHG) emissions (CO₂ equivalents, CO₂e) of the main sites. Other components relating to social criteria and corporate governance are also to be incorporated in the future.

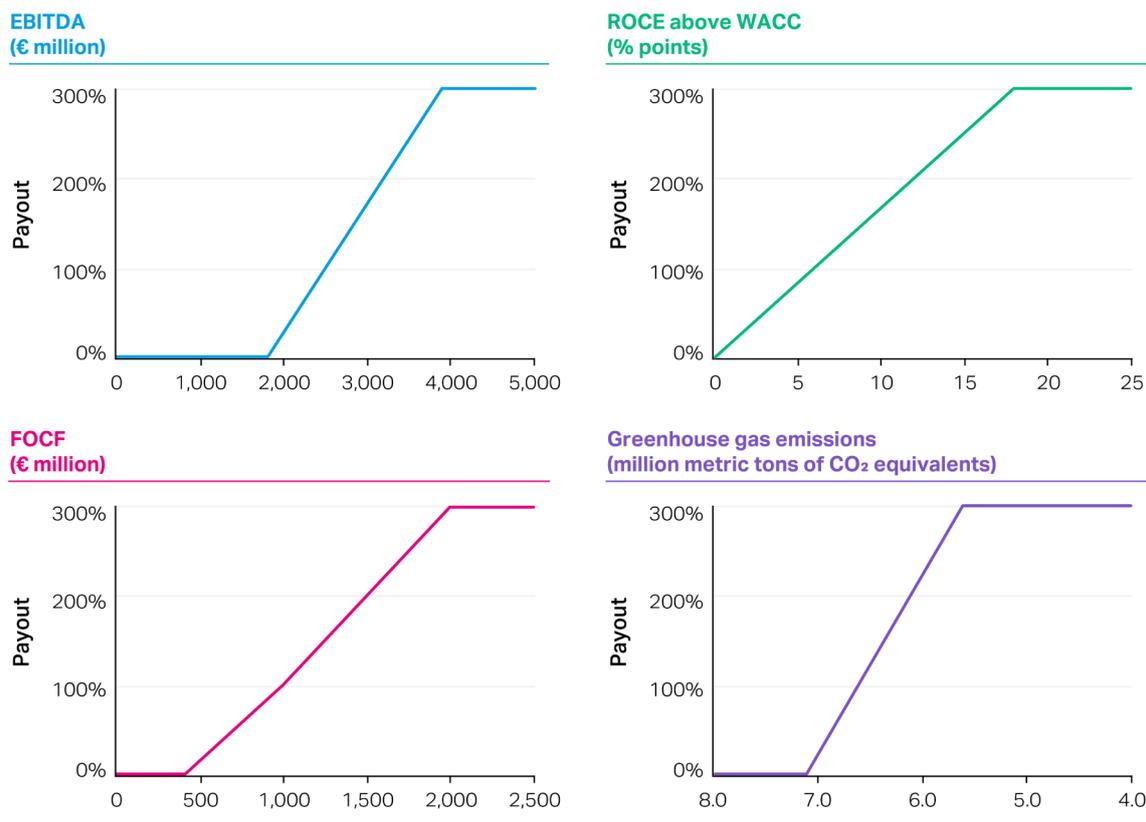
→ See "Key Management Indicators" and "Scope 1 and Scope 2 GHG Emissions."

Components of short-term variable compensation



In fiscal 2021, the Supervisory Board defined the global values for the threshold, 100% payout, and the maximum amount for each performance indicator, which are applied for a multi-year period from the year 2022 to the year 2024. Between these values, linear interpolation is used to determine the payout. There will be no adjustment after the fact.

Relation between payout and profitable growth (EBITDA), liquidity (FOCF), profitability (ROCE above WACC), and sustainability (greenhouse gas emissions)



For each individual performance indicator, the payout can be between 0% (failure to meet minimum requirements) and 300%. The total payout is the arithmetic mean of the individual payouts for all four components. However, it is limited to 250% of the target value corresponding to a maximum payout of 2.5 times the fixed annual compensation. This wide bandwidth ties the short-term variable compensation to the normally cyclical course of our business and ensures that successful years result in attractive payouts, while in challenging ones, it can be lower or even zero.

Components of the Covestro Profit Sharing Plan 2022–2024

	Profitable growth: EBITDA	Liquidity: FOCF	Profitability: ROCE above WACC ¹	Sustainability: GHG emissions
Threshold (0%)	€1,800 million	€400 million	0% points	7.1 million metric tons of CO ₂ equivalents
100% target attainment	€2,500 million	€1,000 million	6% points	6.6 million metric tons of CO ₂ equivalents
Ceiling (300%)	€3,900 million	€2,000 million	18% points	5.6 million metric tons of CO ₂ equivalents

¹ An imputed tax rate of 25% has been used, e.g., for calculating ROCE, since the year 2022 (previous year: effective tax rate).

On the basis of the values achieved for the reporting year 2022, a payout percentage of 75% would have been calculated; the table below shows how it was determined. However, since the thresholds of the three financial indicators (ROCE above WACC < 0) were not reached and the capital costs were therefore not earned in the reporting year, the Supervisory Board used the discretion it was given by the last criterion mentioned and reduced the payout to 0%. Following a resolution of the Board of Management, this figure was also used to calculate the bonus payout for employees, with the result that neither the Board of Management nor employees receive short-term variable compensation for the year 2022.

Calculated payout of the Covestro Profit Sharing Plan for the year 2022

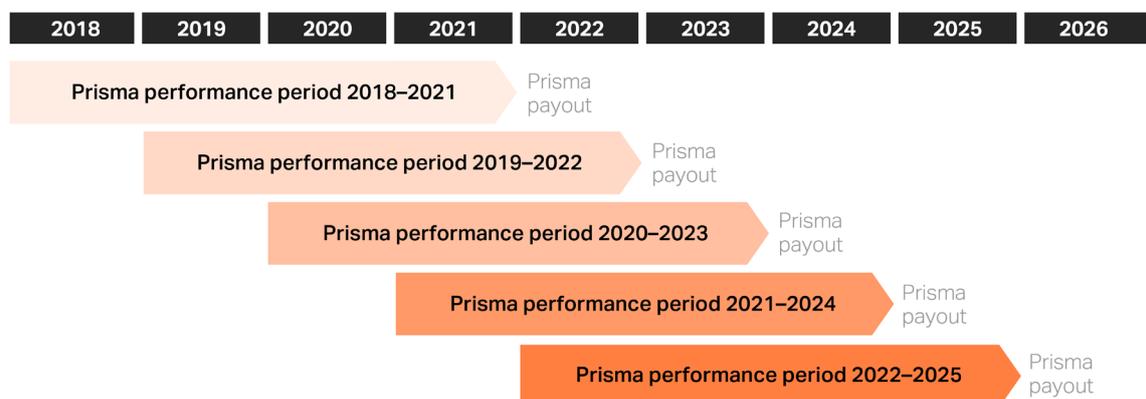
	Profitable growth: EBITDA	Liquidity: FOCF	Profitability: ROCE above WACC¹	Sustainability: GHG emissions
Achieved value	€1,617 million	€138 million	-5% points	4.7 million metric tons of CO ₂ equivalents
Resulting payout	0.0%	0.0%	0.0%	300.0%
Total payout (arithmetic mean)	75.0%			

¹ An imputed tax rate of 25% has been used for calculating ROCE, since the year 2022 (previous year: effective tax rate). If the effective tax rate of 316.2% had been used, imputed income taxes would have amounted to €844 million for the year 2022, resulting in net operating profit (NOPAT) of €-577 million. ROCE would consequently have amounted to -5.9%, and ROCE above WACC would have been -12.9% points. Since the criterion for the Board of Management and Supervisory Board to exercise discretion (ROCE above WACC < 0) has been met for both tax rates, the change in the calculation of ROCE described here does not affect the decision on the payout of short-term variable compensation. Otherwise, as in previous years, the effective tax rate would have been used to calculate ROCE for variable compensation. The expected tax rate (applied since the year 2022) and the effective tax rate (applied to the previous year) are presented in note 11 "Taxes" in the Notes to the Consolidated Financial Statements in the Annual Report 2022.

Long-Term Variable Compensation

The Prisma share-based compensation program for long-term variable compensation (LTI) takes into account the performance of Covestro shares, including the dividend (total shareholder return) and outperformance against the STOXX Europe 600 Chemicals* index over a period of four years. In fiscal 2021, the LTI plan was expanded to also include a sustainability component. The long-term variable compensation is geared toward the sustained, future-oriented, and continuous growth of the company's value and guarantees the implementation of Covestro's Sustainable Future corporate strategy, particularly since the introduction of the sustainability component. Prisma is applicable to both members of the Board of Management and to Covestro executives. The LTI target value amounts to 130% of fixed annual compensation for members of the Board of Management, and participation requires that they fulfill the share ownership guidelines applicable to them.

A new Prisma tranche with a four-year performance period is issued for each fiscal year. At the beginning of this performance period, the Supervisory Board stipulates the performance criteria for outperformance and sustainability as well as the relative weighting of these two criteria, which are linked to the overall criterion of total shareholder return (TSR) as multipliers.

Prisma performance periods

The payout is determined by calculating three factors: the TSR factor, the outperformance factor, and the CO₂ factor.

* STOXX Europe 600 Chemicals: Sector index by index issuer STOXX; the STOXX Europe 600 comprises 600 European companies.

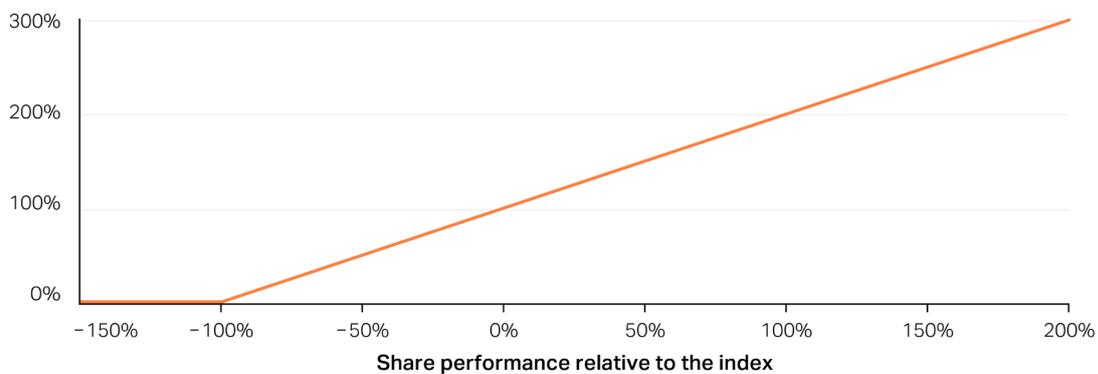
The TSR factor is the return generated by a share expressed as a percentage (total of the final price of the Covestro share and all dividends distributed per share during the four-year performance period divided by the initial price).

The outperformance factor is based on the performance of Covestro shares during the performance period relative to the performance of the STOXX Europe 600 Chemicals index. For the tranche beginning in fiscal year 2022, the following was determined:

- The outperformance factor amounts to 100% if Covestro's share performance (in %) matches the performance of the index (in %).
- The outperformance factor is 0% if the performance of Covestro shares (in %) underperforms the index by 100 percentage points or more.
- The outperformance factor increases in proportion with the deviation if Covestro's share performance falls within ± 100 percentage points of the performance of the index. The same is true if it outperforms the index by more than 100 percentage points.

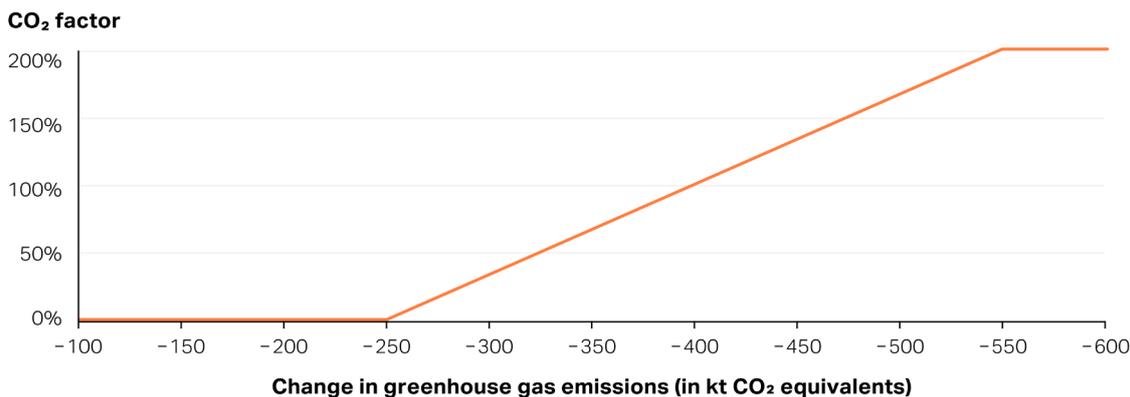
Relation between the outperformance factor and Covestro's share performance

Outperformance factor



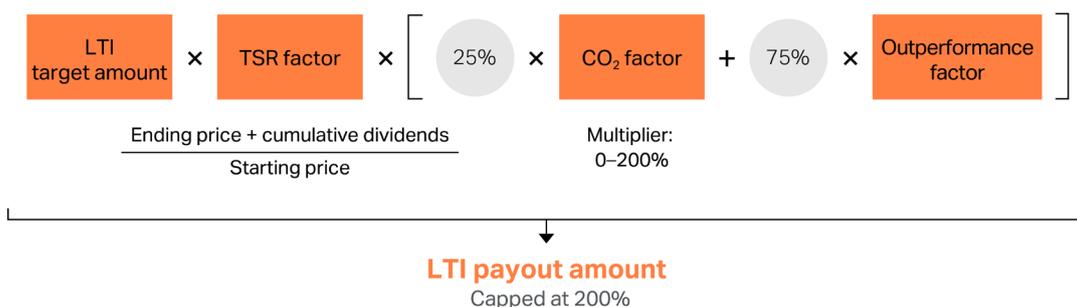
Starting with the tranche issued in fiscal 2022, the sustainability component applied is a reduction target for annual greenhouse gas (GHG) emissions (CO₂ equivalents) classified in Scope 1. The CO₂ factor amounts to 100% if these emissions are reduced by 400 kilotons (kt) by the end of fiscal 2025 in relation to the baseline year of 2020. This corresponds to an emissions reduction of 32%. If the annual emissions are reduced by less than 250 kt, the CO₂ factor is 0%. Starting with a reduction of 550 kt, it reaches the maximum value of 200%. Between these values, linear interpolation is used to determine the factor. The Supervisory Board considers the defined reduction targets as significant in relation to the company's actual Scope 1 emissions.

Relation between emissions and CO₂ factor



In order to calculate the total payout for the tranche beginning in fiscal 2022, the LTI target opportunity is multiplied by the TSR factor, the outperformance factor weighted at 75%, and the CO₂ factor weighted at 25%. The total distribution is limited to no more than 200% of the target opportunity. With the target opportunity being defined as 130% of the fixed compensation, the maximum payout is therefore 260% of the fixed annual compensation.

Components of the long-term variable compensation



In the case of tranches before the year 2021, which did not include a sustainability component, the payout factor is determined by multiplying the TSR factor and outperformance factor. The total payout in this case is also capped at a maximum of 200% of the target opportunity.

2018–2021 and 2019–2022 Prisma Tranche Payouts

In January of the reporting period 2022, Dr. Markus Steilemann, Dr. Klaus Schäfer, and Dr. Thomas Toepfer received payouts from the 2018–2021 Prisma tranche. The payout factor amounted to 17.7%. Sucheta Govil was entitled for the first time to participate in the 2019–2022 Prisma tranche, which ended on December 31 of the reporting year 2022 with a payout factor of 27.0%.

The following chart and table illustrate how the aforementioned payout factors are calculated.

Calculation of the 2018–2021¹ Prisma tranche

$\frac{\text{Ending price}}{\text{Starting price}} + \frac{\text{Cumulative dividends 2018–2021}}{\text{Starting price}} = \text{Total shareholder return (TSR) factor}$
$\frac{€53.53}{€84.34} + \frac{€7.10}{€84.34} = 71.9\%$
$100\% + \left(\frac{\text{Change in Covestro share price}^2}{100\%} - \frac{\text{Change in index price}^3}{100\%} \right) = \text{Outperformance factor}$
$100\% + \left(-36.5\% - 38.9\% \right) = 24.6\%$
$\text{TSR factor} \times \text{Outperformance factor} = \text{Prisma payout}$
$71.9\% \times 24.6\% = 17.7\%$

¹ The relevant prices are calculated as the average of the applicable ending prices during the months of November and December in the years 2017 and 2021.

² Percentage change in the ending price of Covestro share for the year 2021 (€84.34) as compared with the starting price of Covestro share for the year 2018 (€53.53).

³ Percentage change in the ending price of the STOXX Europe 600 Chemicals index for the year 2021 (€1,336.97) as compared with the starting price of the STOXX Europe 600 Chemicals index for the year 2018 (€962.86).

Calculation of the payout factors for the 2018–2021 and 2019–2022 Prisma tranches

		2018–2021 Prisma tranche	2019–2022 Prisma tranche
Starting price, Covestro	€	84.34 ¹	50.22 ²
Ending price, Covestro	€	53.53 ³	36.40 ⁴
Change	%	-36.5	-27.5
Starting price, index	€	962.86 ¹	832.55 ²
Ending price, index	€	1,336.97 ³	1,183.59 ⁴
Change	%	38.9	42.2
Cumulative dividend	€	7.10	8.30
TSR factor	%	71.9	89.0
Outperformance factor	%	24.6	30.3
Payout factor	%	17.7	27.0

¹ November/December 2017.

² November/December 2018.

³ November/December 2021.

⁴ November/December 2022.

The dividend payments for individual years can be accessed on Covestro's website.

+ Additional information is available at: www.covestro.com/en/investors/stock-performance/dividends

The amounts calculated for these two tranches, including those for former CEO Patrick Thomas, are shown in the following table.

Resulting amounts for 2018–2021 and 2019–2022 Prisma tranches

	2018–2021 Prisma tranche		2019–2022 Prisma tranche	
	Target value ¹	Payout in January 2022 (payout factor 39.9%)	Target value ²	Entitlement in January 2023 (payout factor 27.0%)
	€ thousand	€ thousand	€ thousand	€ thousand
Dr. Markus Steilemann ²	730	129	1,550	418
Sucheta Govil ³			327	88
Dr. Klaus Schäfer	730	129	780	211
Dr. Thomas Toepfer ⁴	930	165	948	256
Patrick Thomas ⁵	1,140	202		

¹ The target value is based on the position and the corresponding fixed compensation of the respective Board Member at the beginning of each tranche.

² CEO since June 1, 2018; previously Board of Management member for Sales and Marketing.

³ Member of the Board of Management since August 1, 2019 and therefore proportional payout from the 2019–2022 Prisma tranche.

⁴ Member of the Board of Management since April 1, 2018.

⁵ CEO and member of the Board of Management until May 31, 2018.

At the time of preparing this Compensation Report, the company is verifying whether and to what extent Covestro Deutschland AG and companies affiliated with Covestro Deutschland AG can or will take advantage of relief benefits under the German Electricity Price Cap Act (StromPBG) or the German Gas and Heating Price Cap Act (EWPBG). The acts specify prohibitions on bonuses, starting from a certain level of relief, and this could have an impact on the granting of variable compensation components to members of the company's management. In order not to restrict any of the scope for action of Covestro Deutschland AG and companies affiliated with Covestro Deutschland AG, given that the verification process is currently under way, and to enable any unresolved issues relating to both acts to be clarified with the appropriate due diligence, the Board of Management members in office have agreed to postpone the payouts from the 2019–2022 Prisma tranche until April 2023 for now.

Overview of Current Prisma Tranches

The three currently running Prisma tranches with their starting prices and fair values calculated as of the reporting date (market value of the relevant tranche determined with a Monte Carlo simulation) are explained below. For the 2023–2026 Prisma tranche, the annual reduction target for annual GHG emissions (CO₂ equivalents) for the sustainability component has been extended from Scope 1 emissions to cover Scope 1 and Scope 2 emissions.

Current Prisma tranches

		2020–2023 Prisma tranche	2021–2024 Prisma tranche ¹	2022–2025 Prisma tranche ¹
Covestro share				
Starting price	€	43.36	47.05	53.53
As of December 31, 2022	€		36.55	
STOXX Europe 600 Chemicals				
Starting price	€	1,010.32	1,088.78	1,336.97
As of December 31, 2022	€		1,141.37	
Fair value, December 2022	%	71.0	89.2	57.4

¹ The fair value was calculated assuming a value of 100% for the CO₂ factor first introduced with the 2021–2024 tranche.

Share Ownership Guidelines and Shareholdings

As a rule, the members of the Board of Management are contractually obligated to acquire Covestro shares equivalent to 100% of the fixed compensation (as set at the start of their term) on their own account within three years of their initial appointment and to hold these shares for the duration of their service on the Board of Management. If their contracts are extended, this obligation is increased to the amount of the new fixed compensation. The Board of Management member in question must acquire Covestro shares equivalent to the difference within four years of starting the new period of service. The aforementioned rule has been applied since fiscal 2021. The previously applied share ownership guidelines are currently still applicable to Dr. Klaus Schäfer. They required him to purchase Covestro shares to the value of half of his LTI target by a predefined date, and he has already fully met this requirement. He has to hold the shares he purchased for the duration of his Board of Management activities.

The following table lists the number of Covestro shares held by currently serving Board of Management members as of the reporting date.

Number of shares held by Board of Management members at reporting date

Board of Management member	Number of Covestro shares held	Total value as of end of December, 2022 in € thousand	Number of Covestro shares held
Dr. Markus Steilemann	30,000	1,097	fulfilled
Sucheta Govil	14,912	545	fulfilled
Dr. Klaus Schäfer	5,730	209	fulfilled
Dr. Thomas Toepper	9,500	347	in progress; 82% fulfilled

Malus and Clawback Clauses

According to the malus and clawback rules introduced in the year 2021, the Supervisory Board can withhold short-term and/or long-term variable compensation or request the return of variable compensation already paid out, either in whole or in part, at its discretion in the event of serious breaches of duty or compliance violations. Moreover, a clawback is possible when the calculation and payout was based on incorrect data.

The Supervisory Board has not exercised the right to claw back variable compensation, because no circumstances arose either before or during the reporting year 2022 that would have triggered this provision.

Benefits Associated with Ending Board of Management Service

If the term of Board of Management service is terminated early without good cause, the company fulfills its commitments up to the time the member leaves the company. In this case, payments to the Board of Management member, including fringe benefits, may not exceed two times annual compensation and may not compensate more than the remaining term of the employment contract (severance cap). Outstanding variable compensation components are paid out at the originally agreed times and conditions, i.e., they are not paid out in advance.

In the event of a change of control that results in a material change of status of an individual Board of Management member – e.g., change in company strategy or change in the Board of Management's job responsibilities – the Board of Management member has the right to terminate the employment contract within 12 months of the change of control. When this right of termination is exercised or if the employment relationship is ended by mutual agreement on the company's initiative within 12 months of the change of control, the Board of Management member is entitled to payment of severance of 2.5 times the fixed annual compensation. The amount of the severance payments, including fringe benefits, is limited to the remaining compensation up to the expiration of the employment contract and is subject to the severance cap.

Third-Party Benefits

In the reporting year, the Board of Management members were not promised nor did they receive, any benefits from third parties for their activities on the Board of Management.

Board of Management Compensation in the Fiscal Year Compensation Awarded and Due

The compensation for the fiscal year awarded and due is outlined below in accordance with Section 162, Paragraph 1 AktG. The amounts of short-term and long-term variable compensation are given for the fiscal year in which the activity for which the compensation is paid was performed in full.

Even if the pension expense for the company pension plan is not classified as compensation awarded and due within the meaning of Section 162 AktG, to ensure transparency, we additionally disclose the pension service cost according to IFRSs in the table below.

Compensation awarded and due to individual Board of Management members (AktG)¹

	Dr. Markus Steilemann (Chair)				Sucheta Govil (Sales and Marketing)				Dr. Klaus Schäfer (Technology)				Dr. Thomas Toepfer (Finance and Labor Director)			
	2021		2022		2021		2022		2021		2022		2021		2022	
	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%
Fixed annual compensation	1,219	28.4	1,246	73.7	614	29.1	628	84.2	614	27.5	628	72.7	746	27.4	762	73.0
Fringe benefits	28	0.7	27	1.6	29	1.4	30	4.0	28	1.3	25	2.9	28	1.0	26	2.5
Total	1,247	29.1	1,273	75.3	643	30.5	658	88.2	642	28.7	653	75.6	774	28.5	788	75.5
Short-term variable compensation																
for fiscal 2021	2,909	67.9			1,465	69.5			1,465	65.5			1,780	65.5		
for fiscal 2022			–	0.0			–	0.0			–	0.0			–	0.0
Long-term variable compensation																
2018–2021 Prisma tranche	129	3.0							129	5.8			165	6.1		
2019–2022 Prisma tranche ²			418	24.7			88	11.8			211	24.4			256	24.5
Total compensation awarded and due pursuant to section 162 AktG	4,285	100.0	1,691	100.0	2,108	100.0	746	100.0	2,236	100.0	864	100.0	2,719	100.0	1,044	100.0
Service cost ³	954		835		348		248		381		348		491		330	
Total compensation (including service costs)	5,239		2,526		2,456		994		2,617		1,212		3,210		1,374	

¹ Due to commercial rounding, percentages do not always add up to exactly 100%.

² As explained above, the payout of the amounts listed for this tranche in January 2023 has been postponed for now.

³ Including Board of Management members' own contributions derived from deferred fixed compensation.

Prisma Long-Term Variable Compensation

The fair value when granted of the long-term variable compensation (2022–2025 Prisma tranche) is €3,743 thousand (previous year: €4,176 thousand for the 2021–2024 Prisma tranche).

Provisions amounting to €5,626 thousand (previous year: €5,391 thousand) were recognized as of December 31, 2022, for all current tranches of long-term variable compensation in which active Board of Management members participate. No provisions were recognized for former Board of Management members (previous year: €202 thousand).

Long-term variable compensation (IFRSs)

	Board of Management members serving as of Dec. 31, 2022								Former Board of Management member			
	Dr. Markus Steilemann (Chair)		Sucheta Govil (Sales and Marketing)		Dr. Klaus Schäfer (Technology)		Dr. Thomas Toepfer (Finance and Labor Director)		Patrick Thomas		Total	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
	€ thou- sand	€ thou- sand	€ thou- sand	€ thou- sand	€ thou- sand	€ thou- sand	€ thou- sand	€ thou- sand	€ thou- sand	€ thou- sand	€ thou- sand	€ thou- sand
Total expenses/revenues in the reporting period for long-term variable compensation	847	301	447	222	405	152	489	185	(69)	–	2,119	860

Pension Entitlements

The current pension service cost for the members of the Board of Management recognized in the reporting year totaled €1,761 thousand (previous year: €2,174 thousand) according to IFRSs. The service cost depends on the actuarial assumptions made, in particular the relevant discount rate. The contributions to pension commitments actually made are recognized as cash outflows in the operating cash flow. The service cost, present value of the pension obligations, and contributions made in accordance with pension plan rules are shown in the table below.

Pension entitlements (IFRSs)

	Service cost for pension entitlements earned in the respective year		Present value of defined pension obligation as of Dec. 31		Actual contribution made in the respective year in accordance with pension plan rules	
	2021	2022	2021	2022	2021	2022
	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand
Dr. Markus Steilemann	954	835	5,036	3,267	381	390
Sucheta Govil	348	248	485	630	189	198
Dr. Klaus Schäfer	381	348	5,997	4,277	181	186
Dr. Thomas Toepfer	491	330	1,076	1,006	235	246
Total	2,174	1,761	12,594	9,180	986	1,020

Compensation of Former Members of the Board of Management

The compensation awarded and due to former Board of Management members for the fiscal year is outlined below in accordance with Section 162, Paragraph 1 AktG.

Compensation awarded and due to former Board of Management members (AktG)

	Patrick Thomas (until May 31, 2018)			
	2021		2022	
	€ thousand	in %	€ thousand	in %
Fixed annual compensation				
Fringe benefits				
Pensions			23	100.0
Total			23	100.0
Short-term variable compensation				
for fiscal 2021				
for fiscal 2022				
Long-term variable compensation				
2018–2021 Prisma tranche	202	100.0		
2019–2022 Prisma tranche				
Total	202	100.0	23	100.0

A provision of €5,447 thousand (previous year: €7,696 thousand) is recognized in the Consolidated Financial Statements as of December 31, 2022, for current pensions for former Board of Management members. The settlement value of direct and indirect pension obligations in the Financial Statements of Covestro AG amounted to €7,048 thousand (previous year: €6,921 thousand).

Compensation of the Supervisory Board

Compensation System of the Supervisory Board

The compensation of the Supervisory Board is in line with the provisions of the Articles of Incorporation, which were approved by the Annual General Meeting (AGM) on April 21, 2022 with a majority of 99.30%. Among other things, this resulted in a 20% increase in the Supervisory Board's fixed compensation effective January 1, 2022.

The members of the Supervisory Board now each receive fixed annual compensation of €120 thousand (previous year: €100 thousand) plus reimbursement of their expenses.

In accordance with the recommendations of the GCGC, additional compensation is paid to the Supervisory Board Chair and Vice Chair, and for chairing and membership in committees. The Supervisory Board Chair receives fixed compensation of €360 thousand (previous year: €300 thousand), while €240 thousand is paid to the Vice Chair (previous year: €150 thousand). This compensation includes chairmanship of and membership in committees. The other members of the Supervisory Board are entitled to additional compensation for membership in or chairmanship of committees. The Chair of the Audit Committee receives an additional €90 thousand (previous year: €50 thousand), the other members of the Audit Committee €45 thousand (previous year: €25 thousand) each. The Chairs of the Presidial and Nominations Committees receive €30 thousand each, while members of these two committees receive €15 thousand each. Additional compensation of €60 thousand is paid to the chairs of other committees and of €30 thousand to all other committee members. Work on committees is eligible for compensation for no more than three committees. If this cap is exceeded, compensation is paid for the three highest paid positions. If changes are made to the Supervisory Board and/or its committees during the year, members receive compensation on a prorated basis. The members of the Supervisory Board also receive an attendance fee of €1 thousand each time they attend a meeting of the Supervisory Board or a committee. Attendance at a meeting is also considered to be participation by telephone or video conference or using other comparable customary means of telecommunication. The attendance fee is limited to €1 thousand per day.

+ See Capital Market, section "Report of the Supervisory Board."

Compensation of the Supervisory Board for the Fiscal Year

The following table outlines the components of each Covestro AG Supervisory Board member's compensation for the reporting period 2022 and the prior-year period:

Compensation of the members of the Supervisory Board of Covestro AG

	Fixed compensation		Attendance fee		Total	
	2021	2022	2021	2022	2021	2022
	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand
Ferdinando Falco Beccalli (until April 2021)	29	–	0	–	29	–
Dr. Christine Bortenlänger	125	165	1	9	126	174
Dr. Christoph Gürtler (since April 2022)		126		8	0	134
Lise Kingo (since April 2021)	82	180	2	9	84	189
Petra Kronen (Vice Chair)	150	240	2	11	152	251
Irena Küstner	125	165	2	9	127	174
Dr. Ulrich Liman (until April 2022)	127	55	2	4	129	59
Frank Löllgen (since April 2022)		84		4	0	88
Prof. Dr. Rolf Nonnenmacher (until April 2022)	150	64	3	3	153	67
Dr. Richard Pott (Chair)	300	360	2	8	302	368
Petra Reinbold-Knape	145	180	2	10	147	190
Dr. Sven Schneider (since April 2022)		147		7	0	154
Regine Stachelhaus	140	180	2	8	142	188
Marc Stothfang	107	150	0	6	107	156
Patrick Thomas	132	210	–	15	132	225
Frank Werth (until April 2022)	100	36	2	2	102	38
Total	1,712	2,341	20	113	1,732	2,454

In addition to their compensation as members of the Supervisory Board, those employee representatives who are employees of Covestro Group companies receive compensation unrelated to their service on the Supervisory Board. The total amount of such compensation was €1,253 thousand in the year 2022 (previous year: €667 thousand).

No compensation was paid or benefits granted to members of the Supervisory Board for personally performed services such as consulting or agency services. The company has purchased insurance for the members of the Supervisory Board to cover their personal liability arising from their service on the Supervisory Board. The relevant recommendation has been eliminated from the version of the GCGC dated December 16, 2019, so the Supervisory Board's rules of procedure were amended accordingly in the subsequent year. No deductible for liability insurance has applied since then.

Comparative Presentation of Annual Changes in Compensation and Earnings

The following is the presentation of the annual changes in compensation awarded and due to current and former Board of Management and Supervisory Board members compared with the company's earnings performance and the average compensation of employees (FTEs) from fiscal years 2018 to 2022 as required by Section 162, Paragraph 1, Sentence 2, No. 2 AktG.

Five-year comparison of compensation awarded and due to Board of Management members (AktG)¹

	2018		2019		2020		2021		2022	
	€ thou- sand	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	
Board of Management members as of December 31, 2022										
Dr. Markus Steilemann (Chair)	3,458	3,168	-8.4	1,643	-48.1	4,285	160.8	1,691	-60.5	
Sucheta Govil (since August 1, 2019)	-	320		693		2,108	204.2	746	-64.6	
Dr. Klaus Schäfer	1,724	2,462	42.8	985	-60.0	2,236	127.0	864	-61.4	
Dr. Thomas Toepfer (since April 1, 2018)	3,329	1,014	-69.5	849	-16.3	2,719	220.3	1,044	-61.6	
Former Board of Management members										
Patrick Thomas (until May 31, 2018)	2,266	3,260	43.9	597	-81.7	202	-66.2	23	-88.6	
Frank H. Lutz (until June 2, 2017)	-	2,111	.	148	-93.0					
Total	10,777	12,335	14.5	4,915	-60.2	11,550	135.0	4,368	-62.2	

¹ Percentage changes always refer to the change from the respective previous year.

Five-year comparison of compensation awarded and due to Supervisory Board members (AktG)¹

	2018		2019		2020		2021		2022	
	€ thou- sand	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	€ thou- sand	%	
Supervisory Board members as of December 31, 2022										
Dr. Christine Bortenlänger	105	106	1.0	111	4.7	126	13.5	174	38.1	
Dr. Christoph Gürtler (since April 2022)										
Lise Kingo (since April 2021)						84		189	125.0	
Petra Kronen (Vice Chair)	160	160	0.0	152	-5.0	152	0.0	251	65.1	
Irena Küstner	134	134	0.0	127	-5.2	127	0.0	174	37.0	
Frank Löllgen (since April 2022)										
Dr. Richard Pott (Chair)	310	309	-0.3	302	-2.3	302	0.0	368	21.9	
Petra Reinbold-Knape (since January 2020)				141		147	4.3	190	29.3	
Dr. Sven Schneider (since April 2022)										
Regine Stachelhaus	125	126	0.8	129	2.4	142	10.1	188	32.4	
Marc Stothfang	105	106	1.0	101	-4.7	107	5.9	156	45.8	
Patrick Thomas (since July 2020)				53		132	149.1	225	70.5	
Former Supervisory Board members										
Dr. Ulrich Liman (until April 2022)	127	128	0.0	121	-5.5	129	6.6	59	-54.5	
Prof. Dr. Rolf Nonnenmacher (until April 2022)	159	159	0.0	153	-3.8	153	0.0	67	-56.3	
Frank Werth (until April 2022)	105	106	1.0	101	-4.7	102	1.0	38	-62.3	
Ferdinando Falco Beccalli (until April 2021)	104	106	1.9	102	-3.8	29	-71.6			
Johannes Dietsch (until July 2020)	155	154	-0.6	86	-44.2					
Peter Hausmann (until December 2019)	153	153	0.0							
Total	1,742	1,747	0.3	1,679	-3.9	1,732	3.2	2,454	41.7	

¹ Percentage changes always refer to the change from the respective previous year.

Five-year comparison of relevant performance indicators (AktG)¹

	2018	2019	2020	2021	2022
Net income/(loss) Covestro AG	€496 million	€623 million	25.6%	(€45 million)	€648 million
EBITDA ²	€3,200 million	€1,604 million	-49.9%	€1,472 million	€3,085 million
Free operating cash flow ³	€1,669 million	€473 million	-71.7%	€530 million	€1,429 million
ROCE above WACC ^{4,5}	22.8% points	1.6% points	-0.3% points	12.9% points	-5.0% points
Greenhouse gas emissions ⁶ (CO ₂ equivalents)	-	-	-	€5 million metric tons	€5 million metric tons
Core volume growth ⁷	1.5%	2.0%	-5.6%	10.0%	-9.6%

¹ Percentage changes always refer to the change from the respective previous year.

² Earnings before interest, taxes, depreciation and amortization (EBITDA): EBIT plus depreciation, amortization, and impairment losses; less impairment loss reversals on intangible assets and property, plant and equipment.

³ Free operating cash flow (FOCF): cash flows from operating activities less cash outflows for additions to property, plant, equipment and intangible assets.

⁴ Return on capital employed (ROCE): ratio of EBIT after imputed income taxes to capital employed. An imputed tax rate of 25% has been used, e.g., for calculating ROCE, since the year 2022 (previous year: effective tax rate). If the effective tax rate of 316.2% had been used, imputed income taxes would have amounted to €844 million for the year 2022, resulting in net operating profit (NOPAT) of €-577 million. ROCE would consequently have amounted to -5.9%, and ROCE above WACC would have been -12.9% points. Since the criterion for the Board of Management and Supervisory Board to exercise discretion (ROCE above WACC < 0) for fiscal 2022 has been met for both tax rates, the change in the calculation of ROCE described here does not affect the decision on the payout of short-term variable compensation. Otherwise, as in previous years, the effective tax rate would have been used to calculate ROCE for variable compensation. The expected tax rate (applied since the year 2022) and the effective tax rate (applied to the previous year) are presented in note 11 "Taxes" in the Notes to the Consolidated Financial Statements in the Annual Report 2022.

⁵ Weighted average cost of capital (WACC): weighted average cost of capital reflecting the expected return on the company's equity and debt capital. A figure of 7.0% has been taken into account for the year 2022 (2021: 6.6%). ROCE above WACC has been a key management indicator since the year 2022.

⁶ GHG emissions (Scope 1 and 2, GHG Protocol) at main production sites (responsible for more than 95% of our energy usage).

⁷ Until the year 2021, core volume growth, which refers to the core products in the operational reporting segments, was a key management indicator. It is calculated as the percentage change in externally sold volumes compared with the prior year. Covestro also takes advantage of business opportunities outside its core business, for example the sale of precursors and by-products such as hydrochloric acid, sodium hydroxide solution, and styrene. These transactions are not included in core volume growth. Retroactive calculation based on the definition of the core business as of March 31 of each subsequent year.

In addition to the net income/net loss of Covestro AG (which is legally required to be reported), earnings performance also includes the key figures of the Covestro Group underlying short-term variable compensation (EBITDA, free operating cash flow, ROCE above WACC, absolute annual direct and indirect Scope 1 and Scope 2 GHG emissions (CO₂ equivalents), and core volume growth). Since the year 2022, core volume growth has been replaced by EBITDA as a key management indicator.

Employee compensation was calculated by dividing personnel expenses (wages and salaries plus social expenses and expenses for pensions and other benefits) disclosed in the Consolidated Financial Statements for the relevant period by the number of employees expressed as full-time equivalents (FTEs) as of the reporting date.

Five-year comparison of employee compensation (AktG)¹

	2018		2019		2020		2021		2022	
Personnel expenses	€1,958 million	€1,762 million	-10.0%	€1,723 million	-2.2%	€2,298 million	33.4%	€1,995 million	-13.2%	
Employees ²	16,770 FTE	17,201 FTE	2.6%	16,501 FTE	-4.1%	17,909 FTE	8.5%	17,985 FTE	0.4%	
Personnel expenses per FTE	€117 thousand	€102 thousand	-12.3%	€104 thousand	1.9%	€128 thousand	22.9%	€111 thousand	-13.6%	

¹ Percentage changes always refer to the change from the respective previous year.

² The number of permanent or temporary employees is stated in full-time equivalents (FTEs). Part-time employees are included on a pro-rated basis in line with their contractual working hours. The figures do not include employees in vocational training.

Other Information

There were no advances or loans to members of the Board of Management or the Supervisory Board outstanding as of either December 31, 2021, or December 31, 2022.

Leverkusen, March 1, 2023

Covestro Aktiengesellschaft

For the Board of Management:

For the Supervisory Board:

Dr. Markus Steilemann

Dr. Thomas Toepfer

Dr. Richard Pott

Independent Auditor's Report

To Covestro AG, Leverkusen

Report on the Audit of the Compensation Report

We have audited the attached compensation report of Covestro AG, Leverkusen, for the financial year from January 1 to December 31, 2022, including the related disclosures, prepared to meet the requirements of Section 162 AktG [Aktiengesetz: German Stock Corporation Act].

The compensation report contains cross-references that are not required by law and which are marked as unaudited. We have not audited the cross-references and the information to which the cross-references refer.

Responsibilities of Management and the Supervisory Board

The management and the Supervisory Board of Covestro AG are responsible for the preparation of the compensation report, including the related disclosures, in accordance with the requirements of Section 162 AktG. The management and the Supervisory Board are also responsible for such internal controls that they consider necessary for enabling the preparation of the compensation report, including the related disclosures, that is free from material misstatement, whether due to fraud (i.e. fraudulent financial reporting and misappropriation of assets) or error.

Auditor's responsibilities

Our responsibility is to express an opinion on this compensation report, including the related disclosures, based on our audit. We conducted our audit in accordance with the German Generally Accepted Standards of Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) (IDW). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the compensation report, including the related disclosures, is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts, including the related disclosures, in the compensation report. The procedures selected depend on the auditor's professional judgment. This includes an assessment of the risks of material misstatement, whether due to fraud or error, in the compensation report, including the related disclosures. In assessing these risks, the auditor considers the internal control system relevant for the preparation of the compensation report, including the related disclosures. The objective is to plan and perform audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the Supervisory Board, as well as evaluating the overall presentation of the compensation report, including the related disclosures.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our assurance opinion.

Opinion

In our opinion, on the basis of the knowledge obtained in the audit, the compensation report for the financial year from January 1 to December 31, 2022, including the related disclosures, complies in all material respects with the financial reporting requirements of Section 162 AktG.

Our opinion on the compensation report does not extend to the cross-references, which are marked as unaudited and not required by law, and the information to which the cross-references refer.

Other matter – formal examination of the compensation report

The substantive audit of the compensation report described in this independent auditor's report includes the formal examination of the compensation report required by Section 162 (3) AktG, including issuing an assurance report on this examination. As we have issued an unqualified opinion on the substantive audit of the compensation report, this opinion includes the conclusion that the disclosures pursuant to Section 162 (1) and (2) AktG have been made, in all material respects, in the compensation report.

Limitation of liability

The terms governing this engagement, which we fulfilled by rendering the aforesaid services to Covestro AG, are set out in the General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften [German Public Auditors and Public Audit Firms] as amended on January 1, 2017 . By taking note of and using the information as contained in this auditor's report, each recipient confirms to have taken note of the terms and conditions laid down therein (including the limitation of liability of EUR 4 million for negligence under Clause 9 of the General Engagement Terms) and acknowledges their validity in relation to us.

Düsseldorf, March 1, 2023

KPMG AG
Wirtschaftsprüfungsgesellschaft

[Original German version signed by:]

Ufer
Wirtschaftsprüfer
[German Public Auditor]

Dr. Ackermann
Wirtschaftsprüferin
[German Public Auditor]

CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED FINANCIAL STATEMENTS OF COVESTRO AG

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COVESTRO GROUP CONSOLIDATED INCOME STATEMENT

	Note	2021	2022
		€ million	€ million
Sales	6	15,903	17,968
Cost of goods sold		(11,475)	(15,404)
Gross profit		4,428	2,564
Selling expenses		(1,428)	(1,604)
Research and development expenses		(341)	(361)
General administration expenses		(415)	(353)
Other operating income	7	99	145
Other operating expenses	8	(81)	(124)
EBIT¹		2,262	267
Equity-method loss		(15)	(17)
Result from other affiliated companies		2	2
Interest income		38	69
Interest expense		(79)	(130)
Other financial result		(23)	(61)
Financial result	10	(77)	(137)
Income before income taxes		2,185	130
Income taxes	11	(566)	(411)
Income after income taxes		1,619	(281)
Attributable to noncontrolling interest		3	(9)
Attributable to Covestro AG shareholders (net income)		1,616	(272)
		€	€
Basic earnings per share²	12	8.37	(1.42)
Diluted earnings per share²	12	8.37	(1.42)

¹ EBIT: income after income taxes plus financial result and income tax

² Earnings per share: According to IAS 33 (Earnings per Share), earnings per share comprise net income divided by the weighted average number of outstanding no-par voting shares of Covestro AG. The calculation for fiscal 2022 was based on 190,933,438 no-par value shares (previous year: 193,165,396). For more information, see note 12 "Earnings per Share."

COVESTRO GROUP CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Note	2021	2022
		€ million	€ million
Income after income taxes		1,619	(281)
Remeasurements of the net defined benefit liability for post-employment benefit plans	20	510	849
Income taxes	11	(161)	(454)
Other comprehensive income from remeasurements of the net defined benefit liability for post-employment benefit plans		349	395
Changes in fair values of equity instruments	24	13	(3)
Income taxes	11	(4)	1
Other comprehensive income from equity instruments		9	(2)
Other comprehensive income that will not be reclassified subsequently to profit or loss		358	393
Exchange differences of foreign operations		367	50
Reclassified to profit or loss		-	-
Other comprehensive income from exchange differences		367	50
Other comprehensive income that may be reclassified subsequently to profit or loss		367	50
Total other comprehensive income		725	443
Attributable to noncontrolling interest		2	(4)
Attributable to Covestro AG shareholders		723	447
Total comprehensive income		2,344	162
Attributable to noncontrolling interest		5	(13)
Attributable to Covestro AG shareholders		2,339	175

COVESTRO GROUP CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	Note	Dec. 31, 2021	Dec. 31, 2022
		€ million	€ million
Noncurrent assets			
Goodwill	13	757	729
Other intangible assets	13	706	603
Property, plant and equipment	14	6,032	5,801
Investments accounted for using the equity method	15	172	185
Other financial assets	16	49	143
Other receivables	18	76	110
Deferred taxes	11	818	345
		8,610	7,916
Current assets			
Inventories	17	2,914	2,814
Trade accounts receivable		2,343	2,011
Other financial assets	16	493	62
Other receivables	18	434	451
Claims for income tax refunds	11	128	115
Cash and cash equivalents		649	1,198
Assets held for sale		–	18
		6,961	6,669
Total assets		15,571	14,585
Equity	19		
Capital stock of Covestro AG		193	190
Capital reserves of Covestro AG		3,927	3,788
Other reserves		3,576	3,108
Equity attributable to Covestro AG shareholders		7,696	7,086
Equity attributable to noncontrolling interest		66	36
		7,762	7,122
Noncurrent liabilities			
Provisions for pensions and other post-employment benefits	20	1,199	486
Other provisions	21	223	184
Financial liabilities	22	2,349	3,368
Income tax liabilities	11	98	26
Other liabilities	23	34	32
Deferred taxes	11	300	312
		4,203	4,408
Current liabilities			
Other provisions	21	637	171
Financial liabilities	22	192	321
Trade accounts payable		2,214	2,016
Income tax liabilities	11	239	149
Other liabilities	23	324	396
Liabilities directly related to assets held for sale		–	2
		3,606	3,055
Total equity and liabilities		15,571	14,585

COVESTRO GROUP CONSOLIDATED STATEMENT OF CASH FLOWS

	Note	2021	2022
		€ million	€ million
Income after income taxes		1,619	(281)
Income taxes	11	566	411
Financial result	10	77	137
Income taxes paid		(546)	(538)
Depreciation, amortization, impairment losses and impairment loss reversals	13, 14	823	1,350
Change in pension provisions		31	54
(Gains)/losses on retirements of noncurrent assets		(3)	(3)
Decrease/(increase) in inventories		(987)	148
Decrease/(increase) in trade accounts receivable		(462)	377
(Decrease)/increase in trade accounts payable		722	(213)
Change in other working capital, other noncash items		353	(472)
Cash flows from operating activities	27.1	2,193	970
Cash outflows for additions to property, plant, equipment and intangible assets		(764)	(832)
Cash inflows from sales of property, plant, equipment and other assets		11	21
Cash inflows from divestments less divested cash		12	6
Cash outflows for noncurrent financial assets		(34)	(124)
Cash inflows from noncurrent financial assets		25	3
Cash outflows for acquisitions less acquired cash		(1,469)	–
Interest and dividends received		36	75
Cash inflows from other current financial assets		188	374
Cash flows from investing activities	27.2	(1,995)	(477)
Acquisition of treasury shares	19	–	(150)
Issuance of treasury shares	19	2	8
Dividend payments and withholding tax on dividends	19	(262)	(654)
Issuances of debt		51	2,069
Retirements of debt		(675)	(1,074)
Interest paid		(81)	(131)
Cash outflows for the purchase of additional interests in subsidiaries		–	(4)
Cash flows from financing activities	27.3	(965)	64
Change in cash and cash equivalents due to business activities		(767)	557
Cash and cash equivalents at beginning of year		1,404	649
Change in cash and cash equivalents due to exchange rate movements		12	(8)
Cash and cash equivalents at end of year		649	1,198

COVESTRO GROUP CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Capital stock of Covestro AG	Capital reserves of Covestro AG	Retained earnings incl. total income	Accumulated other com- prehensive income	Equity attributable to Covestro AG shareholders	Equity attributable to noncontrolling interest	Equity
	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Dec. 31, 2020	193	3,925	1,280	209	5,607	37	5,644
Issuance of treasury shares	-	2			2		2
Dividend payments			(251)		(251)	(11)	(262)
Other changes ¹			(1)		(1)	35	34
Income after income taxes			1,616		1,616	3	1,619
Other comprehensive income			358	365	723	2	725
Total comprehensive income			1,974	365	2,339	5	2,344
Dec. 31, 2021	193	3,927	3,002	574	7,696	66	7,762
of which treasury shares	-	-			-		-
Dec. 31, 2021	193	3,927	3,002	574	7,696	66	7,762
Acquisition of treasury shares	(3)	(147)			(150)		(150)
Issuance of treasury shares	-	11			11		11
Dividend payments			(651)		(651)	(6)	(657)
Other changes ²		(3)	8		5	(11)	(6)
Income after income taxes			(272)		(272)	(9)	(281)
Other comprehensive income			393	54	447	(4)	443
Total comprehensive income			121	54	175	(13)	162
Dec. 31, 2022	190	3,788	2,480	628	7,086	36	7,122
of which treasury shares	(3)	(136)			(139)		(139)

¹ Other changes in fiscal 2021 include the dilution of the Groups share resulting from a share deal due to additional noncontrolling interests.

² Other changes in capital reserves in fiscal 2022 include the difference between the historical cost of treasury shares and the issue price in November 2022. Further other changes in 2022 primarily include the purchase of additional interests in subsidiaries.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS OF THE COVESTRO GROUP

Principles and Methods

1. General Information

Covestro AG (registered at the district trade register, or Amtsgericht, for Cologne, number: HRB 85281) is a stock exchange-listed corporation headquartered at Kaiser-Wilhelm-Allee 60, 51373 Leverkusen (Germany), (Covestro AG). The consolidated financial statements of Covestro AG as of December 31, 2022, cover Covestro AG and its subsidiaries, joint arrangements and associated companies. They have been prepared according to the International Financial Reporting Standards (IFRSs) of the International Accounting Standards Board (IASB), London (United Kingdom), as endorsed by the European Union (EU) and in effect at the reporting date, the Interpretations (IFRICs) of the IFRS Interpretations Committee (IFRS IC) and the Interpretations published by the Standing Interpretations Committee (SIC), as well as the additional requirements of German commercial law pursuant to Section 315e (1) of the German Commercial Code (HGB) for the exempting IFRS consolidated financial statements.

The declaration pertaining to the German Corporate Governance Code pursuant to Section 161 of the German Stock Corporation Act (AktG) has been issued and made available to shareholders.

If certain items in the income statement, statement of comprehensive income, statement of financial position, statement of cash flows and statement of changes in equity of the Covestro Group are condensed for the sake of clarity, this is explained in the notes. The income statement has been prepared using the cost-of-sales method. Assets and liabilities are classified by maturity. They are classified as current if they mature or are intended for sale within one year or within the normal business cycle of the Covestro Group. Trade accounts receivable and payable, inventories, and assets held for sale are consistently presented as current. Deferred tax assets, deferred tax liabilities and pension provisions are consistently presented as noncurrent.

The consolidated financial statements are drawn up in euros. Amounts are stated in millions of euros (€ million) unless otherwise noted.

The Board of Management of Covestro AG prepared the consolidated financial statements as of December 31, 2022, on February 24, 2023, submitted the prepared consolidated financial statements to the Audit Committee and the Supervisory Board for examination and approval, and authorized their publication.

Exchange Rates

In the reporting period, the following exchange rates were used for the major currencies of relevance from the Covestro Group's perspective:

Average rates for major currencies

€1/		Average rates	
		2021	2022
BRL	Brazil	6.37	5.42
CNY	China	7.63	7.08
HKD	Hong Kong ¹	9.19	8.23
INR	India	87.43	82.63
JPY	Japan	129.82	137.77
MXN	Mexico	23.98	21.13
USD	United States	1.18	1.05

Closing rates for major currencies

€1/		Closing rates	
		2021	2022
BRL	Brazil	6.31	5.64
CNY	China	7.20	7.37
HKD	Hong Kong ¹	8.83	8.32
INR	India	84.23	88.17
JPY	Japan	130.38	140.66
MXN	Mexico	23.14	20.86
USD	United States	1.13	1.07

¹ Special Administrative Region (China)

2. Effects of New Financial Reporting Standards

2.1 Financial Reporting Standards Applied for the First Time in the Reporting Period

IFRS pronouncement (published on)	Title	Effective for annual periods beginning on or after
Amendments to IFRS 3 (May 14, 2020)	Reference to the Conceptual Framework	January 1, 2022
Amendments to IAS 16 (May 14, 2020)	Property, Plant and Equipment – Proceeds before Intended Use	January 1, 2022
Amendments to IAS 37 (May 14, 2020)	Onerous Contracts – Cost of Fulfilling a Contract	January 1, 2022
Annual Improvements to IFRSs (May 14, 2020)	2018–2020 Cycle	January 1, 2022

Initial application of the standards listed in the table had no or no material impact on the presentation of the net assets, financial position and results of operations of the Covestro Group.

2.2 Published Financial Reporting Standards that have not yet been Applied

The IASB issued the following standards and amendments to standards which have already been adopted by the European Union (EU) but are not mandatory for financial statements 2022

IFRS pronouncement (published on)	Title	Effective for annual periods beginning on or after
IFRS 17 (May 18, 2017)	Insurance Contracts	January 1, 2023
Amendments to IFRS 17 (June 25, 2020)	Amendments to IFRS 17 – Insurance Contracts	January 1, 2023
Amendments to IAS 1 and the practice statement (February 12, 2021)	Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2)	January 1, 2023
Amendments to IAS 8 (February 12, 2021)	Definition of Accounting Estimates (Amendments to IAS 8)	January 1, 2023
Amendments to IAS 12 (May 7, 2021)	Deferred Tax related to Assets and Liabilities arising from a Single Transaction	January 1, 2023
Amendments to IFRS 17 (December 9, 2021)	Initial Application of IFRS 17 and IFRS 9 – Comparative Information	January 1, 2023

The application of the following other standards and amendments to standards issued by the IASB is conditional upon their endorsement by the EU. The effective date for the standards is assumed to be the effective date designated by the IASB.

IFRS pronouncement (published on)	Title	Effective for annual periods beginning on or after
Amendments to IAS 1 (January 23, 2020, July 15, 2020 and October 31, 2022)	Classification of Liabilities as Current or Non-current, Classification of Liabilities as Current or Non-current – Deferral of Effective Date and Non-current Liabilities with Covenants	January 1, 2024
Amendments to IFRS 16 (September 22, 2022)	Lease Liability in a Sale and Leaseback	January 1, 2024

The effects of the initial application of the aforementioned financial reporting standards described below are currently being reviewed. At the time the financial statements were prepared, no material impact on the presentation of the net assets, financial position, and results of operations of the Covestro Group was expected. According to the analysis as it stands currently, initial application of the other standards listed in the table will have no effect on the presentation of the net assets, financial position, and results of operations of the Covestro Group.

On January 23, 2020, the IASB published "Classification of Liabilities as Current or Non-current," an amendment to IAS 1 (Presentation of Financial Statements) that clarifies when a liability with an uncertain settlement date is classified as current or noncurrent in the statement of financial position. On October 31, 2022, the IASB published further amendments to IAS 1 under the title "Non-current Liabilities with Covenants." The changes resulted in the effective date being postponed to January 1, 2024. The amendments clarify this from fiscal 2020 and clarify that the conditions of loan agreements which a company must only comply with after the reporting date have no bearing on whether a liability is classified as current or noncurrent on the reporting date. In contrast, conditions which a company must comply with on or before the reporting date have a bearing on a liability's classification as current or noncurrent, even if the condition itself is only assessed after the reporting date.

On February 12, 2021, the IASB issued additional amendments to IAS 1, "Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2)," along with an amendment to the relevant practice statement. These amendments require all companies to disclose the "material accounting policies" in their notes to the consolidated financial statements that are relevant to understanding the financial statements and the underlying transactions, for example in the case of (de facto) accounting options with respect to material individual items in the group, rather than "significant accounting policies" in general. Accounting policies are significant when they relate to high-value positions such as pension provisions, but the standard on which they are based specifies clear accounting policies that apply to every entity. The amendments to IFRS Practice Statement 2 provide guidelines for the application of this materiality concept.

Also on February 12, 2021, the IASB issued amendments to IAS 8 (Accounting Policies, Changes in Accounting Estimates and Errors) under the title "Definition of Accounting Estimates (Amendments to IAS 8)." These amendments are intended to clarify the distinction between changes in accounting policies and changes in accounting estimates. This distinction is generally relevant since changes in accounting policies are, subject to transitional provisions, always applied retrospectively to consolidated financial statements, while changes in accounting estimates are only applied prospectively from the date of the change in estimates.

On September 22, 2022, the IASB published amendments to IFRS 16 under the title "Lease Liability in a Sale and Leaseback." The amendments clarify that no gains or losses relating to the retained right of use may be recognized in the subsequent measurement of a lease liability in a sale and leaseback transaction.

In December 2022, the Council of the European Union reached an agreement regarding implementation of the EU Directive "Global Anti-Base Erosion Rules (Pillar Two)" of the OECD regarding the global minimum taxation of multinational enterprises. This is yet to be transposed into national law in Germany, with this expected to occur in fiscal 2023. The locally implemented EU Directive is likely to be applicable for the first time to fiscal years beginning on January 1, 2024. The impacts of implementation of the EU Directive are currently being examined.

In this context, the IASB published the Exposure Draft "International Tax Reform – Pillar Two Model Rules (Proposed amendments to IAS 12)" on January 9, 2023. Among other measures, this proposes the introduction of a temporary exception to the accounting for deferred taxes arising from the implementation of the new EU Directive as well as supplementary notes depending on whether or not it has already been transposed into national tax law. The proposed exception to the accounting for deferred taxes is to apply with retroactive effect immediately upon the standard being adopted, subject to the relevant endorsement.

Additionally, the International Sustainability Standards Board (ISSB) newly founded in fiscal 2021 published initial drafts for sustainability reporting in fiscal 2022, the potential future effect of which on the Covestro Annual Report is currently being analyzed.

3. Accounting Policies and Valuation Principles

Covestro's consolidated financial statements are based on the principle of the historical cost of acquisition or production. Exceptions are items measured at fair value, such as certain financial assets, assets held for sale, plan assets, and reportable derivatives.

Discretionary Decisions and Estimation Uncertainties

In preparing the consolidated financial statements, Covestro management has to make assumptions and estimates to a certain extent that may substantially impact the presentation of the Covestro Group's net assets, financial position, and results of operations and could deviate from the actual results. Such assumptions, estimates, and the exercise of discretion mainly relate to the following areas:

- The identification and valuation of intangible assets and liabilities in the context of purchase price allocation in connection with the acquisition of companies
- Defining the useful life of noncurrent assets
- The identification of impairment losses or reversals of impairment losses on noncurrent assets, taking individual lower value thresholds into account
- The determination of cash-generating units for the purpose of centralized impairment tests of noncurrent assets
- Goodwill impairment testing including long-term planning assumptions with respect to growth and profitability using discounted cash flows in the context of central impairment tests
- Accounting for income taxes and assessing the recoverability of deferred tax assets in respect to future taxable income and the recognition of tax effects in the future
- Recognition and measurement of provisions (e.g., for litigation-related expenses, pensions and other employee benefits, other taxes, environmental compliance and remediation costs, and product liability)
- The determination of assumptions underlying the recognition, measurement, and disclosure of financial instruments

The risks relating to the impacts of the current crisis caused by Russia's war against Ukraine and the coronavirus pandemic are taken into account here. In addition, Covestro's management must decide which information is relevant to readers of the IFRS consolidated financial statements and should be included in the notes. Information about exercising discretion in the application of accounting policies that most significantly affect the amounts reported in the consolidated financial statements, and about estimates and assumptions, is disclosed in the following notes. The following estimates are based on historical experience and assumptions that are believed to be reasonable. They are reviewed on an ongoing basis, but may differ from the actual values subsequently recognized.

Climate-related Impacts

Covestro is striving to become climate-neutral and has set itself the target of achieving net zero greenhouse gas (GHG) emissions^{*} in its own production (Scope 1) and from the provision and use of energy produced outside the company (Scope 2) at all environmentally relevant sites by the year 2035. It is simultaneously also working on solutions to reduce emissions along the value chain. All the assumptions and estimates in these financial statements are based on the circumstances and assessments on the reporting date. On this basis, there are no identifiable specific indications of the need for the impairment of noncurrent assets, a significant adjustment to the remaining useful lives of assets, or impacts on existing or possible new environmental or dismantling obligations on reporting date. The Group will continuously review the basic assumptions made and will adjust them if necessary. In this context, Covestro also continuously monitors legislation regarding climate change as increasing legislative restrictions are anticipated in the future.

→ See sections „Management“ and „Climate Neutrality“ of the Combined Management Report for details on how Covestro takes sustainability into account in its corporate strategy as well as its management and planning.

* Achievement of net-zero GHG emissions is defined as a balance between anthropogenic production of GHG emissions (caused by the company's own production activities and by the provision and use of energy produced outside the company) and anthropogenic reduction of GHG emissions.

Consolidation

As of December 31, 2022, the direct and indirect subsidiaries of Covestro AG were fully consolidated in accordance with the principles of IFRS 10 (Consolidated Financial Statements). In addition, joint arrangements as defined by IFRS 11 (Joint Arrangements) were classified as joint operations and consolidated proportionately in the consolidated financial statements, or classified as joint ventures and accounted for in the same way as associated companies using the equity method in accordance with IAS 28 (Investments in Associates and Joint Ventures).

→ See note 5.1 "Scope of consolidation and investment."

Joint Operations and Joint Ventures

Joint operations and joint ventures are based on joint arrangements. A joint arrangement is deemed to exist if Covestro AG, through a contractual agreement, indirectly or directly jointly controls an activity together with one or more third parties. Joint control is only deemed to exist if decisions regarding the relevant activities require the unanimous consent of the parties sharing control.

A joint operation is a joint arrangement whereby the parties that have joint control over the arrangement have rights to the assets attributable to the arrangement and obligations with regard to the liabilities attributable to the arrangement. The Covestro Group recognizes the share of assets, liabilities, revenues and expenses in accordance with its rights and obligations in a joint operation.

A joint venture is a joint arrangement whereby the parties that have joint control over the arrangement have rights to the net assets of the arrangement. Joint ventures are accounted for using the equity method.

Associates over which Covestro AG is able to exercise significant influence, directly or indirectly, generally through an ownership interest between 20% and 50%, are also accounted for using the equity method.

Change in Ownership Interest

A change in the interest in a subsidiary without acquiring or losing control is accounted for as an equity transaction and has no impact on the income statement.

If the Group loses control over a subsidiary, then the associated assets (including proportional goodwill), liabilities, noncontrolling interests, and other equity items are derecognized. Any resulting gain or loss is recognized in the income statement, and any equity interest retained is measured at fair value on this date and recognized. In the event of joint control, the aforementioned provisions would be applied to joint operations and joint ventures. If the Group maintains significant influence, then as a rule, the equity interest in the associated company continues to be accounted for using the equity method after the initial measurement.

Currency Translation

The financial statements of the individual companies included in the consolidated financial statements are prepared in their respective functional currencies. The majority of consolidated companies carry out their activities autonomously from a financial, economic, and organizational point of view, and their functional currencies are therefore the respective local currencies.

In the separate financial statements of the foreign companies, receivables and liabilities in currencies other than the respective functional currency are translated at closing rates. Related exchange differences are recognized in profit or loss and recorded as exchange gains or losses under other financial result.

In the consolidated financial statements, the assets and liabilities of Covestro companies whose functional currency is not the euro are translated into euros at closing rates at the start and end of the reporting period, while income and expense items and cash flows are translated into euros at average rates. Equity items are translated at historical rates. Foreign currency differences resulting from the translation of the figures disclosed in the financial statements of foreign companies are recognized directly in equity in the currency translation reserve.

Sales and Other Operating Income

All revenues from customer contracts, such as the selling of products or rendering of services, or from licensing agreements, are recognized as sales. Other operational revenues are recognized as other operating income.

In principle, the amount of consideration from a contract with a customer to which Covestro expects to be entitled in exchange for the transfer of goods or services is recognized as sales when the customer obtains control of the corresponding goods or services.

Sales are generated primarily from the sale of chemical products. In most cases, control over these products is transferred to the customer at a point in time.

Depending on the contractual agreements made and transportation clauses agreed upon with the customer, in the majority of cases control is transferred to the customer upon delivery at the place of destination, furthermore at the point in time of collection by the customer or upon handover to the freight carrier. In some cases, sales are made through consignment warehouses in which customers primarily obtain control over the delivered goods upon delivery to the consignment warehouse.

In principle, control is considered to be transferred when the customer can direct the use of the product to be delivered and obtain substantially all of the remaining benefits from the product, while this is no longer possible for Covestro.

Determining the point in time of the transfer of control involves considering additional indicators. In particular, it is considered at which point in time Covestro has a present right to payment for the product and when physical possession of the product or, in a broader sense, the possibility of sole access to the product, is transferred to the customer. Depending on the transportation clauses, the possibility of sole access to the product may be transferred even prior to arrival or physical handover of the product to the customer. Furthermore, the point in time when the legal title passes to the customer is also considered to the extent that it constitutes more than a protective right. The point in time when the significant rewards and risks of ownership of a product are transferred to the customer is usually linked closely with the aforementioned indicators and is therefore considered with these. Based on experience, it is assumed that products sold fulfill the agreed-upon specifications, thus acceptance by the customer is an indicator that does not generally affect the point in time at which control is transferred.

As a result, the point in time at which control is transferred depends on the contractual agreement concluded with the customer in each case and the stipulated transportation clauses.

In the case of products sold through a consignment warehouse, the customer generally obtains physical possession of this product upon delivery to the consignment warehouse. In addition, the right to payment for the delivered goods generally arises upon delivery. To the extent that the other three indicators do not lead to a contrary conclusion, control of the products in the case of a sale through a consignment warehouse transfers to the customer upon delivery to the consignment warehouse. The corresponding sales are therefore realized at the time of delivery.

Certain products are only sold to one customer. Some of these customer-specific products have no alternative use for Covestro. Insofar as Covestro has an enforceable right to payment for performance completed to date, sales are recognized on the basis of progress towards complete satisfaction of the performance obligation. As a rule, control over an individual customer-specific product is considered to be transferred when the generally short production process is completed successfully and the product has been tested to confirm that the agreed-upon specifications have been met.

To the extent that, for certain types of performance obligations that are satisfied over time, there is a right to consideration in an amount that corresponds directly with the value of the performance provided by Covestro to date, revenue will normally be realized in the amount to which Covestro has a right to invoice.

Invoices are usually payable in 0 to 90 days. Contracts may contain early payment discounts or rebates. Rebates are generally retroactively granted based on the sales or volume of a period customarily spanning up to 12 months. Some contracts include pricing formulas used to determine the billable price at the time of delivery. Moreover, the final prices for certain contracts with customers are not yet fixed at the time of transfer of control. Instead, provisional prices are billed initially.

Sales are recognized in the amount of the transaction price that Covestro is expected to receive. Sales do not include amounts collected on behalf of third parties (e.g., sales tax). Where consideration includes a variable component, for example due to the contractual clauses described, this component of the consideration is estimated either based on the expected value method or the most likely amount. The method producing the best estimate is used in this case. However, variable consideration is only taken into account to the extent it is not constrained as defined by IFRS 15 (Revenue from Contracts with Customers). Variable consideration is not constrained if it is highly probable that a significant reversal in the amount of sales will not occur when the corresponding uncertainty is subsequently resolved. The transaction price of a contract is allocated to the performance obligations therein using the relative stand-alone selling prices, which generally correspond to the agreed upon prices. If the conditions are met, variable amounts are completely allocated to individual performance obligations.

Refund liabilities result particularly from rebates granted and total the amount of the rebate expected to be refunded, which is calculated based on the methods described. The rebate deemed to be due is reported in other liabilities under refund liabilities until payment.

As a rule, no warranties are issued beyond normal warranties that products will fulfill the agreed-upon specifications.

In the case of contracts with customers, Covestro generally does not expect more than one year to pass between the transfer of a product to a customer and the payment thereof. As a result, the agreed consideration is not adjusted for significant financing components. When incremental costs of obtaining a contract arise, these are immediately recognized as expenses, if the potential amortization period is one year or less.

Government Grants

Government grants are recognized if there is sufficient certainty that the benefits will be granted and the related conditions are met. Asset-related grants from third parties, such as investment grants, are reported under other receivables and liabilities and are recognized in profit or loss in accordance with the asset's useful life. Depending on the circumstances, income-related grants are either offset against expenses or are recognized under other operating result. If realized in the income statement before the payment is received or if it is dependent on specific conditions, these are recognized as other receivables or other liabilities. Emission rights granted free of payment by government authorities are recognized in the statement of financial position at zero euros or at a reminder value. Emission rights acquired on the market in return for payment are capitalized at cost of acquisition and, if the fair value is lower than the acquisition cost, are impaired. Emissions caused generally result in return obligations which have to be recognized.

Research and Development Expenses

Research and development expenses are incurred in the Covestro Group for in-house research and development activities as well as research and development collaborations and alliances with third parties.

According to IFRSs, research costs cannot be capitalized. Development costs, on the other hand, must be capitalized according to closely defined conditions. An intangible asset must be recognized if there is reasonable certainty of receiving future cash flows that will cover an asset's carrying amount. Covestro's development projects are often subject to uncertainties, so the conditions for the capitalization of development costs are normally not satisfied. Each project or contract is reviewed to determine potential capitalization requirements. The recognition, measurement, and presentation rules for other intangible assets apply where development costs are capitalized.

Income Taxes

Income taxes comprise the taxes levied on taxable income in the individual countries along with changes in deferred tax assets and liabilities that are recognized in profit or loss. The income taxes recognized are reflected at the amounts likely to be payable or reimbursable under the statutory regulations in force, or already enacted in relation to future periods, at the end of the reporting period.

As a rule, deferred taxes are recognized in profit or loss. However, if deferred taxes relate to items recognized outside profit or loss in equity, they, too, are recognized directly in equity.

The probability that deferred tax assets resulting from temporary differences, tax credits or loss carryforwards can be utilized in the future is the subject of forecasts by the individual companies regarding the future earnings situation in the respective Covestro companies and other parameters.

Deferred tax liabilities are recognized on planned dividend payments by subsidiaries. Where no dividend payment or disposal of corresponding equity investments is planned for the foreseeable future, no deferred tax liability is recognized on the difference between the proportionate equity according to IFRSs and the tax base of the carrying amount of the investment in the subsidiary (outside basis differences).

The expected effects of uncertain deferred and actual income tax positions are estimated in accordance with IFRIC 23 (Uncertainty over Income Tax Treatments) either based on the expected value method or the most likely amount. The method producing the best estimate is used in this case. Tax audits in which the relevant tax authority could take a view differing from Covestro's legal position are by far the most important sources of estimation uncertainties for uncertain tax positions. Uncertain tax positions are accounted for under the assumption that the tax authorities will investigate all relevant matters and have all relevant information at their disposal.

Acquisition Accounting and Goodwill

Businesses acquired are accounted for pursuant to IFRS 3 (Business Combinations) using the acquisition method, which requires that all identifiable assets acquired and all (contingent) liabilities assumed be recognized and measured at their respective fair values on the date control is obtained. Ancillary acquisition costs are recognized as expenses in the periods in which they occur. If the purchase price or the consideration transferred exceeds the value of the equity acquired, goodwill is recognized. If the value of the equity acquired exceeds the purchase price or the consideration transferred by the acquirer, the difference is recognized in profit or loss after an additional review. Goodwill is not amortized. Its carrying amount is subjected to impairment testing annually or more often if there is any indication of possible impairment. Detailed explanations of impairment testing can be found under "Impairment Testing" in this note. Once an impairment loss has been recognized on goodwill, it generally cannot be reversed in subsequent periods. In the event of a restructuring, e.g., the reorganization of financial reporting processes, or external portfolio divestments, any associated goodwill is reallocated or is only proportionately reduced (IAS 36.86 et seq.).

The Covestro Group recognizes the components of noncontrolling interests in the acquiree either at fair value or at the noncontrolling interest's proportionate share of the acquiree's identified net assets. The Covestro Group exercises this option separately for each business combination in accordance with the standard.

Other Intangible Assets (Excluding Goodwill)

Other intangible assets are identifiable nonmonetary assets without physical substance, other than goodwill (such as software, rights, or capitalized development costs). Other intangible assets, such as individually acquired patents and technologies, are recognized at the cost of acquisition or production. Patents and technologies, licenses, and customer contracts acquired as part of a business combination are recognized at fair value as of the acquisition date and are amortized using the straight-line method if their useful life can be determined. The following useful lives are applied, except where the actual depletion demands a different amortization pattern:

Useful life of other intangible assets

Patents and technologies	3 to 20 years
Production rights, trademarks and licenses	10 to 20 years
Customer relationships and distribution rights	7 to 20 years
Software	3 to 4 years
Other rights and assets	max. 20 years

Determination of the expected useful lives of other intangible assets is based in particular on estimates of the period for which they will generate cash flows.

Other intangible assets with an indefinite useful life and other intangible assets recognized, but not yet available for use, with a specified useful life are regularly tested for impairment, like goodwill.

Property, Plant and Equipment

Property, plant and equipment are carried at the cost of acquisition or construction and depreciated using the straight-line method over the expected useful life. If necessary, the carrying amount is reduced by impairment losses or increased by impairment loss reversals. Right-of-use assets recognized in accordance with IFRS 16 (Leases) are also included in property, plant and equipment. The residual values and useful lives of assets are regularly reviewed and adjusted for expected changes as necessary.

If the construction phase or manufacturing process of property, plant or equipment extends over a period of 12 months or more, the interest incurred on borrowed capital up to the date of completion is capitalized as part of the cost of acquisition or construction in accordance with IAS 23 (Borrowing Costs).

Costs for regular, comprehensive maintenance work (such as the major overhaul of a technical facility) are capitalized as a separate component if they satisfy special recognition criteria.

The following depreciation periods are generally applied throughout the Covestro Group:

Useful life of property, plant and equipment

Buildings	20 to 50 years
Infrastructure	10 to 20 years
Storage tanks and pipelines	10 to 20 years
Plant installations	6 to 20 years
Machinery and equipment	6 to 12 years
Furniture and fixtures	4 to 10 years
Vehicles	5 to 8 years
Computer equipment	3 to 5 years
Laboratory and research facilities	3 to 5 years

Significant asset components with different useful lives are accounted for and depreciated separately.

When assets are sold, closed down, or scrapped, the difference between the recoverable amount, which normally amounts to the fair value less costs of disposal, and the net carrying amount of the assets is recognized as a gain or loss in other operating income or expenses, respectively.

Leases

A lease exists when the lessor grants the lessee the contractual right to control an identified asset for a specified period of time and in return the lessor receives consideration from the lessee.

When Covestro is the lessee in a lease, as a rule a right-of-use asset and a corresponding liability (lease liability) are recognized in the statement of financial position on the date the underlying asset is made available for use to Covestro.

The right-of-use asset represents a lessee's right to use the asset being leased in return for payment. Upon initial recognition, the right-of-use asset is generally capitalized at the amount of the corresponding lease liability plus any initial direct costs, any dismantling obligations, and lease payments made prior to the commencement date less any lease incentives received. For subsequent measurement, the right-of-use asset is depreciated over the lease term. Contract modifications, as long as these are not measured as separate leases, and reassessment of the lease liability are also reflected in the right-of-use asset. The right-of-use asset is included in the property, plant and equipment line item in the statement of financial position. Impairment testing and reporting of any impairment losses or impairment loss reversals are carried out for the right-of-use assets in the statement of financial position in accordance with the regulations applicable to property, plant and equipment.

The lease liability represents the company's obligation to make contractual lease payments and is measured as the present value of precisely these outstanding lease payments. While IFRS 16 (Leases) requires use of the interest rate implicit in the lease in order to calculate the present value, it is frequently not possible to ascertain this interest rate. Accordingly, the incremental borrowing rate is generally applied in discounting the lease payments. This rate depends on the term, currency, and start date of the lease. If the outstanding lease payments include fixed payments or variable lease payments that depend on an index or an interest rate, these are taken into consideration in the lease liabilities. Variable lease payments that depend on an index or an interest rate are measured at the underlying index or interest rate as soon as this is to be applied. If, as an exception, there are residual value guarantees, purchase options, or penalty fees, these are to be recognized accordingly in the lease liability to the extent that they are anticipated. At Covestro, lease agreements usually include fixed contractual terms. Additionally, options to extend and terminate the lease exist particularly for the rental of production and logistics infrastructure and of real estate. In order to assess whether options to extend or terminate the lease are reflected in the lease term, all relevant facts are examined to determine the existence of economic incentives to exercise or not to exercise these options. The lease term is only adjusted to reflect changes in the expectations regarding whether or not such options will be exercised if there is reasonable certainty. The effective interest method is used for the subsequent measurement of lease liabilities. Using this method, periodic lease payments with an effect on cash flows are divided into an interest portion that is recognized in profit or loss and a repayment portion not affecting profit or loss. Lease liabilities are reported under financial liabilities and classified as current or noncurrent according to their maturity.

Overall, effects on income from leases to be recognized in accordance with IFRS 16 comprise depreciation of the right-of-use asset and any impairment losses on the right-of-use asset (operating result), from discounting and subsequent measurement of the lease liability (financial result) and in cases in which a lease agreement is modified. Such lease modifications can result, for instance, from options to terminate or extend a lease which were previously not explicitly stipulated in the contract. Contractual lease payments for leases accounted for in accordance with IFRS 16 are shown solely under cash flows from financing activities.

IFRS 16 provides exemptions for applying the recognition and measurement rules for leases with a term of less than 12 months or those with a low-value underlying asset. Leases are not recognized as a depreciable right-of-use asset on the statement of financial position or as a lease liability at Covestro for the exceptions referenced above. Corresponding contractual payments are instead shown in cash flows from operating activities and the same amount is recognized as an expense in the operating result. Moreover, the rules in IFRS 16 are not applied to leases on intangible assets.

For leases in which Covestro is the lessor, a differentiation is made between finance leases and operating leases in accordance with IFRS 16. Leases that transfer substantially all the risks and rewards incidental to ownership of the leased asset to the lessee are treated as finance leases. At the commencement date, Covestro recognizes a lease receivable in the statement of financial position in the amount of the net investment in the lease and derecognizes the underlying asset from noncurrent assets. In an operating lease, the underlying asset continues to be shown under Covestro's property, plant and equipment and depreciated over its useful life. Lease payments received are recognized as income.

Investment Property

Investment property is measured at cost unless a lower carrying amount is required. The fair values of investment property to be determined for disclosure purposes are mainly based on internally prepared valuations. In the case of buildings and developed land, this is carried out using a method known as the German income approach, and in the case of undeveloped land, using the sales comparison approach.

Inventories

Inventories are recognized at their cost of acquisition or production (production-related full cost) – calculated by the weighted-average method – or at their net realizable value, whichever is lower. The net realizable value is the estimated selling price in the ordinary course of business less estimated cost to complete and selling expenses. Impairment losses on inventories are recognized if their net realizable value on the reporting date is lower than the value calculated using the weighted-average method. Impairment losses are reversed if the net recoverable amount subsequently exceeds the carrying amount.

Financial Instruments

Contracts are recognized as financial instruments in the financial statements which simultaneously give rise to a financial asset at one entity while resulting in a financial liability or equity instrument at another entity. Accordingly, financial assets are recognized in the consolidated statement of financial position if the Covestro Group has a contractual right to receive cash or other financial assets from another entity. Regular-way purchases and sales of financial assets are generally recognized on the settlement date. Financial liabilities are initially recognized in the consolidated statement of financial position if Covestro has a contractual obligation to transfer cash or other financial assets to another entity. With the exception of trade accounts receivable, financial instruments are measured at fair value plus directly attributable transaction costs upon initial recognition. For financial instruments measured at fair value through profit or loss, transaction costs are recognized directly in the income statement. Trade accounts receivable are recognized at their transaction price. Subsequent measurement of financial instruments is based on their classification in the categories stipulated by IFRS 9 (Financial Instruments).

Financial Assets

Financial assets comprise loans, acquired equity and debt instruments, cash and cash equivalents, other financial assets, and derivatives with positive fair values. The classification and measurement of financial assets is based on the business model pursued by the Covestro Group with regard to the management of its financial assets for the purpose of collecting cash flows, and on the characteristics of the contractual cash flows from the relevant financial assets (cash flow condition). Subsequent measurement takes place according to the measurement rules for the respective category, as described below.

Financial assets carried at amortized cost comprise nonderivative financial assets that are held as part of a business model that aims to collect contractual cash flows and that additionally fulfill the cash flow condition, i.e., the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. This category comprises trade accounts receivable, the loans included in other financial assets, the additional financial receivables reflected in other receivables, and cash and cash equivalents. Interest income from financial assets assigned to this category is determined using the effective interest method.

Financial assets carried at fair value through other comprehensive income encompass debt instruments held as part of a business model that aims to obtain cash flows from the instrument both by collecting contractual payments as well as through the sale thereof, and that additionally fulfill the cash flow condition. Acquired bonds may be classified in this category to the extent that they are intended to be sold before they mature. Interest income, foreign currency gains and losses, and impairment losses or impairment loss reversals are recognized in the income statement for financial assets in this category. The remaining changes in fair value are recognized in other comprehensive income. Upon derecognition, the cumulative net gains or losses included in other comprehensive income are reclassified to the income statement.

The Covestro Group exercises the option of recognizing changes in the fair value of equity instruments that are not held for trading in other comprehensive income. In contrast to the treatment of debt instruments, the gains and losses recognized in other comprehensive income are not reclassified to the income statement upon derecognition, and no impairment losses or impairment loss reversals are recognized in profit or loss.

Financial assets carried at fair value through profit or loss are all financial assets not assigned to any of the above categories and particularly include derivatives with positive fair values. The Covestro Group does not currently opt to measure financial assets at fair value, e.g., for the purpose of avoiding or minimizing accounting mismatches.

Financial assets are derecognized when contractual rights to receive cash flows from the financial assets expire or the financial assets are transferred together with all significant risks and rewards.

Cash and Cash Equivalents

Cash and cash equivalents comprise cash, checks received, and balances with banks. Cash equivalents are highly liquid short-term financial investments that are subject to an insignificant risk of changes in value, are easily convertible into a known amount of cash, and have a maturity of three months or less from the date of acquisition or investment.

Cash Flows

The statement of cash flows shows how the Covestro Group's cash and cash equivalents changed in the reporting year. In accordance with IAS 7 (Statement of Cash Flows), cash flows are broken down into cash flows from operating activities, cash flows from investing activities, and cash flows from financing activities.

The reported cash flows of foreign Covestro companies whose functional currency is not the euro are translated at average exchange rates, while cash and cash equivalents are recognized at the closing rate. This effect due to exchange rate movements is recognized in the separate line "Change in cash and cash equivalents due to exchange rate movements."

When determining the cash flows from financing activities, Covestro exercises the option of recognizing dividend payments and profit withdrawals in cash flows from financing activities.

Cash flows from interest and dividends received are presented under cash flows from investing activities in the separate line "Interest and dividends received."

Trade Accounts Payable

Trade accounts payable comprise current liabilities arising from the supply of goods and services, i.e., from the receipt of goods or services. These are based on agreements with the supplier, are invoiced and, in total, are part of working capital within Covestro's normal business cycle.

Derivatives

Derivatives – such as forward exchange contracts – are used to mitigate the risk of fluctuations in exchange rates. Derivatives are recognized at the trade date.

Contracts concluded in order to receive or deliver nonfinancial goods for the company's own purposes are not accounted for as derivatives but treated as pending transactions in accordance with IAS 37 (Provisions, Contingent Liabilities and Contingent Assets). Where embedded derivatives are identified that are required to be separated from the pending transactions, they are accounted for separately. To cover possible peak demand, a nonmaterial volume of transactions may be entered into for which the possibility of immediate resale cannot be excluded. Such transactions are allocated to separate portfolios upon acquisition and accounted for as or like derivatives according to IFRS 9 (Financial Instruments).

Reportable derivatives are carried at fair value. This applies to what are known as stand-alone derivatives as well as derivatives embedded in certain types of contracts and therefore required to be accounted for separately from their host contracts. Positive fair values at the end of the reporting period are reflected in financial assets, negative fair values in financial liabilities. Changes in the fair values of these derivatives are recognized directly in profit or loss in other operating result. Changes in the fair values of forward exchange contracts and currency options serving as hedging instruments for items in the statement of financial position are divided into an interest and a currency component. The interest component is recognized in interest expense or income and the currency component is recognized as exchange gains or losses in the other financial result. Changes in the fair value of forward exchange contracts used to hedge forecasted transactions in foreign currencies are recognized in other operating result.

Covestro does not apply hedge accounting within the meaning of IFRS 9.

Financial Liabilities

Financial liabilities generally comprise primary financial liabilities and negative fair values of derivatives.

In subsequent periods, such nonderivative liabilities are measured at amortized cost using the effective interest method. The Covestro Group does not opt to measure financial liabilities at fair value, e.g., to avoid or minimize accounting mismatches.

Financial liabilities are derecognized when the contractual obligation is discharged or canceled, or has expired.

Netting Financial Instruments

Financial assets and financial liabilities in the context of master netting or similar agreements are netted and the net amount is recognized in the consolidated statement of financial position if the Covestro Group has a present legal entitlement to offset the recognized amounts against one another and there is the intention to balance them on a net basis or at the same time to settle the corresponding liability with realization of the asset.

Provisions for Pensions and Other Post-Employment Benefits

Within the Covestro Group, post-employment benefits are provided under defined contribution and defined benefit plans. In the case of defined contribution plans, the company pays contributions to publicly or privately administered pension plans on a mandatory, contractual, or voluntary basis. Once the contributions have been paid, the company has no further payment obligations. The regular contributions constitute expenses for the year in which they are due. As such, they are included in the functional cost items, and thus in EBIT. All other post-employment benefit systems are defined benefit plans, which may be either unfunded, i.e., financed by provisions, or funded, i.e., financed through pension funds.

The present value of the defined benefit obligations and the resulting expense are calculated in accordance with IAS 19 (Employee Benefits) using the projected unit credit method. The future benefit obligations are valued by actuarial methods and spread over the entire employment period on the basis of specific assumptions regarding beneficiary structure and the economic environment. These relate mainly to the discount rate, future salary and pension increases, variations in health care costs, and mortality rates.

The discount rates used are calculated from the yields of high-quality corporate bond portfolios in specific currencies with cash flows approximately equivalent to the expected disbursements from the pension plans. The uniform discount rate derived from this interest rate structure is thus based on the yields, on the closing date, of a portfolio of corporate bonds with at least an AA or AAA rating whose weighted residual maturities approximately correspond to the duration necessary to cover the entire benefit obligation.

The fair value of plan assets is deducted from the present value of the defined benefit obligation for pensions and other post-employment benefits to determine the net defined benefit liability. Plan assets in excess of the benefit obligation are reflected in other receivables, subject to the asset ceiling specified in IAS 19. Comprehensive actuarial valuations for all major plans are performed annually as of December 31.

The balance of all income and expenses relating to defined benefit plans, except the net interest on the net liability, is recognized in EBIT. The net interest is reflected in the financial result.

The effects of remeasurements of the net defined benefit liability are reflected in other comprehensive income. They consist of actuarial gains and losses, the return on plan assets, and changes in the effects of the asset ceiling, less the respective amounts included in net interest for the last two components. Deferred taxes relating to the effects of remeasurements are also recognized in other comprehensive income.

Other Provisions

Other provisions are measured in accordance with IAS 37 (Provisions, Contingent Liabilities and Contingent Assets) or, where applicable, IAS 19 (Employee Benefits). Where the cash outflow to settle an obligation is expected to occur after one year, the provision is recognized at the present value of the expected cash outflow. Claims for reimbursements from third parties are separately recognized in other receivables if their realization is virtually certain.

If the projected obligation declines as a result of a change in the estimate, the provision is reversed by the corresponding amount and the resulting income generally recognized in the functional cost item(s) in which the original charge was recognized.

To enhance the information content of the estimates, certain provisions that could have a material effect on the net assets, financial position, and results of operations are selected and tested for their sensitivity to changes in the underlying parameters using sensitivity analysis. To reflect uncertainty about the likelihood of the assumed events actually occurring, the impact of a five-percentage-point change in the probability of occurrence is examined in each case.

Provisions for environmental protection are recognized if future cash outflows are likely to be necessary to ensure compliance with environmental regulations or to carry out remediation work based on an obligation, such costs can be reliably estimated, and no future benefits are expected from such measures.

Estimating the future costs of environmental protection and remediation involves many uncertainties, particularly with regard to the status of laws, regulations, and the information available about conditions in the various countries and at the individual sites. Significant factors in estimating the costs include previous experiences in similar cases, the conclusions in expert opinions obtained for existing environmental programs, current costs, and new developments affecting these costs. Also taken into consideration are management's interpretation of current environmental laws and regulations, the number and financial position of third parties that may become obligated to participate in any remediation costs on the basis of joint liability, and the remediation methods likely to be deployed. Changes in these assumptions could impact future reported results.

Taking into consideration experience gained to date regarding environmental matters of a similar nature, Covestro's management believes the existing provisions to be adequate based upon currently available information. Given the business environment in which the Covestro Group operates and the inherent difficulties in accurately estimating environmental liabilities, material additional costs beyond the amounts accrued may be incurred under certain circumstances. It may transpire during remediation work that additional expenditures are necessary over an extended period and that these exceed existing provisions and cannot be reasonably estimated.

Provisions for restructuring are based either on a legal or a constructive external obligation. They only cover expenses that arise directly from restructuring measures, are necessary for restructuring, and are not related to future business operations. Such expenses include severance payments to employees and compensation payments in respect of rented property that can no longer be used. Prior to recognition of this type of provision, the associated assets are tested for impairment.

Restructuring measures may include the sale or termination of business units, site closures, relocations of business activities, leveraging of portfolio synergies, or fundamental reorganizations of business units. The respective provisions are recognized when a detailed restructuring plan has been drawn up, resolved by the responsible decision-making level of management, and communicated to the affected employees and/or their representatives. Provisions for restructuring are generally recognized at the present value of future cash outflows.

As a company with international operations, the Covestro Group is exposed to numerous legal risks for which provisions for litigation must be recognized under certain conditions – especially in the areas of product liability, competition and antitrust law, patent disputes, tax law, environmental law, and compliance issues such as corruption and export control.

Litigation and other judicial proceedings often raise complex issues and are subject to many uncertainties and complexities including, but not limited to, the facts and circumstances of each particular case, the jurisdiction in which each suit is brought, and differences in applicable law. The outcomes of currently pending and future proceedings generally cannot be predicted. Judgment in court proceedings, regulatory decisions, or the conclusion of a settlement may result in the Covestro Group incurring charges for which no accounting measures have been taken for lack of reasonable estimate or which exceed established provisions and insurance coverage.

The Covestro Group considers the need for accounting measures in respect of pending or future litigations, and the extent of any such measures, on the basis of the information available to its Law, Intellectual Property & Compliance corporate function and in close consultation with legal counsel acting for the Covestro Group.

Where it is more likely than not that such litigation will result in an outflow of resources that is already reasonably estimable, a provision for litigation is normally recognized in the amount of the present value of the expected cash outflows. Such provisions cover the estimated unavoidable payments to the plaintiffs, court and procedural costs, attorney costs, and the cost of potential settlements.

It is often impossible to reliably determine the existence of a present obligation or reasonably estimate the probability that a potential outflow of resources will result from pending or future litigation. Due to the special nature of these litigation, provisions are generally not established until initial settlements allow an estimate of potential amounts or judgments have been issued, and not before at least a range of possible legal outcomes of such litigations can be determined. Provisions for legal defense costs are recognized if it is probable that material costs will have to be incurred for external legal counsel to defend the company's legal position and an outflow of resources can generally be expected.

Internal and external legal counsels evaluate the current status of the material legal risks to the Covestro Group at the end of each reporting period. The need to recognized or adjust a provision and the amount of the provision or adjustment are determined on this basis. Adjusting events are reflected up to the date of preparation of the consolidated financial statements.

→ See note 26 "Legal Risks."

Personnel-related provisions are mainly those recorded for variable one-time payments, individual performance awards, long-service awards, severance payments in connection with early retirement arrangements, surpluses on long-term accounts, and other personnel costs. Since January 1, 2022, calculation of the provision for short-term variable compensation ("Covestro Profit Sharing Plan", "Covestro PSP") has been based not only on the achievement of financial performance indicators such as Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA), Free Operating Cash Flow (FOCF), and Return on Capital Employed (ROCE) above Weighted Average Cost of Capital (WACC), but also on a sustainability component measured on the basis of selected environmental, social, and governance (ESG) criteria. In fiscal 2022, measurement was based on selected environmental criteria.

Obligations under share-based compensation programs that provide for awards payable in cash are also included in personnel-related provisions ("Prisma"). The compensation of the Board of Management of Covestro AG and of managerial employees includes cash compensation based on the share price that are earned with lock-up periods and are reflected in profit or loss as personnel expenses in line with the consideration paid in the performance period. They are measured using a subscription price model at the time of granting and at each reporting date in accordance with IFRS 2 (Share-based Payment). In 2021, Prisma was expanded to include a sustainability component that covers Covestro's target for reducing greenhouse gas emissions (CO₂ equivalents, CO₂e).

Miscellaneous provisions include those for other liabilities, for product liability, for warranty, and insurance payments. Rebates to be granted to customers, on the other hand are reported under refund liabilities.

Other Receivables and Liabilities

Other receivables are measured at fair value plus the transaction costs directly attributable to the acquisition of the asset.

Pending Transactions

Pending transactions relating to contributions in kind ("executory contracts"), i.e., agreements in relation to which (to a degree) neither the service nor the consideration has been rendered, are not recognized in the statement of financial position on the reporting date if there is no risk of a loss on the reporting date. If there is the risk of a loss, this is generally anticipated in the form of provisions if all the other requirements are met. In contrast, gains anticipated from such agreements on the reporting date may not be recognized in the statement of financial position. Examples of executory procurement contracts include contracts regarding the procurement of energy for the operation of production facilities, which also includes what are known as power purchase agreements (PPA) for the procurement of power from renewable energy. In comparison, pending transactions in the area of the application of the rules regarding financial instruments (financial derivatives) are to be recognized on the reporting date in the amount of the negative fair value if a loss is expected and in the amount of the positive fair value if a gain is expected.

Impairment Testing

If there are indications that an individual intangible asset that does not constitute goodwill (other intangible asset) or property, plant and equipment may be impaired, the recoverable amount is compared to the carrying amount to determine whether it is higher or lower. The recoverable amount is generally the higher of the value in use or the fair value less costs of disposal. If the recoverable amount does not exceed the respective carrying amount, an impairment loss is recognized in profit or loss in the amount of the difference between the carrying amount and the recoverable amount. If the reasons for a previously recognized impairment loss no longer apply, the impairment loss is reversed in profit or loss provided that the reversal does not cause the carrying amount to exceed the original (amortized) cost of acquisition or production. Impairment losses and any impairment loss reversals are recognized in the functional cost in the same way as depreciation and amortization, depending on the use of the respective assets.

In addition to impairment testing of individual items of property, plant and equipment and other intangible assets, cash-generating units are globally tested if there is indication of impairment. Recognized goodwill is tested for impairment if there is indication of impairment, but at least once a year. Testing is generally done in the fourth quarter at the level of (groups of) cash-generating units.

A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. As a rule, Covestro considers strategic business entities to be cash-generating units. They represent the reporting level below the seven business entities that form the two reportable segments, Performance Materials and Solutions & Specialties. In cases where recognized goodwill in groups of cash-generating units is tested for impairment annually, the level tested is the relevant business entity.

If recognizing an impairment loss is required at the level of a CGU or group of CGUs, goodwill is written down first. In cases where the necessary impairment loss exceeds the goodwill written down, the remaining charge is distributed across other noncurrent, nonfinancial assets in proportion to their carrying amount. The impairment loss on goodwill is reported in other operating expenses. Impairment losses on goodwill may not be reversed.

The recoverable amount of a CGU or group of CGUs is equal to the fair value less costs of disposal. This calculation is based on the present value of the future cash flows since no market price can be determined for the individual units. The forecasts of future cash flows for determining the recoverable amount are based on the Covestro Group's current planning, which generally extends over 10 years, although a shorter detailed planning period of generally five years is used for assessment purposes. In certain cases, shorter or longer planning horizons are also considered if advisable due to specific assumptions underlying the planning. Assumptions made for purposes of forecasting cash flows mainly concern future selling prices and volumes, costs, market growth rates, economic cycles, and exchange rates. Changes in these assumptions are based on the Group's own estimates and external sources of information. Where the recoverable amount is the fair value less costs of disposal, this is measured from the viewpoint of an independent market participant. Cash flows beyond the detailed planning period are determined on the basis of the respective individual growth rates derived from market information and the associated long-term business expectations. The measurement of fair value less costs of disposal is based on unobservable inputs ("Level 3" of the fair value hierarchy).

The net cash inflows are discounted at the weighted average cost of capital (WACC), which is calculated as the weighted average cost of equity and cost of debt. To take into account the risk and return profile of the Covestro Group, an after-tax cost of capital is calculated, and a specific capital structure is defined via benchmarking against comparable companies in the same industry sector ("peer group"). The cost of equity corresponds to the return expected by shareholders, while the cost of debt is based on the terms at which the peer group can obtain long-term financing. In principle, both components are derived from capital market information.

The monitoring and management structure for recognized goodwill and the capital cost factors and growth rates used in annual impairment testing are presented in the following table for each CGU or group of CGUs. The growth assumptions reflect, in particular, economic cycles over several years as well as expectations for capacity and the market for each unit to be tested.

Steering- and monitoring level of goodwill and important valuation parameters for the central impairment test in the 4th quarter

Impairment testing level or goodwill carrying unit	Reporting level ¹	Segment	Goodwill in million €		Cost of capital in %		Terminal value
			2021	2022	2021	2022	growth rate in %
Standard Diphenylmethan-Diisocyanat (SMDI)	Strategic Business Area	Performance Materials	49	51	6.6	7.9	1.5
Standard Toluylen-Diisocyanate (STDI)	Strategic Business Area	Performance Materials	-	-	6.6	7.9	1.5
Standard Polyether-Polyols (SPET)	Strategic Business Area	Performance Materials	15	-	6.6	7.9	1.0
Standard Polycarbonate (SPCS)	Strategic Business Area	Performance Materials	43	43	6.6	7.9	1.0
Engineering Plastics (EP)	Strategic Business Area	Solutions & Specialties	78	79	6.6	7.9	1.5
Tailored Urethanes (TUR)	Business Entity	Solutions & Specialties	17	-	6.6	7.9	1.1
Tailored Diphenylmethan-Diisocyanat (TMDI)	Strategic Business Area	Solutions & Specialties	-	-	6.6	7.9	1.1
Tailored Polyether-Polyols (TPET)	Strategic Business Area	Solutions & Specialties	-	-	6.6	7.9	1.1
Coatings & Adhesives (CA)	Business Entity	Solutions & Specialties	534	535	6.8	8.0	1.5
Powder Coating Resins (PCR)	Strategic Business Area	Solutions & Specialties	-	-	6.8	8.0	2.0
Thermoplastic Polyurethanes (TPU)	Strategic Business Area	Solutions & Specialties	16	16	6.6	7.9	1.5
Other	Strategic Business Area	Solutions & Specialties	5	5	6.6	7.9	0.0–1.8

¹ The business entity level is used for impairment testing of recognized goodwill if this is performed at the level of groups of cash-generating units. At the level of the strategic business area as a cash-generating unit, the central impairment test is performed on property, plant and equipment and other intangible assets, as well as any directly allocated goodwill.

In fiscal 2022, Russia's war against Ukraine launched in February led to considerable negative changes in Covestro's economic environment. In particular, the massive increase in energy prices, which can only be passed on to the customers to a limited degree in 2022, and anticipated weak demand as a consequence of the global economic slowdown resulted in a deterioration in the Group's business prospects compared with the previous year. In view of this, the fact that Covestro's market capitalization had already fallen below the Group's equity in the second quarter of 2022, and, furthermore, that there was a significant increase in borrowing costs in 2022, all the cash-generating units were subjected to impairment testing if it could not be ruled out on the basis of previous calculations and the Group's current unit-specific planning that the recoverable amount would fall below the carrying amount of the relevant unit.

The impairment testing performed centrally in the fourth quarter of 2022 determined that the recoverable amount of the cash-generating units SPET and STDI in the Performance Materials segment and of TMDI, PCR, and the goodwill-carrying unit TUR in the Solutions & Specialties segment was a total of €451 million below the carrying amount. The carrying amount including the net working capital of these cash-generating units and the goodwill attributed to TUR totaled €2,512 million (STDI: €1,125 million, SPET: €967 million) on the reporting date. After impairment losses of €18 million were already recognized for the SPET unit as early as at the half-year point in 2022 as the result of ad hoc centralized impairment testing, a further €418 million in impairment losses was consequently recognized in the fourth quarter as a result of the central impairment testing. These expenses were reported under production costs (€355 million), selling expenses (€46 million), and other operating expenses (€17 million). In the case of TMDI, the carrying amount exceeds the recoverable amount by €40 million, with an analysis of the carrying amount structure and the related recoverability of the individual assets showing that higher individual valuations could be assumed in each case.

The table below provides an overview of the impairments recorded per area and of the impaired balance sheet item:

Overview of the results of the central impairment testing activities of 4th quarter 2022

Impairment testing level	Impairment in million €	Goodwill	Other Intangibles, especially marketing & distribution rights	Plant installations and machinery	Land and buildings
Standard Toluylen-Diisocyanate (STDI)	99	-	-	45	54
Standard Polyether-Polyole (SPET)	249	-	-	236	13
Tailored Urethanes (TUR)	17	17	-	-	-
Tailored Diphenylmethan-Diisocyanat (TMDI)	7	-	-	6	1
Powder Coating Resins (PCR)	46	-	46	-	-

Taking into account the impairment of individual property, plant and equipment and other intangible assets, impairment losses in fiscal 2022 totaled €463 million (previous year: €5 million). Of this sum, €387 million was attributable to the Performance Materials segment and €76 million to the Solutions & Specialties segment. Impairment loss reversals on property, plant and equipment and intangible assets amounted to €1 million (previous year: €3 million).

→ See note 13 „Goodwill and Other Intangible Assets” and note 14 “Property, Plant and Equipment.”

The impairment losses can be attributed, in particular, to the negative changes in the economic environment, which directly and indirectly negatively affected various measurement parameters. On the one hand, when forecasting future cash flows, the negative macroeconomic developments were taken into account in the Group’s planning on which the valuation model is based, while on the other, the considerable increases in the price of raw materials and energy resulted in generally higher capital commitment, with the cost of capital as such increasing due to the rise in interest rates. As a consequence of the changed economic parameters, declining sales volume coupled with falling gross product margins was taken into account at short notice for the impaired cash-generating units of the Performance Materials segment. In the case of the TMDI cash-generating unit/the TUR goodwill-carrying unit, the anticipated sales volumes were likewise significantly reduced compared with the previous year’s planning, while it was assumed at short notice that these would remain approximately at the current fiscal year’s level, which was estimated to be significantly below the prior-year level at the valuation date. An assumption was made that raw material and energy prices would normalize across all cash-generating units in the medium term and that the market would begin to recover, this going hand in hand with a normalization of the supply and demand situation in the subsequent years. Overall, average annual volume increases in the mid-single-digit percentage range were taken into account for these cash-generating units within the detail planning period in the valuation model. For SPET, this approximately equates to a return to the precrisis level of fiscal 2021. In the case of STDI, SPET, and TUR, it was assumed that EBITDA growth would be disproportionately high compared with volume growth through the end of the detailed planning period. The assumption was made that TMDI would undergo an approximately proportionate development.

The cash-generating unit PCR was acquired as part of the acquisition of the Resins & Functional Materials business from Koninklijke DSM N.V., Heerlen (Netherlands), in 2021. The impairment loss recognized for this CGU resulted primarily from reduced business expectations compared with the acquisition date. The unit’s carrying amount was marked by the capitalization of existing customer relationships at the time of acquisition, the valuations of which were largely based on business plans founded on more positive economic parameters at the time. The negative macroeconomic developments being taken into account in the unit’s current earnings planning resulted in the recoverable amount derived from this planning no longer covering the carrying amount, which was largely based on more positive business expectations. Average annual volume increases in the mid-single-digit percentage range and above-average EBITDA growth were taken into account for the detailed planning period.

The carrying amount of the CA business entity includes a considerable proportion of goodwill valued at €535 million. The annual impairment testing was based on a detailed planning period of three years, in which it was assumed that there would be volume increases in the mid- to high-single-digit percentage range and above-average EBITDA growth. A key planning assumption made was that the current economic crisis would be overcome by 2025. In view of the high degree of uncertainty regarding future business performance, alternative planning calculations were also taken into account in the review of CA's goodwill. On the one hand, it was assumed that the overall economy would recover more slowly, especially in EMLA, and that energy and raw material costs would rise, with corresponding effects on sales volumes, investment behavior, and profitability. On the other hand, a scenario was imagined in which the energy and raw material costs would normalize more quickly than generally expected and the current economic crisis would have less of a negative impact on sales volumes. In each scenario, there was an everlasting assumption of a level which was representative of CA based on the original business and earnings plans, representing the long-term business expectations of CA once the economic crisis has been overcome. The individual planning calculations were given probability weightings that reflect Covestro's best estimates at the time of valuation even though the situation remains characterized by a high degree of uncertainty. No impairment loss was recognized.

Overall, management believes the estimates of the useful lives of certain assets, assumptions concerning the macroeconomic environment and developments in the industries in which the Covestro Group operates, and estimates of the discounted future cash flows to be appropriate. Changes in the assumptions or circumstances could nevertheless necessitate corrections, leading to additional impairment losses or – except in the case of goodwill – to reversals of previously recognized impairment losses if developments are contrary to expectations. In a sensitivity analysis, the assumption was made that there would be a 10% reduction in the future free operating cash flow, a 10% increase in the WACC, or a one-percentage-point reduction in the long-term growth rate for all the cash-generating units or groups of cash-generating units to which goodwill is allocated. Based on these scenarios, there would be no need to recognize an impairment loss for any of the cash-generating units or groups of cash-generating units with the exception of the cash-generating units which saw impairment losses in fiscal 2022. The same applies on the measurement date to other deviations from the assumptions used in impairment testing that were deemed possible. Nevertheless, if the gradual normalization of the economic situation assumed for the determination of the recoverable amount of the individual cash-generating units, in particular the situation on the raw material and energy markets, as well as the imbalance of global supply and demand, materially affects the recoverability of the individual cash-generating units in the next fiscal year, this may lead to reversals of impairment losses. Following recognition of the impairment losses, the recoverable amounts of the SPET, STDI and PCR cash-generating units was the same as their respective carrying amounts as of the measurement date.

Fair Value

According to IFRS 13 (Fair Value Measurement), fair value is the price that would be received to sell an asset or paid to transfer a liability on the measurement date in an orderly transaction in what is known as the primary market or, if such is not available, in the most favorable market to which the Covestro Group has access at that time. In essence, the fair value of a liability reflects the risk of nonfulfillment.

If available, the Covestro Group calculates the fair value of a financial instrument based on quoted prices in an active market for this instrument. A market is regarded as active when transactions for the respective asset or liability take place with sufficient frequency and volume to provide regular pricing information on the reporting date.

If no quoted prices on an active market exist, measurement methods are used which maximize the use of relevant observable inputs and minimize the use of unobservable inputs. All factors taken into account by market participants in pricing such a transaction are incorporated into the relevant method of measurement.

Depending on the asset or liability category, specific information is provided about the principles for using or determining fair value. In the Covestro Group, this generally applies to items in the financial statements as well as disclosures in the notes.

Expected Credit Losses (ECL) Model

The Covestro Group calculates a risk provision for expected credit losses for the following items:

- Financial assets measured at amortized cost
- Debt instruments measured at fair value through other comprehensive income
- Financial guarantees and loan commitments
- Contract assets

For financial instruments without a significant increase in credit risk since initial recognition, the amount of the risk provision for expected credit losses equals the credit losses expected to occur within the next 12 months. For financial instruments with a significant increase in credit risk, a risk provision is calculated in the amount of the credit losses expected over their residual maturity.

Relevant data from within and outside the company that can be obtained with reasonable effort is considered when determining whether the credit risk has increased substantially since initial recognition. For instance, the financial data of counterparties or customers, ratings, the payment histories of counterparties or customers, and forward-looking information are all assessed. It is assumed that a significant increase in credit risk has occurred when the financial asset is more than 30 days past due.

A default event has occurred when the Covestro Group comes to the conclusion that the counterparty is highly unlikely to be able to meet its payment obligations in full.

In the case of trade accounts receivable and contract assets, the amount of the risk provision is equal to the credit losses expected over their remaining term.

On each reporting date, the Covestro Group determines whether financial assets measured at amortized cost or at fair value through other comprehensive income are credit impaired. Indicators of possible credit impairment of a financial asset include observable data regarding the following events:

- Significant financial difficulties of the issuer or borrower
- A breach of contract, such as default or delinquency
- Concessions that Covestro makes to the borrower for financial or legal reasons relating to the financial difficulties of the borrower that it would not otherwise make
- Impending bankruptcy or other impending reorganization proceedings on the part of the borrower
- The loss of an active market for this financial asset

The gross carrying amount of a financial asset is derecognized when the Covestro Group comes to the conclusion that the counterparty is no longer able to meet its payment obligations. Following derecognition, the Covestro Group assumes that it will no longer be able to recover any significant amounts.

Noncurrent Assets and Disposal Groups Held for Sale

Noncurrent assets and disposal groups classified as held for sale are carried at the lower of the carrying amount or fair value less the costs of disposal. The costs of disposal are the additional costs incurred directly attributable to the disposal of an asset or a disposal group with the exception of financing costs and income tax expense. Disposal groups also include liabilities which are classified as held for sale. The criteria for classifying an asset or a disposal group as held for sale are only fulfilled when the sale is highly probable and the asset or disposal group may be sold immediately in its current condition. The disposal must be possible, as expected, within one year from the date of classification as a completed sale. Assets to be discontinued do not constitute assets or disposal groups held for sale.

Property, plant and equipment and intangible assets classified as held for sale are not depreciated/amortized. Instead, they are recognized at fair value less the costs of disposal if this is lower than the carrying amount. After classification of an asset or disposal group as held for sale, its recoverability must be reviewed on an ongoing basis.

4. Segment and Regional Reporting

The Board of Management of Covestro AG, as the chief operating decision maker of the Covestro Group, allocates resources to the reportable segments and assesses their performance. The reportable segments are identified, and the disclosures selected, in line with the internal financial reporting system (management approach).

The segments pursue the following activities:

Performance Materials

The Performance Materials segment focuses on developing, producing, and reliably supplying high-performance materials such as standard polyurethanes and polycarbonates, as well as base chemicals. This includes diphenylmethane diisocyanate (MDI), toluene diisocyanate (TDI), long-chain polyols, and polycarbonate resins, among others. These materials are used in sectors such as the furniture and wood processing industry, the construction industry as well as the automotive and transportation industry, for example in roof structures, insulation for buildings and refrigerators, mattresses, and car seats, among other applications.

Solutions & Specialties

The Solutions & Specialties segment consolidates Covestro's solutions and specialties businesses, and combines chemical products with application technology services. A fast pace of innovation is a key success factor since customer requirements change quickly. Covestro's Solutions & Specialties business comprises a variety of polymer products including polycarbonates, precursors for coatings and adhesives, MDI specialties and polyols, thermoplastic polyurethanes, specialty films, and elastomers. They are used in sectors such as the automotive and transportation industry; the electrical, electronics, and household appliances industry; the construction industry; and the healthcare industry. These materials include composite resins for wind turbine rotor blades; precursors for coatings and adhesives, laptop cases, floodlights, and high-quality specialty films.

Business activities that cannot be allocated to any of the aforementioned segments, costs associated with central corporate functions, higher or lower expenses resulting from more or less favorable Covestro share performance as part of long-term variable compensation, and the difference between the imputed income tax payments of the reportable operating segments and the actual income taxes paid by the Covestro Group can be found in the segment reporting under "Others/ Consolidation." External sales are generated primarily from the sale of energy, site management services, and rentals and leasing.

As a general rule, the segment data is calculated in accordance with the International Financial Reporting Standards (IFRSs) listed in note 3 "Accounting Policies and Valuation Principles" with the following exceptions:

- Intersegment sales are generally based on arm's length transactions between the units that make up Covestro's segments. Market prices and, in exceptional cases, cost of goods sold serve as the settlement basis.
- Property, plant and equipment and intangible assets - except goodwill, including noncurrent assets used jointly by both segments - and the associated depreciation, amortization, and impairment losses are allocated according to a principle based on major use. Goodwill is allocated at the level of the business entities or strategic business entities. The strategic business entity level corresponds to the reporting level below the seven business entities, which form the two reportable segments Performance Materials and Solutions & Specialties.
- EBIT and EBITDA are not defined in the IFRSs. EBIT is equal to income after income taxes plus financial result and income taxes. EBITDA is EBIT plus amortization and impairment losses on intangible assets, and depreciation and impairment losses on property, plant and equipment, less impairment loss reversals.
- Free operating cash flow, which is not defined in the IFRSs either, equals cash flows from operating activities less cash outflows for additions to property, plant, equipment and intangible assets. The income taxes paid that make up part of cash flows from operating activities are not directly allocated to any of the company's units. For purposes of calculating cash flows from operating activities, the income taxes paid by a reportable segment are determined in fiscal 2021 by multiplying the effective tax rate (ETR) expected for the fiscal year by that segment's EBIT. This expected effective tax rate was 25% for 2021. Since 2022, an imputed tax rate of 25% has been used for the calculation.
- Trade working capital comprises inventories, trade accounts receivable, and contract assets, less trade accounts payable, contract liabilities, and refund liabilities.

EBIT, EBITDA, and free operating cash flow per segment include intersegment sales and, in each case, the effects of the aforementioned allocation of property, plant and equipment and intangible assets, including noncurrent assets used jointly by both segments, and the associated depreciation, amortization, impairment losses, and impairment loss reversals.

In line with internal reporting to the Board of Management since July 1, 2022, intersegment sales also include sales at cost of goods sold. However, this has no effect on the level of the earnings measures EBIT and EBITDA per segment.

The following tables show the segment reporting data:

Key data by segment

	Performance Materials	Solutions & Specialties	Others/ Consolidation	Covestro Group
	€ million	€ million	€ million	€ million
2022				
Sales (external)	9,095	8,558	315	17,968
Intersegment sales ¹	2,967	35	(3,002)	–
Sales (total)	12,062	8,593	(2,687)	17,968
EBITDA ²	951	825	(159)	1,617
EBIT ²	(28)	461	(166)	267
Free operating cash flow ^{3,4}	544	195	(601)	138
Cash outflows for additions to property, plant and equipment and intangible assets	547	277	8	832
Depreciation, amortization and impairment losses	(979)	(364)	(7)	(1,350)
of which impairment losses	(387)	(76)	–	(463)
of which impairment loss reversals	–	1	–	1
Research and development expenses	(85)	(273)	(3)	(361)
2021				
Sales (external)	8,142	7,554	207	15,903
Intersegment sales ¹	2,608	27	(2,635)	–
Sales (total)	10,750	7,581	(2,428)	15,903
EBITDA ²	2,572	751	(238)	3,085
EBIT ²	2,003	503	(244)	2,262
Free operating cash flow ³	1,387	145	(103)	1,429
Cash outflows for additions to property, plant and equipment and intangible assets	488	273	3	764
Depreciation, amortization and impairment losses	(569)	(248)	(6)	(823)
of which impairment losses	(3)	(2)	–	(5)
of which impairment loss reversals	3	–	–	3
Research and development expenses	(104)	(227)	(10)	(341)

¹ In line with the internal reporting to the Board of Management since July 1, 2022, the figures also include sales generated in the amount of the cost of sales. For the purposes of comparability, the segment data is presented on a standardized basis.

² EBITDA and EBIT include the effect of intersegment sales on earnings.

³ Since 2022, an assumed tax rate of 25% has been used to determine the income taxes paid by the reportable segments (previous year: expected effective tax rate).

⁴ The difference between the income tax payments by the reportable operating segments and the income taxes actually paid by the Covestro Group is taken into account under "Other/Consolidation" and amounted to -€429 million for the year 2022.

Trade working capital by segment

	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million
Performance Materials	1,392	1,135
Solutions & Specialties	1,560	1,592
Total of reportable segments	2,952	2,727
Others/Consolidation	–	(21)
Trade working capital	2,952	2,706
Inventories	2,914	2,814
Trade accounts receivable	2,343	2,011
Trade accounts payable	(2,214)	(2,016)
IFRS 15 items ¹	(91)	(103)

¹ The item includes contract assets, contract liabilities, and refund liabilities.

Information by Geographical Areas

The following table shows information by geographical area. The EMLA region consists of Europe, the Middle East, Africa and Latin America except Mexico, which together with the United States and Canada forms the NA region. The APAC region includes Asia and the Pacific region.

Regional reporting¹

	EMLA	NA	APAC	Total
	€ million	€ million	€ million	€ million
2022				
Sales (external) by market	7,600	4,639	5,729	17,968
Sales (external) by point of origin	7,603	4,696	5,669	17,968
2021				
Sales (external) by market	6,876	3,553	5,474	15,903
Sales (external) by point of origin	6,914	3,617	5,372	15,903

¹ No further presentation of interregional sales is provided, as these are neither reported separately to, nor do they influence the EBIT and EBITDA reported to the Board of Management of Covestro AG.

External sales by market and noncurrent assets can be broken down by country as follows:

Sales (external) by market and noncurrent assets by country

	Sales (external) by market	Noncurrent assets ¹
	€ million	€ million
2022		
Germany	2,216	2,068
United States	3,869	1,796
China	3,644	1,371
Other	8,239	2,193
Total	17,968	7,428
2021		
Germany	1,918	2,188
United States	2,962	1,714
China	3,544	1,536
Other	7,479	2,305
Total	15,903	7,743

¹ Noncurrent assets do not include other financial assets or deferred tax assets.

Information on Major Customers

In fiscal 2022 and the previous year, no customer accounted for more than 10% of the Covestro Group's total sales.

Reconciliation

The following table shows the reconciliation of EBITDA of the segments to income before income taxes of the Group:

Reconciliation of segments' EBITDA to group income before income taxes

	2021	2022
	€ million	€ million
EBITDA of reportable segments	3,323	1,776
EBITDA of Others/Consolidation	(238)	(159)
EBITDA	3,085	1,617
Depreciation, amortization, impairment losses and impairment loss reversals of reportable segments	(817)	(1,343)
Depreciation, amortization, impairment losses and impairment loss reversals of Others/Consolidation	(6)	(7)
Depreciation, amortization, impairment losses, and impairment loss reversals	(823)	(1,350)
EBIT of reportable segments	2,506	433
EBIT of Others/Consolidation	(244)	(166)
EBIT	2,262	267
Financial result	(77)	(137)
Income before income taxes	2,185	130

5. Changes in the Scope of Consolidation

5.1 Scope of Consolidation and Investments

As of December 31, 2022, the scope of consolidation comprised Covestro AG and 60 (previous year: 66) consolidated companies.

Effective January 14, 2022, the purchase agreement for the 30% of the shares in Japan Fine Coatings Co., Ltd., Ibaraki (Japan), previously held by the former joint venture partner JSR Corporation, Tokyo (Japan), was signed and executed. Covestro is now sole owner of the company.

Reconciliation of acquired noncontrolling interests

	€ million
Carrying amount of acquired noncontrolling interests	10
Consideration paid to noncontrolling interests	(4)
Increase in equity attributable to owners of the parent company	6

Covestro Invest GmbH, Leverkusen (Germany), was consolidated for the first time effective April 1, 2022. This company had previously been classified as an immaterial subsidiary. The purpose of Covestro Invest GmbH is to acquire, hold, and manage the company's investments, provide services for third parties, especially within the scope of intragroup management of investments, in each case insofar as these do not constitute activities requiring authorization under the German Banking Act (KWG), and the assumption of personal liability and management functions for commercial partnerships.

The decrease in the number of consolidated companies in the reporting year 2022 is primarily attributable to intragroup mergers of consolidated companies, which were transferred in connection with the acquisition of the Resins & Functional Materials (RFM) business from Koninklijke DSM N.V., Heerlen (Netherlands). As of June 1, 2022, Covestro Coating Resins B.V., Zwolle (Netherlands), Covestro Desotech B.V., Hoek van Holland (Netherlands), and Covestro Resins B.V., Zwolle (Netherlands) were merged into Covestro (Netherlands) B.V., Geleen (Netherlands), and Covestro Coating Resins, Inc., Wilmington, Massachusetts (USA), and Covestro Desotech Inc., Elgin, Illinois (USA), were merged into Covestro LLC, Pittsburgh, Pennsylvania (USA). In addition, Covestro Coating Resins Spain S.L., Barcelona (Spain) was merged into Covestro, S.L., Barcelona (Spain), while Covestro Resins (ROA) Ltd., Taipei City (Taiwan, Greater China), was merged into Covestro (Taiwan) Ltd., Kaohsiung City (Taiwan, Greater China).

As of July 1, 2022, the consolidated company Covestro GmbH, Leverkusen (Germany), was merged with Covestro Deutschland AG, Leverkusen (Germany).

Covestro Polymers (Zhuhai) Company Limited, Zhuhai (China), was consolidated for the first time with effect from September 30, 2022.

The scope of consolidation includes the joint operation LyondellBasell Covestro Manufacturing Maasvlakte V.O.F, Rotterdam (Netherlands), as of December 31, 2022, which is unchanged from the previous year. Pursuant to IFRS 11 (Joint Arrangements), Covestro's shares of this company's assets, liabilities, revenues, and expenses are included in the consolidated financial statements in accordance with Covestro's rights and obligations. The main purpose of LyondellBasell Covestro Manufacturing Maasvlakte V.O.F is the joint production of propylene oxide (PO) for Covestro and its partner LyondellBasell.

Additionally, two (previous year: two) associated companies are accounted for in the consolidated financial statements using the equity method.

Eight (previous year: ten) subsidiaries and two (previous year: two) associated companies that in aggregate are immaterial to the Covestro Group's net assets, financial position, and results of operations are not consolidated but recognized at cost. The immaterial subsidiaries each accounted for no more than 0.1% of Group sales, equity, or total assets in the reporting year 2022.

The information on the companies included in the consolidated financial statements and on the Covestro Group's shareholdings pursuant to Section 313 (2) of the German Commercial Code (HGB) and the list of domestic subsidiaries that made use of the exemption provisions pursuant to Sections 264 (3) and 264b of the German Commercial Code (HGB) in fiscal 2022 are components of the consolidated financial statements submitted for publication to Germany's Federal Gazette (Bundesanzeiger).

The disclosures on shareholdings in accordance with the requirements of Section 313 (2) HGB are shown in the following tables. The first table contains the following fully consolidated companies:

Fully consolidated companies

Company name	Place of business	Covestro's interest in %
EMLA		
Covestro (France)	Fos-sur-Mer (France)	100
Covestro (Netherlands) B.V.	Geleen (Netherlands)	100
Covestro (Slovakia) Services s.r.o.	Bratislava (Slovakia)	100
Covestro Amulix V.o.F.	Zwolle (Netherlands)	72
Covestro Bio-Based Coatings B.V.	Zwolle (Netherlands)	100
Covestro Brunsbüttel Energie GmbH	Brunsbüttel (Germany)	100
Covestro Coating Resins China Holding B.V.	Zwolle (Netherlands)	100
Covestro Deutschland AG	Leverkusen (Germany)	100
Covestro Elastomers	Romans-sur-Isère (France)	100
Covestro First Real Estate GmbH	Leverkusen (Germany)	100
Covestro Indústria e Comércio de Polímeros Ltda.	São Paulo (Brazil)	100
Covestro Intellectual Property GmbH & Co. KG	Leverkusen (Germany)	100
Covestro International SA	Fribourg (Switzerland)	100
Covestro Invest GmbH	Leverkusen (Germany)	100
Covestro Niaga B.V.	Zwolle (Netherlands)	100
Covestro NV	Antwerp (Belgium)	100
Covestro Polyurethanes B.V.	Nieuwegein (Netherlands)	100
Covestro Procurement Services GmbH & Co. KG	Leverkusen (Germany)	100
Covestro Resins (Germany) GmbH	Meppen (Germany)	100
Covestro Resins China Holding B.V.	Zwolle (Netherlands)	100
Covestro S.r.l.	Filago (Italy)	100
Covestro Second Real Estate GmbH	Leverkusen (Germany)	100
Covestro Thermoplast Composite GmbH	Markt Bibart (Germany)	100
Covestro UK Limited	Cheadle Hulme (United Kingdom)	100
Covestro, S.L.	Barcelona (Spain)	100
Epurex Films GmbH & Co. KG	Walsrode (Germany)	100
MS Global AG in Liquidation	Köniz (Switzerland)	100
Solar Coating Solutions B.V.	Zwolle (Netherlands)	100
NA		
Covestro International Re, Inc.	Colchester, Vermont (United States)	100
Covestro International Trade Services Corp.	Wilmington, Delaware (United States)	100
Covestro LLC	Pittsburgh, Pennsylvania (United States)	100
Covestro PO LLC	Pittsburgh, Pennsylvania (United States)	100
Covestro, S.A. de C.V.	Mexico City (Mexico)	100
APAC		
Covestro (Hong Kong) Limited	Hong Kong Special Administrative Region (China)	100
Covestro (India) Private Limited	Navi Mumbai (India)	100
Covestro (Shanghai) Investment Company Limited	Shanghai (China)	100
Covestro (Taiwan) Ltd.	Kaohsiung City (Taiwan, Greater China)	97.3
Covestro (Thailand) Co., Ltd.	Bangkok (Thailand)	100
Covestro (Viet Nam) Company Limited	Ho Chi Minh City (Vietnam)	100
Covestro Eternal Resins (Far East) Ltd.	Pingtung (Taiwan, Greater China)	60
Covestro Eternal Resins (Kunshan) Co., Ltd.	Kunshan (China)	50
Covestro Far East (Hong Kong) Limited	Hong Kong Special Administrative Region (China)	100
Covestro Invest (Far East) Company Limited	Hong Kong Special Administrative Region (China)	100
Covestro Japan Ltd.	Tokyo (Japan)	100
Covestro Korea Corporation	Seoul (South Korea)	100
Covestro Material Science and Technology (Shanghai) Company Limited	Shanghai (China)	100
Covestro Polymers (China) Company Limited	Shanghai (China)	100
Covestro Polymers (Qingdao) Company Limited	Qingdao (China)	100
Covestro Polymers (Shenzhen) Co., Ltd.	Shenzhen (China)	100
Covestro Polymers (Zhuhai) Company Limited	Zhuhai (China)	100
Covestro Pty Ltd	Mulgrave (Australia)	100
Covestro Resins (Foshan) Company Ltd.	Foshan (China)	100

Fully consolidated companies

Company name	Place of business	Covestro's interest in %
Covestro Resins (Shanghai) Co., Ltd.	Shanghai (China)	100
Covestro Resins (Taiwan) Ltd.	Taipei City (Taiwan, Greater China)	100
DIC Covestro Polymer Ltd.	Tokyo (Japan)	80
Guangzhou Covestro Polymers Company Limited	Guangzhou (China)	100
Japan Fine Coatings Co., Ltd.	Ibaraki (Japan)	100
PT Covestro Polymers Indonesia	Jakarta (Indonesia)	99.9
Sumika Covestro Urethane Company, Ltd.	Hyogo (Japan)	60

According to IFRS 10 (Consolidated Financial Statements), Covestro's interest in the amount of 50% in Covestro Eternal Resins (Kunshan) Co., Ltd., Kunshan (China), is classified as a fully consolidated company due to the 57% share of voting rights.

In addition, the following joint operation have been included in the consolidated financial statements in line with Covestro's shares of its assets, liabilities, revenues and expenses:

Joint operation

Company name	Place of business	Covestro's interest in %
LyondellBasell Covestro Manufacturing Maasvlakte V.O.F	Rotterdam (Netherlands)	50

The following associated companies are accounted for in the consolidated financial statements using the equity method:

Associates accounted for using the equity method

Company name	Place of business	Covestro's interest in %
Paltough Industries (1998) Ltd.	Kibbutz Ramat Yohanan (Israel)	25
PO JV, LP	Houston, Texas (United States)	39.4

The following subsidiaries were included in the consolidated financial statements at amortized cost due to their immateriality:

Immaterial subsidiaries

Company name	Place of business	Covestro's interest in %
Asellion (Shanghai) Information Technology Co., Ltd.	Shanghai (China)	100
Covestro Intellectual Property Verwaltungs GmbH	Leverkusen (Germany)	100
Covestro Middle East FZ-LLC	Dubai (United Arab Emirates)	100
Covestro Polimer Anoním Şirketi	Istanbul (Turkey)	100
Covestro Polymers (Tianjin) Co., Ltd.	Tianjin (China)	100
Covestro Procurement Services Verwaltungs GmbH	Leverkusen (Germany)	100
Covestro sp. z o.o.	Warsaw (Poland)	100
Epurex Films Geschäftsführungs-GmbH	Walsrode (Germany)	100

The following associated companies were recognized at cost due to their immateriality:

Immaterial associate

Company name	Place of business	Covestro's interest in %
Pure Salt Baytown, LLC	Baytown, Texas (United States)	0
Technology JV, LP	Houston, Texas (United States)	33.3

The 41.2% interest in Crime Science Technology, Lille (France), is classified as a debt instrument in accordance with IAS 32 (Financial Instruments: Presentation) and is measured at fair value through profit or loss in accordance with IFRS 9 (Financial Instruments).

The following fully consolidated domestic subsidiaries made use of the exemption provisions pursuant to Section 264 (3) of the German Commercial Code (HGB) and Section 264b of the German Commercial Code (HGB) in fiscal 2022:

German exempt subsidiaries

Company name	Place of business	Covestro's interest in %
Covestro Intellectual Property GmbH & Co. KG	Leverkusen (Germany)	100
Covestro Invest GmbH	Leverkusen (Germany)	100
Covestro Procurement Services GmbH & Co. KG	Leverkusen (Germany)	100
Covestro Resins (Germany) GmbH	Meppen (Germany)	100
Covestro Thermoplast Composite GmbH	Markt Bibart (Germany)	100
Epurex Films GmbH & Co. KG	Walsrode (Germany)	100

5.2 Acquisitions and Divestitures

Acquisitions

No reportable acquisitions were made in the reporting year 2022.

Divestitures

On August 5, 2022, Covestro signed an agreement for the sale of assets and liabilities (disposal group) of the additive manufacturing business to Stratasys, a U.S.-Israeli manufacturer of 3D printers and 3D production systems. The business sold by Covestro includes employees, research and development facilities, production units, and offices in the Netherlands, the United States, China, Japan, Germany, and the United Kingdom as well as access to a large network of partners around the world. The portfolio also includes products that are part of the Resins & Functional Materials business (RFM) acquired from Koninklijke DSM N.V., Heerlen (Netherlands), in fiscal 2021. The additive manufacturing business, which is part of the Solutions & Specialties segment, offers material solutions for common polymer 3D printing processes. Covestro's decision to sell the additive manufacturing business is consistent with the optimization of its portfolio to make its organization more efficient and allow the company to sharpen its focus on the extensive range of offerings for customers in its main customer industries. The selling price amounts to €43 million and an additional payment for certain assets, less any liabilities transferred. In addition, the agreement specifies a variable earn-out payment which depends on the achievement of various success factors. The transaction is structured as an asset deal. In connection with the sale, noncurrent assets and inventories of €18 million and liabilities of €2 million were classified as held for sale in accordance with IFRS 5 (Non-current Assets Held for Sale and Discontinued Operations). The sale is expected to close in the second quarter of 2023.

Notes to the Income Statement

6. Sales

Sales are categorized according to "geographical regions and key countries" and mainly comprise sales from contracts with customers and an immaterial amount of rental and leasing sales. The table also contains a reconciliation of the breakdown of sales by reportable segments.

Breakdown of sales

	Performance Materials	Solutions & Specialties	Others/ Consolidation	Covestro Group
	€ million	€ million	€ million	€ million
2022				
EMLA	4,152	3,198	250	7,600
of which Germany	1,093	948	175	2,216
NA	2,447	2,140	52	4,639
of which United States	2,058	1,761	50	3,869
APAC	2,496	3,220	13	5,729
of which China	1,681	1,960	3	3,644
2021				
EMLA	3,878	2,835	163	6,876
of which Germany	978	843	97	1,918
NA	1,926	1,594	33	3,553
of which United States	1,620	1,313	29	2,962
APAC	2,338	3,125	11	5,474
of which China	1,572	1,969	3	3,544

The following table presents the opening and closing balances of trade accounts receivable, contract assets, and contract liabilities.

Contract balances

	Jan. 1, 2021	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million	€ million
Trade accounts receivable	1,593	2,343	2,011
Contract assets	43	62	64
Contract liabilities	22	37	56

Contract assets are recognized in case the right to consideration in exchange for goods or services that have been transferred is conditional. This occurs primarily in the event of goods delivered to external customers' consignment warehouses. Where sales are made through consignment warehouses, customers primarily obtain control over the delivered goods upon delivery to the consignment warehouse. Accordingly, contract assets are generally recognized as trade accounts receivable when invoiced.

Contract liabilities are recognized for advance payments received from customers prior to transferring goods or services. These contract liabilities are recognized as sales when the goods or services have been transferred.

Sales from performance obligations satisfied (or partially satisfied) in previous periods and recognized in fiscal 2022 amounted to €1 million (previous year: €2 million).

The changes in contract assets and contract liabilities in the reporting period resulted from the following circumstances:

Reconciliation of contract assets

	2021	2022
	€ million	€ million
Reclassification of contract assets recognized at the beginning of the reporting period to trade accounts receivable	(43)	(62)
Additions from services rendered but not yet invoiced in the reporting period	62	64
Total	19	2

Reconciliation of contract liabilities

	2021	2022
	€ million	€ million
Sales included in the balance of contract liabilities at the beginning of the reporting period	(22)	(38)
Additions from payments received less amounts recognized as sales in the reporting period	36	57
Changes in scope of consolidation	1	–
Total	15	19

The following table presents the transaction price allocated to remaining performance obligations as of the reporting date. It is broken down by the reporting periods in which recognition is expected:

Transaction price allocated to remaining performance obligations

	Dec. 31, 2021		Dec. 31, 2022	
	€ million		€ million	
2022	1,028	2023	1,137	
2023	885	2024	867	
2024	696	2025	421	
2025	505	2026	367	
2026	574	2027	152	
2027 or later	73	2028 or later	161	
Total	3,761	Total	3,105	

The disclosures on the transaction price allocated to remaining performance obligations are based on long-term supply contracts within the meaning of IFRS 15 (Revenue from Contracts with Customers) which stipulate minimum volumes to be purchased as agreed between both parties.

Performance obligations from contracts with an original expected term of 12 months or less are excluded. Similarly, the disclosure excludes performance obligations satisfied over a certain period of time for which Covestro has the right to consideration in an amount that corresponds directly with the value of the performance completed to date and for which Covestro may recognize sales in the amount to which Covestro has the right to invoice.

The transaction price only includes variable consideration arising from contracts with customers, like sales-based or volume-based rebates or price formulas, for which the prices are derived from external, market-based indices, to the extent that they are not constrained as defined in IFRS 15.

7. Other Operating Income

Other operating income was comprised as shown in the following table:

Other operating income

	2021	2022
	€ million	€ million
Gains on retirements of noncurrent assets	8	8
Reversals of impairment losses on receivables	11	3
Reversals of unutilized provisions	–	2
Gains from derivatives	1	1
Miscellaneous other operating income	79	131
Total	99	145

Gains from derivatives in fiscal years 2021 and 2022 resulted from embedded derivatives.

Miscellaneous other operating income for the reporting period mainly included business development subsidies received in China in the amount of €71 million (previous year: €1 million) and insurance premiums received amounting to €36 million (previous year: €30 million).

8. Other Operating Expenses

Other operating expenses were comprised as shown in the following table:

Other operating expenses

	2021	2022
	€ million	€ million
Losses on retirements of noncurrent assets	(6)	(5)
Impairment losses on receivables	(5)	(12)
Losses from derivatives	(1)	(3)
Miscellaneous operating expenses	(69)	(104)
Total	(81)	(124)

Losses from derivatives in fiscal years 2021 and 2022 resulted from embedded derivatives.

Miscellaneous other operating expenses in fiscal 2022 mainly included the impairment of goodwill in the amount of €33 million (previous year: €0 million) and insurance expenses of €28 million (previous year: €43 million).

9. Personnel Expenses and Employee Numbers

Personnel expenses consisted of the following:

Personnel expenses

	2021	2022
	€ million	€ million
Salaries	(1,895)	(1,564)
Social expenses and expenses for pensions and other benefits	(403)	(431)
of which for defined contribution pension plans	(111)	(117)
of which for defined benefit and other pension plans	(115)	(114)
Total	(2,298)	(1,995)

In 2022, personnel expenses declined primarily as a result of lower expenses for short-term variable compensation as part of the Group's Covestro Profit Sharing Plan (Covestro PSP).

Average number of employees

	2021	2022
Production	11,349	11,757
Marketing and distribution	3,257	3,281
Research and development	1,421	1,485
General administration	1,530	1,490
Total	17,557	18,013
Employees in vocational training	530	526

The number of permanent or temporary employees is stated in full-time equivalents. Part-time employees are included on a pro-rated basis in line with their contractual working hours. The figures do not include employees in vocational training.

10. Financial Result

10.1 Result from Investments in Affiliated Companies

The result from investments in affiliated companies mainly comprised the result of equity-method valuation of the €19 million (previous year: €21 million) loss from the associated company PO JV, LP, Houston, Texas (United States), and the €2 million (previous year: €6 million) gain from Paltough Industries (1998) Ltd., Kibbuz Ramat Yochanan (Israel). This figure also included €2 million (previous year: €2 million) in dividend income from other affiliated companies.

→ See note 15 "Investments Accounted for Using the Equity Method."

10.2 Net Interest Expense

Net interest expense was comprised as shown in the following table:

Net interest expense

	2021	2022
	€ million	€ million
Expenses		
Interest and similar expenses	(58)	(63)
Interest expenses from forward exchange contracts	(21)	(67)
Income		
Interest and similar income	5	8
Interest income from forward exchange contracts	33	61
Total	(41)	(61)

Interest and similar expenses primarily resulted from interest expenses from leases totaling €25 million (previous year: €26 million) and bonds issued by Covestro AG totaling €25 million (previous year: €24 million). Interest income and expenses from forward exchange contracts included interest rate-driven changes in the fair value and the forward element.

10.3 Other Financial Result

The other financial result was comprised as shown in the following table:

Other financial result

	2021	2022
	€ million	€ million
Interest portion of interest-bearing provisions	(13)	(36)
Exchange gain/(loss)	1	(9)
Miscellaneous financial expenses	(11)	(16)
Total	(23)	(61)

The interest portion of interest-bearing provisions mainly includes net interest expense from pension provisions and similar obligations amounting to €18 million (previous year: €18 million). In addition, expenses of €18 million (previous year: income of €5 million) arose in fiscal 2022 from the effects of compounding and changes in interest rates as well as measurement effects from other provisions and corresponding asset surpluses.

Miscellaneous financial expenses primarily included impairment losses of €8 million for a contingent purchase price receivable from divestments, which was recognized as the present value of future cash inflows on the basis of the expected EBITDA of the divested business unit for 2021. However, the EBITDA actually achieved in 2021 was well below expectations, so no purchase price payment was made. This item also includes expenses relating to fees in the amount of €4 million (previous year: €3 million) and negative interest on bank deposits and money market funds totaling €1 million (previous year: €5 million).

11. Taxes

The breakdown of tax expenses by type is shown in the table below:

Income taxes

	2021	2022
	€ million	€ million
Current taxes	(628)	(383)
Tax expense current year	(627)	(400)
Tax income (previous year: expense) prior years	(1)	17
Deferred taxes	62	(28)
from temporary differences	55	(24)
from tax loss carryforwards and tax credits	7	(4)
Total	(566)	(411)

The deferred tax assets and liabilities were allocated to the items in the statement of financial position as shown in the table below:

Deferred tax assets and liabilities

	Dec. 31, 2021			Dec. 31, 2022		
	Deferred tax assets	Deferred tax liabilities	of which recognized in profit or loss	Deferred tax assets	Deferred tax liabilities	of which recognized in profit or loss
	€ million	€ million	€ million	€ million	€ million	€ million
Intangible assets	46	(162)	(116)	48	(81)	(33)
Property, plant and equipment	125	(297)	(172)	153	(269)	(116)
of which right-of-use assets from application of IFRS 16	–	(142)	(142)	–	(128)	(128)
Financial assets	–	(57)	(51)	3	(102)	(94)
Inventories	85	(3)	82	71	(2)	69
Receivables	5	(30)	(25)	3	(58)	(55)
Provisions for pensions and other post-employment benefits	523	(20)	(14)	70	(15)	(12)
Other provisions	104	(12)	92	61	(15)	46
Liabilities	159	(2)	157	141	(25)	116
of which lease liabilities from application of IFRS 16	135	–	135	118	–	118
Tax loss and interest carryforwards and tax credits	54	–	54	50	–	50
Total	1,101	(583)	7	600	(567)	(29)
of which noncurrent	973	(532)		386	(362)	
Offsetting	(283)	283		(255)	255	
Recognition	818	(300)		345	(312)	

No deferred tax assets were recognized for tax deductible temporary differences in the amount of €850 million (previous year: €0 million) as it is unlikely that these can be utilized within a foreseeable period.

Of the total tax loss and interest carryforwards of €1,494 million (previous year: €482 million), an amount of €292 million (previous year: €353 million) is expected to be usable within a foreseeable period. The increase in loss carryforwards was due to additional loss carryforwards in the reporting year and tax reassessments for prior years. Deferred tax assets of €48 million (previous year: €52 million) were recognized for the amount of tax loss and interest carryforwards expected to be usable.

The use of €1,202 million (previous year: €129 million) of existing tax loss and interest carryforwards was subject to legal or economic restrictions.

Expiration of unusable tax loss and interest carryforwards

	Tax loss and interest carryforwards	
	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million
Within one year	8	–
Within two years	19	–
Within three years	19	–
Within four years	15	–
Within five years	11	–
Thereafter	57	1,202
Total	129	1,202

In the reporting year, tax credits of €2 million (previous year: €2 million) were recognized.

In fiscal 2022, subsidiaries that reported losses for the reporting year or the previous year recognized net deferred tax assets totaling €62 million (previous year: €506 million) from temporary differences and tax loss carryforwards. Of this amount, €30 million (previous year: €27 million) was attributable to net deferred tax assets from tax loss and interest carryforwards. All of the deferred tax assets were considered to be unimpaired because the companies concerned were expected to generate taxable income and tax strategies ensure that the deferred tax assets will be utilized.

Deferred tax liabilities of €74 million (previous year: €13 million) were recognized in the reporting year for planned dividend payments by subsidiaries. No deferred tax liabilities were recognized for temporary differences of €120 million (previous year: €128 million) relating to shares in subsidiaries, as the parent company can control the timing of the reversal of the temporary differences, and it is unlikely that these temporary differences will reverse in the foreseeable future.

The reported tax expense of €411 million (previous year: €566 million) for fiscal 2022 was €399 million higher (previous year: €59 million higher) than the expected tax expense of €12 million (previous year: €507 million) that would have resulted from applying an expected weighted average tax rate to the pre-tax income of the Covestro Group. This average tax rate was derived from the nominal tax rates of the individual Group companies and amounted to 9.2% in fiscal 2022 (previous year: 23.2%). The effective tax rate was 316.2% (previous year: 25.9%).

The Covestro Group operates in various countries. The tax rates ranged from 14.1% to 34.0% (previous year: 14.1% to 34.3%) due to national regulations.

The reconciliation of expected to actual income tax expense and of the expected to the effective tax rate for the Covestro Group is shown in the following table:

Reconciliation of expected to actual income tax expense

	2021		2022	
	€ million	%	€ million	%
Expected income tax expense and expected tax rate	507	23.2	12	9.2
Reduction in taxes due to tax-free income	(12)	-0.6	(23)	-17.7
First-time recognition of previously unrecognized deferred tax assets on tax loss carryforwards	-	-	(3)	-2.3
Increase in taxes due to non-tax-deductible expenses	28	1.3	32	24.6
New tax loss carryforwards and temporary differences unlikely to be usable	3	0.1	191	146.9
Existing tax loss carryforwards and temporary differences on which deferred tax assets were previously recognized but which are unlikely to be usable	-	-	64	49.3
Tax income (-) and expenses (+) relating to other periods	11	0.5	8	6.2
Tax effects of change in tax rates	(1)	-	6	4.6
Other tax effects	30	1.4	124	95.4
Actual income tax expense and effective tax rate	566	25.9	411	316.2

Other tax effects are primarily the result of ineligible foreign withholding taxes on the dividend payments of subsidiaries totaling €55 million (previous year: €14 million) and of the change in deferred tax liabilities on planned dividend payments by subsidiaries in the amount of €61 million (previous year: €5 million).

12. Earnings per Share

Earnings per share are calculated according to IAS 33 (Earnings per Share) as the relationship of the Group's income after income taxes (net income) for the fiscal year to the weighted average number of outstanding no-par voting shares of Covestro AG. In fiscal 2022, a weighted average number of outstanding no-par voting shares of 190,933,438 was used to calculate earnings per share, while in fiscal 2021, these shares amounted to 193,165,396.

Earnings per share

	2021	2022
	€ million	€ million
Income after income taxes	1,619	(281)
Attributable to noncontrolling interests	3	(9)
Attributable to Covestro AG shareholders (net income)	1,616	(272)
	Shares	Shares
Weighted average number of outstanding no-par voting shares of Covestro AG	193,165,396	190,933,438
	€	€
Basic earnings per share	8.37	-1.42
Diluted earnings per share	8.37	-1.42

Notes to the Statement of Financial Position

13. Goodwill and Other Intangible Assets

Changes in intangible assets in fiscal 2022

	Acquired goodwill	Patents and technologies	Marketing and distribution rights	Production rights	Software	Other rights	Advance payments	Total
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Cost of acquisition or generation, December 31, 2021	759	208	463	133	172	244	49	2,028
Acquisitions	–	–	–	–	–	–	–	–
Capital expenditures	–	–	–	–	2	6	19	27
Retirements	(3)	–	–	–	(6)	(7)	–	(16)
Transfers	–	–	2	–	13	(11)	(10)	(6)
Transfers (IFRS 5)	–	(1)	(4)	–	–	(3)	–	(8)
Exchange differences	7	5	5	–	–	–	–	17
Cost of acquisition or generation, December 31, 2022	763	212	466	133	181	229	58	2,042
Accumulated amortization, impairment losses and impairment loss reversals, December 31, 2022	34	47	149	132	163	185	–	710
Carrying amounts, December 31, 2022	729	165	317	1	18	44	58	1,332
Amortization and impairment losses	33	18	86	–	9	10	–	156
Amortization	–	18	40	–	9	9	–	76
Impairment losses	33	–	46	–	–	1	–	80
Impairment loss reversals	–	–	–	–	–	–	–	–

In the reporting year, impairment losses of €80 million (previous year: €1 million) were recognized on goodwill and other intangible assets. These were primarily due to impairment testing in the reporting year 2022. The items of goodwill significant for the Covestro Group and a detailed description of the method for impairment testing goodwill and other intangible assets are presented in section "Impairment Testing" in note 3 "Accounting Policies and Valuation Principles." As in the previous year, there were no impairment loss reversals.

Changes in intangible assets in fiscal 2021

	Acquired goodwill	Patents and technologies	Marketing and distribution rights	Production rights	Software	Other rights	Advance payments	Total
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Cost of acquisition or generation, December 31, 2020	257	28	40	132	170	203	34	864
Acquisitions	489	176	412	–	–	37	–	1,114
Capital expenditures	–	–	–	–	2	2	15	19
Retirements	–	–	–	–	–	(1)	–	(1)
Transfers	–	–	1	–	1	–	–	2
Transfers (IFRS 5)	–	–	–	–	–	–	–	–
Exchange differences	13	4	10	1	(1)	3	–	30
Cost of acquisition or generation, December 31, 2021	759	208	463	133	172	244	49	2,028
Accumulated amortization, impairment losses and impairment loss reversals, December 31, 2021	2	27	64	132	157	183	–	565
Carrying amounts, December 31, 2021	757	181	399	1	15	61	49	1,463
Amortization and impairment losses	–	13	30	2	8	10	–	63
Amortization	–	13	30	1	8	10	–	62
Impairment losses	–	–	–	1	–	–	–	1
Impairment loss reversals	–	–	–	–	–	–	–	–

The acquisition of the Resins & Functional Materials (RFM) business from Koninklijke DSM N.V., Heerlen (Netherlands), resulted in significant additions to goodwill and other intangible assets in the previous year.

14. Property, Plant and Equipment**Changes in property, plant and equipment in fiscal 2022**

	Land and buildings	Plant installations and machinery	Furniture, fixtures and other equipment	Construction in progress and advance payments	Total
	€ million	€ million	€ million	€ million	€ million
Cost of acquisition or construction, December 31, 2021	3,871	13,543	881	920	19,215
Acquisitions	–	–	–	–	–
Capital expenditures	80	309	61	496	946
Retirements	(29)	(194)	(31)	(19)	(273)
Transfers	116	337	15	(462)	6
Transfers (IFRS 5)	(1)	(7)	–	–	(8)
Exchange differences	15	118	9	2	144
Cost of acquisition or construction, December 31, 2022	4,052	14,106	935	937	20,030
Accumulated depreciation, impairment losses and impairment loss reversals, December 31, 2022	2,492	11,085	648	4	14,229
Carrying amounts, December 31, 2022	1,560	3,021	287	933	5,801
Depreciation and impairment losses	220	869	84	22	1,195
Depreciation	150	577	84	1	812
Impairment losses	70	292	–	21	383
Impairment loss reversals	–	–	(1)	–	(1)

In the reporting year, impairment losses of €383 million (previous year: €4 million) were recognized on property, plant and equipment. These are primarily attributable to the impairment testing performed in the reporting year, which is explained in greater detail in section "Impairment Testing" in note 3 "Accounting Policies and Valuation Principles." Impairment loss reversals of €1 million (previous year: €3 million) were also recognized.

Covestro is increasingly investing in projects that drive success and progress in achieving a circular economy and climate neutrality. To this end, the company continued to pursue various investment projects in the areas of pollution prevention and control, energy efficiency improvements, and recycling management in the reporting year, with a particular focus on technical equipment and machinery. Examples include investments in the new chloralkali production plant in Tarragona (Spain), the existing chloralkali production plant in Dormagen (Germany), and the company's first own plant for the mechanical recycling of polycarbonates in Shanghai (China).

Borrowing costs of €3 million (previous year: €3 million) were capitalized as part of the cost of qualifying assets under property, plant and equipment in the reporting year. The capitalization rate applied amounted to 1.7% on average (previous year: 1.8%).

Changes in property, plant and equipment in fiscal 2021

	Land and buildings	Plant installations and machinery	Furniture, fixtures and other equipment	Construction in progress and advance payments	Total
	€ million	€ million	€ million	€ million	€ million
Cost of acquisition or construction, December 31, 2020	3,499	12,184	769	844	17,296
Acquisitions	112	271	24	47	454
Capital expenditures	90	324	54	497	965
Retirements	(47)	(190)	(23)	–	(260)
Transfers	84	385	16	(487)	(2)
Transfers (IFRS 5)	(9)	(1)	(2)	–	(12)
Exchange differences	142	570	43	19	774
Cost of acquisition or construction, December 31, 2021	3,871	13,543	881	920	19,215
Accumulated depreciation, impairment losses and impairment loss reversals, December 31, 2021	2,282	10,309	590	2	13,183
Carrying amounts, December 31, 2021	1,589	3,234	291	918	6,032
Depreciation and impairment losses	142	539	80	2	763
Depreciation	141	537	80	1	759
Impairment losses	1	2	–	1	4
Impairment loss reversals	(3)	–	–	–	(3)

The acquisition of the Resins & Functional Materials (RFM) business from Koninklijke DSM N.V., Heerlen (Netherlands), resulted in significant additions to property, plant and equipment in the reporting year 2021.

14.1 Leasing

Covestro as Lessee

The recognized right-of-use assets from leases are reported under property, plant and equipment.

Changes in right-of-use assets in 2022

	Land and buildings	Plant installations and machinery	Furniture, fixtures and other equipment	Total
	€ million	€ million	€ million	€ million
Carrying amounts, January 1, 2022	285	314	183	782
Additions	41	49	50	140
Retirements	(5)	(2)	(2)	(9)
Depreciation, impairment losses and impairment loss reversals	(49)	(61)	(52)	(162)
Other changes	16	5	6	27
Carrying amounts, December 31, 2022	288	305	185	778

Changes in right-of-use assets in 2021

	Land and buildings	Plant installations and machinery	Furniture, fixtures and other equipment	Total
	€ million	€ million	€ million	€ million
Carrying amounts, January 1, 2021	267	241	181	689
Additions	60	122	41	223
Retirements	(9)	(10)	(3)	(22)
Depreciation, impairment losses and impairment loss reversals	(42)	(54)	(47)	(143)
Other changes	9	15	11	35
Carrying amounts, December 31, 2021	285	314	183	782

Right-of-use assets relate mainly to leases for production and logistics infrastructure and real estate leases. Leases for production and logistics infrastructure are mainly related to the rental of tanks and containers as well as rail tank cars. For tanks and containers, the average lease term is 16 years (previous year: 16 years) and for rail tank cars, 11 years (previous year: 12 years). Leases for renting real estate, particularly buildings, are for an average lease term of 15 years (previous year: 14 years). Some of the underlying leases include variable lease payments as well as options to extend or terminate the lease.

→ See note 3 "Accounting Policies and Valuation Principles."

The following table presents the amounts recognized in the statement of cash flows and the income statement for all leases:

Cash outflows and expenses from leases

	2021	2022
	€ million	€ million
Amounts reported in the statement of cash flows		
Total cash outflow for leases	184	205
Amounts reported in the income statement		
Depreciation, impairment losses and impairment loss reversals	143	162
Interest expense	26	25
Expenses relating to short-term leases	14	17
Expenses relating to leases of low-value assets	2	1
Expenses relating to variable lease payments not included in the lease liability	2	3

As of December 31, 2022, the lease commitments for short-term leases not recognized in the statement of financial position amount to €6 million (previous year: €6 million).

Further information on the liabilities arising from leases and details on payments from leases are described in the following notes:

→ [Note 22 "Financing and Financial Liabilities."](#)

→ [Note 27 "Notes to the Statement of Cash Flows."](#)

Covestro as Lessor

In the reporting year, leasing income generated from lease contracts under IFRS 16 (Leases) was €8 million (previous year: €8 million). These are mainly related to real estate. In addition, lease payments from rentals of €5 million (previous year: €4 million) are expected to be received in the following year, not including the investment property as outlined below. Lease payments totaling €5 million are expected to be received in the period from 2024–2027, and lease payments totaling €3 million after the year 2027.

At Covestro, risks from renting real estate are usually limited by building insurance policies and by the contractual obligation of the tenant to return the property to its original condition. In addition, contractual agreements provide for price adjustment mechanisms based primarily on the consumer price index.

14.2 Investment Property

The total carrying amount of investment property as of December 31, 2022, amounted to €21 million (previous year: €23 million), and its fair value totaled €141 million (previous year: €223 million). Rental income from investment property was €17 million (previous year: €13 million) and the operating expenses directly allocable to this property amounted to €11 million (previous year: €10 million). In the reporting period and in the previous year, no material operating expenses were recognized for investment property not generating any rental income.

Rental income generated from the leasing of properties classified as investment properties stemmed in part from contracts for hereditary building rights and leases granted by the Covestro Group. These contracts with a weighted average remaining term of 33 years relate to space used by companies and contractual partners in the chemical industry at production sites in Germany. Based on current rental prices, around €5 million in compensation will be received annually from these long-term contracts for the use of this space in the coming years.

15. Investments Accounted for Using the Equity Method

The two following tables contain summarized data from the income statement and statement of financial position of the associate PO JV, LP, Houston, Texas (United States), which is accounted for using the equity method, and show the respective amounts recognized in the financial statements of the Covestro Group.

→ See note 5.1 “Scope of Consolidation and Investments” for an overview of the companies accounted for using the equity method.

In 2000, the polyols business and parts of the propylene oxide (PO) production operations of former Lyondell Chemicals Company, Houston, Texas (United States), were acquired with the objective of ensuring access to patented technologies and safeguarding the long-term supply of PO, a precursor for polyurethanes. As part of this strategy, a company was established to jointly produce PO (PO JV, LP, in which Covestro continues to hold a 39.4% interest, as in the prior year). Covestro benefits from fixed long-term supply quotas/volumes of PO produced by this company.

Income statement data of PO JV, LP, Houston, Texas (United States)

	2021	2022
	€ million	€ million
Sales	2,063	1,977
Net loss after taxes	(58)	(55)
Share of net loss after taxes	(21)	(19)
Share of total comprehensive income after taxes	(21)	(19)

Statement of financial position data of PO JV, LP, Houston, Texas (United States)

	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million
Noncurrent assets	359	346
Equity	359	346
Share of equity	156	157
Other	(15)	(2)
Carrying amount	141	155

The item “Other” mainly comprises differences arising from adjustments of data to Covestro’s uniform accounting policies.

The following table contains the income statement data and carrying amounts of Paltough Industries (1998) Ltd., Kibbutz Ramat Yohanan (Israel) (Covestro’s interest remained unchanged from the prior year at 25%):

Income statement data and carrying amounts of Paltough Industries (1998) Ltd., Kibbutz Ramat Yohanan (Israel)

	2021	2022
	€ million	€ million
Income after taxes	25	10
Share of income after taxes	6	2
Share of total comprehensive income after taxes	6	2
Carrying amount	31	30

16. Other Financial Assets

Other financial assets consisted of the following items:

Other financial assets

	Dec. 31, 2021		Dec. 31, 2022	
	Total	Of which current	Total	Of which current
	€ million	€ million	€ million	€ million
Money market funds	65	65	–	–
Loans and bank deposits	402	394	128	17
Other investments	27	–	24	–
Receivables from derivatives	40	34	45	45
Receivables under lease agreements	8	–	8	–
Total	542	493	205	62

As of the reporting date, December 31, 2022, loans and bank deposits particularly included initial fund loans in the amount of €101 million which were requested by Bayer-Pensionskasse VVaG, Leverkusen (Germany), and Rheinische Pensionskasse VVaG, Leverkusen (Germany), in the fiscal year. In the previous year, the item consisted primarily of bank deposits totaling €388 million. These fell by €373 million to €15 million in the fiscal year.

→ See note 25 "Contingent Liabilities and Other Financial Commitments."

Receivables from derivatives included forward exchange contracts of €42 million (previous year: €34 million) and embedded derivatives of €3 million (previous year: €6 million).

→ See note 24.2 "Financial Risk Management and Information on Derivatives."

→ See note 24.1 "Financial Instruments by Category" for further information regarding money market funds, loans and bank deposits and other investments.

Receivables under lease agreements relate to finance leases where Covestro is the lessor and the counterparty is the economic owner of the leased assets. Receivables under lease agreements are based on expected future lease payments of €41 million (previous year: €32 million) including an interest component of €33 million (previous year: €24 million). In the reporting year, interest income from finance leases of €1 million (previous year: €1 million) was recognized. Of the expected lease payments, €1 million is due within one year (previous year: €1 million), €4 million is due within the following four years (previous year: €3 million), and €36 million is due in subsequent years (previous year: €28 million).

17. Inventories

Inventories were comprised as follows:

Inventories

	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million
Raw materials and supplies	830	848
Work in process, finished goods and goods purchased for resale ¹	2,081	1,964
Advance payments	3	2
Total	2,914	2,814

¹ In fiscal 2022, work in process comprises approximately 21% of inventories (previous year: approximately 21%).

In fiscal 2022, impairment losses on inventories of €69 million (previous year: €22 million) and reversals of impairment losses of €12 million (previous year: €5 million) were recognized through profit or loss in cost of goods sold.

Inventories recognized as an expense in the reporting period essentially correspond to the cost of goods sold less booked impairment losses.

18. Other Receivables

Other receivables consisted of the following:

Other receivables

	Dec. 31, 2021		Dec. 31, 2022	
	Total	Of which current	Total	Of which current
	€ million	€ million	€ million	€ million
Other tax receivables	226	223	245	244
Accruals and deferrals	99	90	84	79
Contract assets	62	62	64	62
Receivables from employees	8	8	7	7
Receivables from divestments	13	13	–	–
Reimbursement claims	2	2	2	2
Net defined benefit asset	4	–	56	–
Miscellaneous receivables	96	36	103	57
Total	510	434	561	451

Other receivables included €20 million (previous year: €30 million) in financial receivables. The impairment losses on financial receivables as of the reporting date are immaterial.

→ See note 6 "Sales" for further information on contract assets.

19. Equity

The individual components of equity and changes in equity in fiscal years 2021 and 2022 are presented in the Covestro Group consolidated statement of changes in equity.

Authorized and Conditional Capital

The Annual General Meeting (AGM) adopted a resolution on April 16, 2021, authorizing the Board of Management, with the approval of the Supervisory Board, to increase the capital stock of the company by up to €57,960,000 in the period through April 15, 2026 by issuing new, no-par value bearer shares against cash contributions and/or contributions in kind (Authorized Capital 2021).

The Authorized Capital 2021 has not been utilized to date.

On July 30, 2020, the AGM authorized the Board of Management to issue bonds with conversion or exchange rights or warrants, or with conversion obligations, or a combination of these instruments on up to 18,300,000 no-par value bearer shares of Covestro AG. Based on this authorization, convertible/warrant bonds can be issued up to a total nominal value of €2 billion by the company or a Group company in the period through July 29, 2025. The AGM in the year 2020 also resolved to conditionally increase the capital stock by up to €18.3 million by issuing up to 18,300,000 no-par value bearer shares to grant shares to the holders or creditors of such convertible/warrant bonds (Conditional Capital 2020).

The Conditional Capital 2020 has not been utilized to date.

Capital Stock

The capital stock of Covestro AG changed as follows in fiscal 2022:

Change in capital stock

	Number of shares	Of which treasury shares	Shares carrying dividend rights	Capital stock
	number	number	number	€ million
Dec. 31, 2021	193,200,000	–	193,200,000	193
Acquisition of treasury shares		(3,479,956)	(3,479,956)	(3)
Issuance of treasury shares		228,321	228,321	–
Dec. 31, 2022	193,200,000	(3,251,635)	189,948,365	190

Covestro AG's capital stock as of December 31, 2022, is divided into 193,200,000 (previous year: 193,200,000) no-par value bearer shares and is fully paid up. Each share confers the right to one vote.

Covestro AG repurchased a total of 3,479,956 treasury shares as part of the share buyback program in 2022. Covestro AG also issued 228,321 (previous year: 39,456) treasury shares to employees of the German legal entities under the Covestment share-based participation program. As of December 31, 2022, the company held 3,251,635 treasury shares (previous year: 0), corresponding to 2% of the capital stock.

The cost of acquiring the treasury shares held by Covestro AG at the end of the fiscal year came to €139 million. Measurement was carried out according to the FIFO method. The average price paid per share under the share buyback program amounted to €43.11 per share.

Capital Reserves

Covestro AG's capital reserves as of December 31, 2022, amounted to €3,788 million (previous year: €3,927 million). The year-over-year decline is primarily attributable to the acquisition of treasury shares (€147 million) as part of the share buyback program. This was partially offset by the issuance of treasury shares as part of the Covestment share-based participation program.

The capital reserves include premiums from the issue of shares.

Retained Earnings and Other Comprehensive Income

Retained earnings totaled €2,480 million (previous year: €3,002 million) as of December 31, 2022.

Retained earnings consist of the net income earned both in the current fiscal year and in the past less the dividends paid. It also includes all remeasurements of the net defined benefit liability for post-employment benefit plans recognized in other comprehensive income. Accumulated other comprehensive income includes foreign currency effects from the translation of the annual financial statements of foreign subsidiaries that are recognized directly in equity.

Dividend

The dividend available for distribution is based on the distributable profit reported in the annual financial statements of Covestro AG, which were prepared according to the provisions of the German Commercial Code (HGB). In view of the Group's negative net income, no dividend will be paid to Covestro AG shareholders for fiscal 2022 in accordance with the current dividend policy. For fiscal 2021, a dividend of €3.40 per share carrying dividend rights was paid in April 2022.

Accumulated Other Comprehensive Income

Accumulated other comprehensive income was as follows:

Accumulated other comprehensive income

	Currency translation	Accumulated other comprehensive income
	€ million	€ million
Jan. 1, 2021	209	209
Other comprehensive income	365	365
Total comprehensive income	365	365
Dec. 31, 2021	574	574
Other comprehensive income	54	54
Total comprehensive income	54	54
Dec. 31, 2022	628	628

Noncontrolling Interests

Noncontrolling interests mainly relate to the equity of Sumika Covestro Urethane Company, Ltd., Hyogo (Japan), Covestro Eternal Resins (Kunshan) Co., Ltd., Kunshan (China), Covestro Eternal Resins (Far East) Ltd. Pingtung (Taiwan, Greater China), DIC Covestro Polymer Ltd., Tokyo (Japan), and Covestro (Taiwan) Ltd., Kaohsiung City (Taiwan, Greater China).

The changes in equity attributable to noncontrolling interests are presented in the following table:

Changes in equity attributable to noncontrolling interests

	2021	2022
	€ million	€ million
January 1	37	66
Change in equity not recognized in profit or loss		
Exchange differences on translation of operations outside the eurozone	2	(4)
Other changes in equity	35	(11)
Dividend payments	(11)	(6)
Change in equity recognized in profit or loss	3	(9)
December 31	66	36

20. Provisions for Pensions and Other Post-Employment Benefits

Provisions for pensions and other post-employment benefits were recognized for defined benefit obligations.

→ See note 9 "Personnel Expenses and Employee Numbers" for the expenses for defined contribution obligations.

The net defined benefit liability for post-employment benefit plans was accounted for as follows:

Net defined benefit liability recognized in the statement of financial position

	Pensions		Other post-employment benefits		Total	
	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million	€ million	€ million	€ million	€ million
Provisions for pensions and other post-employment benefits	1,054	370	145	116	1,199	486
Germany	948	250	–	–	948	250
Other countries	106	120	145	116	251	236
Net defined benefit asset	4	56	–	–	4	56
Germany	3	56	–	–	3	56
Other countries	1	–	–	–	1	–
Net defined benefit liability	1,050	314	145	116	1,195	430
Germany	945	194	–	–	945	194
Other countries	105	120	145	116	250	236

Expenses for defined benefit plans and for other post-employment benefits included the following components:

Expenses for defined benefit plans

	Pension plans						Other post-employment benefit plans	
	Germany		Other countries		Total		Other countries	
	2021	2022	2021	2022	2021	2022	2021	2022
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Current service cost	97	86	12	17	109	103	2	3
Past service cost	3	8	1	–	4	8	–	–
Service cost	100	94	13	17	113	111	2	3
Interest expense from defined benefit obligation	31	50	11	14	42	64	3	4
Interest income from plan assets	(19)	(39)	(8)	(11)	(27)	(50)	–	–
Net interest	12	11	3	3	15	14	3	4
Total expenses	112	105	16	20	128	125	5	7

In fiscal 2022, gains totaling €849 million (previous year: €510 million) from remeasurements of the net defined benefit liability were also recognized in other comprehensive income. This resulted largely from an increase in discount rates. Of this amount, €813 million (previous year: €500 million) relates to pension obligations and €36 million (previous year: €10 million) to other post-employment benefit obligations.

The changes in the net defined benefit liability for post-employment benefit plans were as follows:

Changes in the present value of the defined benefit obligation

	2021			2022		
	Germany	Other countries	Total	Germany	Other countries	Total
	€ million	€ million	€ million	€ million	€ million	€ million
January 1	4,487	771	5,258	4,198	753	4,951
Acquisition	16	6	22	–	–	–
Current service cost	97	14	111	86	20	106
Past service cost	3	1	4	8	–	8
Interest expense from defined benefit obligation	31	14	45	50	18	68
Net actuarial (gain)/loss	(388)	(41)	(429)	(1,356)	(142)	(1,498)
Due to change in financial assumptions	(363)	(46)	(409)	(1,458)	(151)	(1,609)
Due to change in demographic assumptions	–	–	–	–	1	1
Due to experience adjustments	(25)	5	(20)	102	8	110
Employee contributions	14	1	15	13	1	14
Payments due to plan settlements ¹	2	(1)	1	1	(1)	–
Benefits paid out of plan assets	(31)	(46)	(77)	(65)	(61)	(126)
Benefits paid by the company	(33)	(13)	(46)	(4)	(14)	(18)
Exchange differences	–	47	47	–	40	40
December 31	4,198	753	4,951	2,931	614	3,545
of which other post-employment benefits	–	147	147	–	119	119

¹ Payments due to plan settlements may include transfers from and to other companies in the course of employee transfers for which benefits are granted as part of a multi-employer plan managed as a pension plan by the transferring and receiving company.

Changes in fair value of plan assets

	2021			2022		
	Germany	Other countries	Total	Germany	Other countries	Total
	€ million	€ million	€ million	€ million	€ million	€ million
January 1	2,627	510	3,137	3,253	505	3,758
Acquisition	1	5	6	–	–	–
Interest income from plan assets	19	8	27	39	11	50
Return or (loss) on plan assets excluding amounts recognized as interest result	93	(10)	83	(521)	(115)	(636)
Employer contributions	531	8	539	32	11	43
Employee contributions	14	1	15	13	1	14
Payments due to plan settlements ¹	–	(1)	(1)	–	–	–
Benefits paid out of plan assets	(31)	(46)	(77)	(65)	(61)	(126)
Plan administration cost paid out of plan assets	(1)	–	(1)	–	–	–
Exchange differences	–	30	30	–	27	27
December 31	3,253	505	3,758	2,751	379	3,130
of which other post-employment benefits	–	2	2	–	3	3

¹ Payments due to plan settlements may include transfers from and to other companies in the course of employee transfers for which benefits are granted as part of a multi-employer plan managed as a pension plan by the transferring and receiving company.

Effects of the asset ceiling

	2021			2022		
	Germany	Other countries	Total	Germany	Other countries	Total
	€ million	€ million	€ million	€ million	€ million	€ million
January 1	-	-	-	-	2	2
Remeasurement of asset ceiling	-	2	2	14	(1)	13
Exchange differences	-	-	-	-	-	-
December 31	-	2	2	14	1	15
of which other post-employment benefits	-	-	-	-	-	-

Changes to the net defined benefit liability

	2021			2022		
	Germany	Other countries	Total	Germany	Other countries	Total
	€ million	€ million	€ million	€ million	€ million	€ million
January 1	1,860	261	2,121	945	250	1,195
Acquisition	15	1	16	-	-	-
Current service cost	97	14	111	86	20	106
Past service cost	3	1	4	8	-	8
Net interest	12	6	18	11	7	18
Net actuarial (gain) / loss	-388	-41	-429	(1,356)	(142)	(1,498)
(Return) or loss on plan assets excluding amounts recognized as interest result	(93)	10	(83)	521	115	636
Remeasurement of asset ceiling	-	2	2	14	(1)	13
Employer contributions	(531)	(8)	(539)	(32)	(11)	(43)
Employee contributions	-	-	-	-	-	-
Payments due to plan settlements ¹	2	-	2	1	(1)	-
Benefits paid out of plan assets	-	-	-	-	-	-
Benefits paid by the company	(33)	(13)	(46)	(4)	(14)	(18)
Plan administration cost paid out of plan assets	1	-	1	-	-	-
Exchange differences	-	17	17	-	13	13
December 31	945	250	1,195	194	236	430
of which other post-employment benefits	-	145	145	-	116	116

¹ Payments due to plan settlements may include transfers from and to other companies in the course of employee transfers for which benefits are granted as part of a multi-employer plan managed as a pension plan by the transferring and receiving company.

Benefit obligations pertained mainly to Germany (83%; previous year: 85%) and the United States (12%; previous year: 11%). In Germany, current employees accounted for approximately 50% (previous year: approximately 57%) of entitlements under defined benefit plans, retirees or their surviving dependents for approximately 44% (previous year: approximately 35%), and former employees with vested pension rights for approximately 6% (previous year: approximately 8%). In the United States, current employees accounted for approximately 32% (previous year: approximately 38%) of entitlements under defined benefit plans, retirees or their surviving dependents for approximately 62% (previous year: approximately 54%), and former employees with vested pension rights for approximately 6% (previous year: approximately 8%).

Actual expenses from plan assets relating to pension obligations amounted to €586 million (previous year: income of €110 million). No income was accrued from plan assets for other post-employment benefits either in the reporting period or the prior year.

The present value of the defined benefit obligation for pensions and other post-employment benefits and the funded status of the funded obligations are presented in the following table:

Defined benefit obligation and funded status

	Pension obligations		Other post-employment benefit obligations		Total	
	2021	2022	2021	2022	2021	2022
	€ million	€ million	€ million	€ million	€ million	€ million
Defined benefit obligation	4,804	3,426	147	119	4,951	3,545
Unfunded	135	106	143	114	278	220
Funded	4,669	3,320	4	5	4,673	3,325
Funded status of funded obligations						
Overfunding	6	71	–	–	6	71
Underfunding	919	264	2	2	921	266

Pension Entitlements and Other Post-Employment Benefit Obligations

The Covestro Group provides retirement benefits for most of its employees, either directly or by contributing to privately or publicly administered funds. Benefits vary according to the legal, tax, and economic conditions of each country and are generally based on employee compensation and years of service. The obligations relate both to existing retirees' pensions and to pension entitlements of future retirees.

Funded pension plans exist for employees in various countries. As a general rule, an individual investment strategy is determined for each of the Covestro Group's defined benefit pension plans taking into account the risk structure of the obligations (especially demographics, the current funded status, the structure of the expected future cash flows, interest sensitivity, biometric risks, etc.), the regulatory environment, and the existing level of risk tolerance or risk capacity. A strategic target investment portfolio is then developed in line with the plan's risk structure, taking capital market factors into consideration. Further determinants include risk diversification, portfolio efficiency, and the need for both a country-specific and a global risk/return profile centered on ensuring the payment of all future benefits. Since the capital investment strategy for each pension plan is always developed individually in light of the plan-specific conditions listed above, the investment strategies for different pension plans may vary considerably. The investment strategies are generally geared less toward maximizing absolute returns and more toward ensuring that the pension commitments can be financed with a sufficient degree of probability. Risk management systems are used to simulate stress scenarios and perform other risk analyses (e.g., value at risk) for the plan assets.

In addition to investment strategies tailored to the obligations, funding in the form of regular or unscheduled contributions is also an effective instrument for reducing risk. Potential funding measures for pension obligations are therefore selected taking specific national regulatory requirements and liquidity into account. If an unscheduled contribution is made, the funded status may increase significantly under certain circumstances and thereby reduce the volatility of the net defined benefit liability recognized. As a consequence the level of liability-driven investments in plan assets can be further increased. In addition, the expected future liability on operating cash flows is reduced due to the increase in plan assets that are available to settle pension payments.

Bayer-Pensionskasse VVaG, Leverkusen (Germany), (Bayer-Pensionskasse) constitutes a major pension plan for Covestro. It has been closed to new members since January 1, 2005. This legally independent fund operates as a life insurance company and is therefore subject to the German Insurance Supervision Act (VAG). The benefit obligations covered by Bayer-Pensionskasse comprise retirement, surviving dependents', and disability pensions. It is financed with contributions from active members and their employers. The company contribution is a certain percentage of the employee contribution. This percentage is the same for all participating employers and is set by agreement between the plan's executive committee and supervisory board, acting on a proposal from the responsible actuary. It takes into account the differences between the actuarial estimates and the actual values for the factors used to determine liabilities and contributions. Bayer AG, Leverkusen (Germany), may adjust the company contribution in agreement with the plan's executive committee and supervisory board, acting on a proposal from the responsible actuary. The plan's liability is governed by Section 1, Paragraph 1, Sentence 3 of Germany's Occupational Pensions Act (BetrAVG). This means that if the pension plan exercises its right under the articles of association to reduce benefits, each participating employer has to make up the resulting difference.

Covestro is not liable for the obligations of other participating employers, even if they cease to participate in the plan.

Pension entitlements were granted via Rheinische Pensionskasse VVaG, Leverkusen (Germany), (Rheinische Pensionskasse) between January 1, 2005, and December 31, 2020. It has been closed to new members since January 1, 2021. Future pension payments from this plan are based among other aspects on contributions and the return on plan assets; a guaranteed interest rate applies.

The Bayer-Pensionskasse and Rheinische Pensionskasse pension obligations are classified as multi-employer plans as defined by IAS 19 (Employee Benefits). A defining characteristic of multi-employer plans is that assets from various employers not under common control are pooled at plan level and used to collectively grant pension benefits to employees. Allocation mechanisms that would permit an exact distribution of the plan assets managed by the pension plan to individual employers often do not exist, as in the case of Bayer-Pensionskasse and Rheinische Pensionskasse. Covestro therefore applies an estimation method that is adequately suited to this purpose to calculate its proportional share of the assets of these pension plans.

Pension entitlements for newly hired employees have been granted by Pensionplan2021 since January 1, 2021. This is a funded company pension plan. Contributions are invested in an age-based investment model at the individual employee level. Future pension payments are determined based on the contributions paid in and the return achieved. The pension entitlements are managed by Metzler Trust e.V., Frankfurt am Main (Germany) (Metzler Trust). Individuals employed at Covestro prior to January 1, 2021, who acquired pension entitlements via Rheinische Pensionskasse are entitled to switch to Pensionsplan2021.

Metzler Trust is also used as a pension vehicle for further obligations than Pensionplan2021. This vehicle covers further retirement provision arrangements for German employees of the Covestro Group, such as the conversion of salary entitlements into pension entitlements, pension obligations, and components of other direct commitments. Metzler Trust covers the majority of funded pension commitments in Germany. In this context, approximately 44% (previous year: approximately 35%) of the investment total is subject to ESG (environmental, social, and governance) criteria.

The defined benefit pension plans in the United States have been frozen for some years, and no significant new entitlements can be earned under these plans. The assets of all the U.S. pension plans are held by a master trust for reasons of efficiency. The applicable regulatory framework is based on the Employee Retirement Income Security Act (ERISA). Covestro continues to bear the actuarial risks such as investment risk, interest rate risk, and longevity risk.

The other post-employment benefit obligations outside Germany are mainly related to retirees' health care benefit payments in the United States.

The fair value of the plan assets to fund pensions and other post-employment benefit obligations was as follows:

Fair value of plan assets as of December 31

	Pension obligations				Other post-employment obligations	
	Germany		Other countries		Other countries	
	2021	2022	2021	2022	2021	2022
	€ million	€ million	€ million	€ million	€ million	€ million
Plan assets based on quoted prices in active markets						
Real estate and special real estate funds	–	–	6	7	–	–
Equities and equity funds	495	317	51	42	–	–
Callable debt instruments	–	–	10	7	–	–
Noncallable debt instruments	727	759	45	35	–	–
Bond funds	415	344	253	174	–	–
Cash and cash equivalents	759	361	10	8	–	–
Other	–	–	10	3	–	–
	2,396	1,781	385	276	–	–
Plan assets for which quoted prices in active markets are not available						
Real estate and special real estate funds	194	275	–	–	–	–
Equities and equity funds	70	100	–	–	–	–
Callable debt instruments	224	173	–	–	–	–
Noncallable debt instruments	303	228	–	–	–	–
Bond funds	–	–	–	–	–	–
Derivatives	–	–	–	–	–	–
Cash and cash equivalents	–	–	–	–	–	–
Other	66	194	118	100	2	3
	857	970	118	100	2	3
Total plan assets	3,253	2,751	503	376	2	3

No properties leased by Group companies were included in the fair value of the domestic plan assets. Likewise, there were no Covestro shares or bonds held through funds. Other plan assets comprise mortgage loans granted, other receivables, and qualified insurance policies.

Risks

The risks from defined benefit plans arise partly from the defined benefit obligations and partly from the investment in plan assets. The risks lie in the possibility that higher direct pension payments will have to be made to the beneficiaries and/or that additional contributions will have to be made to plan assets in order to meet current and future pension obligations.

→ For more information, see "Opportunities and Risks" in the Combined Management Report

Demographic/Biometric Risks

Since a large proportion of the defined benefit obligations consists of lifelong pensions or surviving dependents' pensions, longer claim periods or earlier claims may result in higher benefit obligations, higher benefit expenses and/or higher pension payments than previously anticipated.

Investment Risks

If the actual return on plan assets were below the return anticipated on the basis of the discount rate, the net defined benefit liability would increase, assuming there were no changes in other parameters. This could happen as a result of a drop in share prices, increases in market rates of interest, default of individual debtors, or the purchase of low-risk but low-interest bonds.

Interest Rate Risks

Declining capital market interest rates, especially for high-quality corporate bonds, would increase the defined benefit obligation. This effect would be at least proportionately offset by the ensuing increase in the market values of the debt instruments held in plan assets.

Measurement Parameters and their Sensitivities

The bond portfolio consists exclusively of high-quality corporate bonds with a rating of at least AA or AAA. The portfolio does not include any government-guaranteed or secured bonds. The following weighted parameters were used to measure the pension obligations as of December 31 and the expense for pensions and other post-employment benefits in the respective reporting year.

Parameters for benefit obligations

	Germany		Other countries		Total	
	2021	2022	2021	2022	2021	2022
	%	%	%	%	%	%
Pension obligations						
Discount rate	1.20	3.70	2.15	4.55	1.30	3.80
Projected future salary increases	2.75	3.00	2.95	3.30	2.80	3.05
Projected future benefit increases	1.80	2.20	2.75	3.15	1.90	2.35
Other post-employment benefit obligations						
Discount rate	–	–	2.75	5.15	2.75	5.15

In Germany, the Heubeck 2018 G mortality tables were used, in the United States the MP-2021 Mortality Tables. The parameters for measuring the benefit expense are the same as those used to measure the benefit obligations in the most recent annual financial statements.

The rise in projected future benefit increases in Germany to 2.20% (previous year: 1.80%) and in other countries to 3.15% (previous year: 2.75%) as well as the rise in projected future salary increases in Germany to 3.00% (previous year: 2.75%) and in other countries to 3.30% (previous year: 2.95%) reflect the global increases in consumer prices and inflation expectations.

The parameter sensitivities were computed by expert actuaries based on a detailed evaluation similar to that performed to determine the net defined benefit liability. Altering individual parameters by 0.5 percentage points (mortality by 10% per beneficiary) while leaving the other parameters unchanged would have impacted pension and other post-employment benefit obligations as of the end of fiscal 2022 as follows:

Sensitivity analysis of benefit obligations

	Germany		Other countries		Total	
	Increase	Decrease	Increase	Decrease	Increase	Decrease
	€ million	€ million	€ million	€ million	€ million	€ million
Pension obligations						
0.5 percentage points change in discount rate	(222)	251	(21)	23	(243)	274
0.5 percentage points change in projected future salary increases	13	(12)	2	(2)	15	(14)
0.5 percentage points change in projected future benefit increases	148	(135)	2	(1)	150	(136)
10% change in mortality	(72)	80	(8)	9	(80)	89
Other post-employment benefit obligations						
0.5 percentage points change in discount rate	–	–	(6)	6	(6)	6
10% change in mortality	–	–	(3)	3	(3)	3

Sensitivity analysis of benefit obligations (previous year)

	Germany		Other countries		Total	
	Increase	Decrease	Increase	Decrease	Increase	Decrease
	€ million	€ million	€ million	€ million	€ million	€ million
Pension obligations						
0.5 percentage points change in discount rate	(401)	464	(32)	36	(433)	500
0.5 percentage points change in projected future salary increases	28	(26)	3	(3)	31	(29)
0.5 percentage points change in projected future benefit increases	244	(221)	2	(2)	246	(223)
10% change in mortality	(130)	147	(12)	13	(142)	160
Other post-employment benefit obligations						
0.5 percentage points change in discount rate	–	–	(9)	10	(9)	10
10% change in mortality	–	–	(4)	5	(4)	5

Due to their nature as pension benefits, the obligations of Covestro LLC, Pittsburgh, Pennsylvania (USA), in particular, for employees' post-employment health care costs are also recognized under obligations similar to pensions. The valuation of health care costs was based on the assumption that they will increase at a rate of 7% (previous year: 6%), which should gradually decline to 5% (previous year: 5%) by 2034. The following table shows the impact of a one-percentage-point change in the assumed health care cost increase rates:

Sensitivity analysis of health care cost increases

	2021		2022	
	Increase of one percentage point	Decrease of one percentage point	Increase of one percentage point	Decrease of one percentage point
	€ million	€ million	€ million	€ million
Impact on other post-employment benefit obligations	11	(10)	7	(6)

Employer Contributions Made or Expected

The following payments or transfers correspond to the employer contributions made or expected to be made to funded benefit plans:

Employer contributions made or expected

	Germany				Other countries			
	2021	2022 expected	2022	2023 expected	2021	2022 expected	2022	2023 expected
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Pension obligations	531	33	32	33	7	9	9	7
Other post-employment benefit obligations	-	-	-	-	1	-	2	-
Total	531	33	32	33	8	9	11	7

Pensions and other post-employment benefits payable in the future from funded and unfunded plans are estimated as follows:

Future benefit payments

	Payments from plan assets				Payments by the company			
	Pensions		Other post-employment benefits		Pensions		Other post-employment benefits	
	Germany	Other countries	Other countries	Total	Germany	Other countries	Other countries	Total
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
2023	40	33	-	73	50	6	7	63
2024	43	34	-	77	50	6	7	63
2025	46	31	-	77	53	7	7	67
2026	50	31	1	82	56	7	8	71
2027	53	36	-	89	60	8	8	76
2028-2032	316	165	3	484	345	39	42	426

The weighted average term of the pension obligations is 20.8 years (previous year: 20.8 years) in Germany and 9.7 years (previous year: 11.5 years) in other countries. The weighted average term of the obligations for other post-employment benefits in other countries is 10.1 years (previous year: 12.3 years).

21. Other Provisions

The following table shows the changes in the individual provision categories in fiscal 2022:

Changes in other provisions

	Taxes	Environ- mental protection	Restruc- turing	Trade- related commit- ments	Litigations	Personnel commit- ments	Miscella- neous	Total
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
December 31, 2021	3	48	7	18	4	714	66	860
Additions	4	10	2	38	6	276	32	368
Utilization	(3)	(2)	(8)	(16)	(5)	(624)	(33)	(691)
Reversal	(2)	(1)	–	(4)	–	(144)	(31)	(182)
Reclassifications	–	–	–	–	–	(1)	–	(1)
Interest cost	–	–	–	–	–	(9)	–	(9)
Exchange differences	–	2	–	(2)	–	8	2	10
December 31, 2022	2	57	1	34	5	220	36	355
of which noncurrent	–	55	–	–	–	112	17	184

Taxes

Provisions for taxes comprise provisions for other types of non-income taxes amounting to €2 million (previous year: €3 million).

Environmental Protection

Provisions for environmental protection mainly relate to the rehabilitation of contaminated land and recultivation of landfills as well as water protection measures at sites in the United States and Spain.

Restructuring

As of December 31, 2022, provisions for restructuring included €1 million (previous year: €7 million) for severance payments.

Personnel

Personnel-related provisions are mainly those recorded for variable one-time, short-term and long-term incentive payments and other personnel-related provisions.

Long-term Incentive Programs

The Covestro Group's long-term incentive programs entail commitments offered collectively to different groups of employees. As a general rule, all obligations from long-term compensation programs are covered by provisions. As of the reporting date, their amount corresponds to the fair value of the entitlement earned of the respective commitments to the employee groups. All resulting valuation adjustments are recognized in profit or loss.

The Board of Management, senior executives, and other managerial employees at Covestro are entitled to participate in the Prisma long-term, share-based compensation program. A percentage of the employee's annual base salary – based on his/her position – is defined as a target for variable payments (Prisma target opportunity). The payout is calculated by multiplying the Prisma target opportunity by the total shareholder return (total of Covestro's closing stock price* and all of the dividends distributed in the relevant performance period divided by the opening stock price) and the performance of Covestro's stock relative to the STOXX Europe 600 Chemicals index**. In 2021, Prisma was expanded to include a sustainability component that encompasses Covestro's target for reducing annual greenhouse gas emissions [CO₂ equivalents] at the Scope 1 emissions level.

→ See Compensation Report for more information on the LTI sustainability component

* Calculated as the average price for the last 30 days of trading in the relevant performance period.

** STOXX Europe 600 Chemicals: Sector index by the index issuer STOXX; the STOXX Europe 600 includes 600 European companies

The payout is capped at 200% of the Prisma target opportunity. If Covestro's stock were to significantly underperform the STOXX Europe 600 Chemicals index (e.g., if the stock price declined while the index increased in value), Prisma target attainment could amount to zero, in which case there would be no payout. The target achievement for the 2018–2021 tranche amounted to 17.7% and was distributed in the amount of €5 million mainly in January 2022.

The net expense for all long-term incentive programs amounted to €9 million (previous year: €17 million), of which €5 million (previous year: €5 million) was attributable to the Covestment share-based participation program, explained in greater detail in the following section.

The fair value of the Prisma share-based incentive program recognized in the provision amounted to €39 million as of December 31, 2022 (previous year: €40 million). The fair value was calculated using the Monte Carlo simulation method on the basis of the following key parameters pertaining to the reporting date:

Monte Carlo simulation parameters

	Tranche		
	2020	2021	2022
Risk-free interest rate	3.43%	3.29%	3.21%
Stock price volatility	40.68%	34.97%	38.01%
STOXX Europe 600 Chemicals volatility	23.31%	19.14%	22.91%
Correlation between stock price and STOXX Europe 600 Chemicals	0.75	0.70	0.74

Share-Based Participation Program (Covestment)

Under the Covestment program, employees of numerous Group companies could invest a fixed amount of their compensation in Covestro stocks in fiscal 2022, which Covestro supplemented through an employer subsidy. The discount granted for fiscal 2022 was generally 30% of the subscription amount and is set every year. The total individual investment amount was capped at €3,600, depending on the Group company and the employee's position. Overall, 99% of Covestro's global workforce was authorized to participate in Covestment.

Approximately 495,000 shares were purchased by employees at a weighted average share price of €35.57 under the Covestment program in fiscal 2022. Depending on the Group company, the purchased shares are subject to a vesting period of at least one year from the subscription date.

22. Financing and Financial Liabilities

The €5.0 billion Debt Issuance Program launched in the first quarter of 2016 is a key form of external financing. Of the euro bonds issued in March 2016, a fixed-rate tranche with a term until September 2024 (a coupon of 1.75% and a volume of €500 million) was still in the portfolio on the reporting date. The fixed-rate euro bonds issued in 2020 with a total volume of €1.0 billion will mature in February 2026 (a coupon of 0.875% and a volume of €500 million) and in June 2030 (a coupon of 1.375% and a volume of €500 million).

In addition, Covestro published a Green Financing Framework in May 2022, on the basis of which the first green euro bond was issued in November 2022 with a fixed coupon of 4.75% and a volume of €500 million, maturing in November 2028. All the proceeds from the bond issue are to be used to finance sustainable projects.

As of December 31, 2022, the Group had total credit facilities of €2,890 million (previous year: €2,817 million) at its disposal. Of this amount, €2.5 billion is attributable to the five-year syndicated revolving credit facility arranged in March 2020. This credit facility's term has been extended until March 2027 due to the exercising of two options to extend the term by one year in each case. A feature of the credit line is its link to an ESG (environment, social, and governance) rating: The better (worse) the externally calculated ESG score is, the lower (higher) the interest component of the credit facility.

A total of €350 million (previous year: €275 million) of the existing credit facilities was drawn down, while €2,540 million (previous year: €2,542 million) remained unused.

In October 2022, Covestro issued Schuldschein loans in an amount equivalent to approx. €650 million as a new corporate financing instrument, of which a volume equivalent to €552 million was collected in 2022. The issue is denominated in U.S. dollars and euros. There are a total of 10 tranches with terms of three, five, or seven years and with fixed and variable interest rates. The proceeds from the issue will be used for general corporate financing and to replace short-term with long-term liquidity. The Schuldschein loans are likewise linked to an ESG rating.

Another new financing instrument established in August 2022 was the Euro Commercial Paper Programme (ECP), allowing the company to issue notes in different currencies and terms of up to one year on a flexible basis. On the reporting date of December 31, 2022, however, there were no commercial papers in the portfolio that were recognized as other financial liabilities.

Financial liabilities consisted of the following:

Financial liabilities

	Dec. 31, 2021		Dec. 31, 2022	
	Total	Of which current	Total	Of which current
	€ million	€ million	€ million	€ million
Bonds	1,492	–	1,988	–
Liabilities to banks	275	50	922	154
Lease liabilities	761	130	746	135
Liabilities from derivatives	11	11	32	32
Other financial liabilities	2	1	1	–
Total	2,541	192	3,689	321

Maturities of financial liabilities

Maturity	Dec. 31, 2021		Maturity	Dec. 31, 2022	
	€ million			€ million	
2022	192		2023	321	
2023	135		2024	606	
2024	580		2025	583	
2025	293		2026	576	
2026	556		2027	334	
2027 or later	785		2028 or later	1,269	
Total	2,541		Total	3,689	

The majority of the Covestro Group's financial liabilities are unsecured.

Lease liabilities

Lease payments of €890 million (previous year: €893 million) are to be made to the respective lessors in future years; of this amount, the interest component amounts to €142 million (previous year: €132 million). The lease liabilities mature as follows:

Lease liabilities

Maturity	Dec. 31, 2021			Maturity	Dec. 31, 2022		
	Lease payments	Interest component	Lease liabilities		Lease payments	Interest component	Lease liabilities
	€ million	€ million	€ million		€ million	€ million	€ million
2022	150	20	130	2023	155	20	135
2023	154	19	135	2024	127	21	106
2024	96	15	81	2025	99	16	83
2025	81	13	68	2026	92	14	78
2026	69	10	59	2027	114	10	104
2027 or later	343	55	288	2028 or later	303	63	240
Total	893	132	761	Total	890	144	746

23. Other Liabilities

Other liabilities were comprised as follows:

Other liabilities

	Dec. 31, 2021		Dec. 31, 2022	
	Total	Of which current	Total	Of which current
	€ million	€ million	€ million	€ million
Other tax liabilities	59	59	95	95
Deferred income	18	18	18	18
Public grants and subsidies	20	8	27	11
Liabilities to employees	38	34	42	38
Social security liabilities	13	13	18	18
Accrued interest on liabilities	11	11	20	20
Contract liabilities	37	37	56	56
Refund liabilities	116	116	111	111
Miscellaneous liabilities	46	28	41	29
Total	358	324	428	396

Miscellaneous liabilities included €2 million (previous year: €3 million) in liabilities from derivatives.

→ See note 6 "Sales" for further information on contract liabilities.

24. Financial Instruments

24.1 Financial Instruments by Category

The following tables show the carrying amounts and fair values of the individual financial assets and liabilities in accordance with IFRS 9 (Financial Instruments):

Carrying amounts of financial instruments and their fair values as of December 31, 2022

	Measurement according to IFRS 9					
	Carrying amount	Carried at amortized cost	Fair value through other comprehensive income	Fair value recognized in profit or loss	Measurement according to IFRS 16	Fair value
Financial assets						
Trade accounts receivable	2,011	2,011				2,011
Other financial assets	205					
Money market funds	–	–	–	–		–
Loans and bank deposits	128	17	–	111		128
Other investments	24		24	–		24
Receivables under lease agreements	8				8	17
Derivatives that do not qualify for hedge accounting	45			45		45
Other receivables ¹	20	20	–			20
Cash and cash equivalents	1,198	1,198	–	–		1,198
Financial liabilities						
Financial debt	3,689					
Bonds	1,988	1,988		–		1,852
Lease liabilities	746				746	
Liabilities to banks	922	922		–		946
Other financial liabilities	1	1		–		1
Derivatives that do not qualify for hedge accounting	32			32		32
Trade accounts payable	2,016	2,016		–		2,016
Other liabilities ²	170					
Derivatives that do not qualify for hedge accounting	2			2		2
Refund liabilities	111	111		–		111
Miscellaneous other liabilities	57	57		–		57

¹ Other receivables recognized in the consolidated statement of financial position also include nonfinancial assets totaling €541 million.

² Other liabilities recognized in the consolidated statement of financial position also include nonfinancial liabilities totaling €258 million.

Carrying amounts of financial instruments and their fair values as of December 31, 2021

	Measurement according to IFRS 9					
	Carrying amount	Carried at amortized cost	Fair value through other comprehensive income	Fair value recognized in profit or loss	Measurement according to IFRS 16	Fair value
	€ million	€ million	€ million	€ million	€ million	€ million
Financial assets						
Trade accounts receivable	2,343	2,343				2,343
Other financial assets	542					
Money market funds	65	–	–	65		65
Loans and bank deposits	402	393	–	9		402
Other investments	27		27	–		27
Receivables under lease agreements	8				8	19
Derivatives that do not qualify for hedge accounting	40			40		40
Other receivables ¹	30	22	–	8		30
Cash and cash equivalents	649	649	–	–		649
Financial liabilities						
Financial debt	2,541					
Bonds	1,492	1,492		–		1,568
Lease liabilities	761				761	
Liabilities to banks	275	275		–		280
Other financial liabilities	2	2		–		2
Derivatives that do not qualify for hedge accounting	11			11		11
Trade accounts payable	2,214	2,214		–		2,214
Other liabilities ²	172					
Derivatives that do not qualify for hedge accounting	3			3		3
Refund liabilities	116	116		–		116
Miscellaneous other liabilities	53	53		–		53

¹ Other receivables recognized in the consolidated statement of financial position also include nonfinancial assets totaling €480 million.

² Other liabilities recognized in the consolidated statement of financial position also include nonfinancial liabilities totaling €186 million.

The fair values of financial instruments are determined and reported in accordance with IFRS 13 (Fair Value Measurement) on the basis of the fair value hierarchy described below:

Level 1 covers fair values determined on the basis of quoted, unadjusted prices that exist in active markets.

Level 2 comprises fair values determined on the basis of parameters that are observable in an active market.

Level 3 applies to fair values determined using parameters whose input factors are not based on observable market data.

The following table shows the classification of the financial instruments within the three-level fair value hierarchy:

Fair value hierarchy of financial instruments

	Fair value				Fair value			
	Dec. 31, 2021	Level 1	Level 2	Level 3	Dec. 31, 2022	Level 1	Level 2	Level 3
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Financial assets carried at fair value								
Money market funds	65	–	65	–	–	–	–	–
Loans and bank deposits	9	–	–	9	111	–	101	10
Other investments	27	4	–	23	24	2	–	22
Derivatives that do not qualify for hedge accounting	40	–	34	6	45	–	42	3
Other receivables	8	–	–	8	–	–	–	–
Financial assets not carried at fair value								
Receivables under lease agreements	19	–	–	19	17	–	–	17
Financial liabilities carried at fair value								
Derivatives that do not qualify for hedge accounting	14	–	11	3	34	–	32	2
Financial liabilities not carried at fair value								
Bonds	1,568	1,568	–	–	1,852	1,852	–	–
Liabilities to banks	280	–	280	–	946	–	946	–
Other financial liabilities	2	–	2	–	1	–	1	–

Reallocation between the different levels of the fair value hierarchy takes place at the end of the reporting period in which the change occurred. During the fiscal year, no financial instruments were reallocated to a different level of the fair value hierarchy.

Because of the generally short maturities of cash and cash equivalents, loans and bank deposits, trade accounts receivable and payable, and other receivables and liabilities, their carrying amounts do not significantly differ from the fair values.

The fair value of the bonds issued by Covestro AG is based on quoted, unadjusted prices in active markets and therefore assigned to Level 1 of the fair value hierarchy. The fair value of some of the other investments is also based on quoted prices in active markets (Level 1).

The fair values stated for noncurrent financial assets and liabilities are the present values of the respective future cash inflows or outflows. These are determined by discounting the cash flows at a reporting-date interest rate that takes into account the term of the assets or liabilities and the creditworthiness of the counterparty. For this reason, these values are assigned to Level 2 of the fair value hierarchy.

The fair values of derivatives for which no publicly quoted market prices exist are determined using valuation techniques based on observable market data as of the reporting date (Level 2). Credit value adjustments and debt value adjustments are determined to allow for both the contracting party's credit risk and Covestro's own credit risk. The forward exchange contracts are measured individually at their respective forward rates or prices on the balance sheet date. Forward rates and prices are based on spot rates and prices, taking into account forward premiums and discounts.

Where fair values are estimated (in whole or in part) on the basis of unobservable inputs, they are reported within Level 3 of the fair value hierarchy. The fair values of noncurrent receivables under lease agreements are calculated on the basis of interest curves observable in the market. Additionally, a discount for cash flows that are very far in the future is applied as an unobservable factor.

Covestro works with and invests in start-ups within the framework of the Covestro Venture Capital (COVeC) approach, which was newly developed in fiscal 2020. Investments associated with COVeC activities are recognized either as debt instruments at fair value through profit and loss or as other financial investments at fair value directly in equity, depending on the contractual design. The fair value is calculated as the present value of the future cash flows estimated based on available performance indicators. The cash flows are discounted at the current interest rate for the appropriate term on the reporting date and reflecting the creditworthiness of the venture capital company. The main input factors are not based on observable market data (Level 3). The estimated fair value of the debt instruments classified in Level 3 would rise (fall) if the expected cash inflows were to be higher (lower) or if the risk-adjusted discount rate were to be lower (higher).

Other financial investments are recognized at fair value directly in equity because they are held for the long term for strategic reasons. The fair value of some of the other investments is based on quoted prices in active markets (Level 1). Where there are no quoted, unadjusted prices in an active market for identical or similar instruments, and there is no suitable valuation method where all major input factors are based on observable market data, the fair value of the other investments is determined using a market price-oriented valuation method where the main input factors are not based on observable market data (Level 3). The valuation of certain other investments is based on available performance indicators as well as on market valuation multipliers. The estimated fair value of the equity instruments categorized within Level 3 would rise (fall) if the multiple applied were to be greater (smaller).

Further, the fair values of embedded derivatives are determined on the basis of unobservable input factors (Level 3). They are separated from their respective host contracts, which are regularly purchase agreements relating to the operational business. The embedded derivatives cause the cash flows from the contracts to vary with fluctuations in exchange rates, or regional and industry-specific price indices, for example. The internal measurement of embedded derivatives is mainly performed using the discounted cash flow method, which is based on unobservable inputs. These include prices or price indices derived from market data. The estimated fair value of the embedded derivative would rise (fall) if the expected payment flows were to be higher (lower) as a result of fluctuations in exchange rates or prices.

The table below shows the changes in Level 3 financial instruments:

**Changes in the net amount of financial assets and liabilities
recognized at fair value based on unobservable inputs**

	2021	2022
	€ million	€ million
Net carrying amounts, Jan. 1	22	43
Gains (losses) recognized in profit or loss	2	(9)
of which related to assets/liabilities recognized in the statement of financial position	2	(1)
Gains (losses) recognized outside profit or loss	14	(1)
Additions of assets (liabilities)	5	–
Net carrying amounts, Dec. 31	43	33

The gains and losses from Level 3 financial assets and liabilities are reported as follows:

- Gains and losses from embedded derivatives recognized in profit or loss are reported in other operating expenses or income;
- Gains and losses from the contingent purchase price receivable from divestments and debt instruments recognized in profit or loss are reported in other financial result;
- Gains and losses from other financial investments are reported in other comprehensive income from equity instruments.

Other financial investments amount to €24 million (previous year: €27 million), of which €18 million (previous year: €18 million) was attributable to Hydrogenious LOHC Technologies GmbH, Erlangen (Germany), and €3 million (previous year: €4 million) to Hi-Bis GmbH, Bitterfeld-Wolfen (Germany). In fiscal 2022, the Covestro Group received dividends of €2 million (previous year: €2 million) from other financial investments, of which €1 million (previous year: €2 million) was attributable to Hi-Bis GmbH.

As part of efforts to improve supplier relationships, a small number of Covestro's suppliers participate in prefinancing programs in which an external financial intermediary pays the invoice underlying the current trade payables to the supplier before it is due in each case. Such scenarios could, in particular, lead to a change in the presentation of the original liability in the consolidated financial statements if the nature, function, and risk of the liability subject to the financing program differs from other trade payables. In the case of the current programs, however, the underlying conditions do not result in any changes to the presentation in the consolidated financial statements. For this reason, the corresponding amounts continue to be reported under trade accounts payable. As of the reporting date, only a minor share of outstanding trade accounts payable is attributable to such financing programs.

The classification of income, expenses, gains, and losses from financial instruments by measurement category in accordance with IFRS 9 is shown in the table below:

Net result by measurement category in accordance with IFRS 9

	2021	2022
	€ million	€ million
Financial assets carried at amortized cost	15	84
of which net interest	3	6
Equity instruments measured at fair value through other comprehensive income	2	2
of which net interest	–	–
Financial instruments measured at fair value through profit or loss	33	(78)
of which net interest	12	(6)
Financial liabilities carried at amortized cost	(87)	(97)
of which net interest	(53)	(62)

24.2 Financial Risk Management and Information on Derivatives

Capital management

The main purpose of financial management is to ensure solvency at all times, continuously optimize capital costs, and reduce the risks of financing measures. Financial management for the Covestro Group is performed centrally by Covestro AG.

Covestro AG currently holds a Baa2 investment-grade rating with a stable outlook from the rating agency Moody's Investors Service, London (United Kingdom). Covestro uses the debt ratios published by prominent rating agencies in managing its capital and pursues a conservative debt policy along with a balanced financing portfolio. This is based primarily on bonds, Schuldschein loans, commercial papers, syndicated credit facilities, and bilateral loan agreements.

Credit risk

Credit risk is the risk of a loss for the Covestro Group when a counterparty is unable to meet its payment obligations arising from a financial instrument as contractually stipulated. Payment obligations to the Covestro Group primarily comprise trade accounts receivable, debt instruments, other financial assets, and contract assets.

The carrying amount of the financial assets and the contract assets represents the maximum credit risk exposure.

The impairment loss for financial assets and contract assets recognized during the year resulted almost exclusively from impairment losses on trade accounts receivable. Net impairment losses amounted to €9 million (previous year: net reversals of impairment losses of €6 million) in the reporting year.

Trade accounts receivable and contract assets

The credit risk the Covestro Group is exposed to through its trade accounts receivable and contract assets depends largely on the creditworthiness of the customer. In order to manage this risk, the Covestro Group's Credit Management implemented a process that uses internal and external data to assess each customer in terms of its creditworthiness. Quantitative and qualitative data are evaluated during the assessment process. The assessment reflects financial data, ratings, payment history, and data on the customer's environment. The customer is allocated to one of five risk categories on the basis of the final assessment. The categories range from A to E, with risk category A representing the most creditworthy companies and risk category E the least.

Meaningful data is used to determine an expected loss rate for each risk category. Data such as default probabilities from rating agencies and credit insurance firms, historical impairment losses recognized by the Covestro Group, and the empirical data from Credit Management are used to determine the expected loss rates. In addition, forward-looking information such as the country rating is also used in determining the expected loss rates. The expected and actual losses are compared every year (backtesting) to validate the method.

The Russian war against Ukraine and the resulting fundamental shift in the geopolitical situation led to a massive increase in energy and certain raw material prices in fiscal 2022, particularly in Europe, as well as to higher inflation and weaker economic growth. To accordingly reflect the increased credit risk attributable to this development in the measurement of trade accounts receivable and contract assets, an additional risk premium was applied to the creditworthiness of customers in the relevant regions as determined on the basis of the method described above. An affected customer may consequently be assigned to a worse risk category, with the corresponding receivables then being subjected to greater impairment.

The following table presents the gross carrying amounts and the expected losses for trade accounts receivable and contract assets:

Expected credit loss by category as of December 31

2022	Cluster					Total
	A	B	C	D	E	
Expected loss rate (%)	0.01	0.03	0.12	0.70	6.00	
Gross amount (€ million)	291	755	737	249	49	2,081
Expected loss (€ million)	-	-	(1)	(2)	(3)	(6)
2021	A	B	C	D	E	Total
Expected loss rate (%)	0.01	0.03	0.12	0.70	6.00	
Gross amount (€ million)	665	724	823	167	30	2,409
Expected loss (€ million)	-	-	(2)	(1)	(2)	(5)

The accumulated impairment losses amounted to €30 million (previous year: €25 million) for those customers that the Covestro Group considers credit impaired on the basis of this assessment. The corresponding gross carrying amount was €31 million (previous year: €25 million). Indicators for customers being credit impaired include significant financial difficulties of the customer and a breach of contract such as default or delinquency. Determining that a customer is credit impaired does not occur automatically when payments are overdue for more than 90 days but is instead always based on the individual assessment conducted by Credit Management.

Total impairment losses for trade accounts receivable and contract assets changed as follows:

Reconciliation of expected credit loss

	2021	2022
	€ million	€ million
Valuation allowances, Jan. 1	(35)	(29)
Net remeasurement impairment loss	6	(9)
Write offs	1	2
Foreign exchange differences	(1)	-
Valuation allowances, Dec. 31	(29)	(36)

The Covestro Group limits the credit risk exposure from trade accounts receivable by stipulating the shortest payment terms possible. In addition, the Covestro Group has a widely diversified customer portfolio. In order to avoid concentration of risk, customer limits are set, regularly monitored, and exceeded only in agreement with Credit Management.

Receivables of €25 million (previous year: €34 million) are secured mainly by letters of credit.

Debt instruments

The Covestro Group generally pursues a conservative investment policy based on a strategy of maintaining liquidity and safeguarding value. Consequently, investments are limited to counterparties with investment-grade ratings, simple debt instruments, and short-term investment horizons. Credit risks, particularly concentration of risk with individual counterparties, are managed by means of a Group-wide limit system in conjunction with ongoing monitoring. Covestro also acts as a start-up investor as part of the Covestro Venture Capital (COVeC) approach newly developed in fiscal 2020. Investments associated with COVeC activities are recognized either as debt instruments at fair value through profit and loss or other financial investments at fair value directly in equity, depending on the contractual design.

The general approach for calculating and recording impairment losses in accordance with IFRS 9 applies to all debt instruments, loan commitments, and financial guarantees recognized at amortized cost or at their fair values directly in equity. Covestro uses a general, three-stage approach for measuring the risk provision for expected credit losses as follows:

- Stage 1: The risk provision is calculated as the 12-month expected credit loss, whereby the default probability is derived from historical data published by recognized rating agencies. The Covestro Group assumes that investment-grade ratings imply a low level of credit risk.
- Stage 2: The amount of the risk provision is measured as the expected credit loss over the lifetime of the debt instrument if the credit risk has increased significantly since its initial recognition. Changes in credit risk are assessed using the actual payment history and external information. Whenever available, Covestro uses credit default swap prices and other forward-looking information such as ratings outlooks in addition to external ratings.
- Stage 3: Covestro reclassifies a debt instrument to Level 3 if it determines that its creditworthiness is impaired. This is the case, for instance, when a counterparty has obtained insolvency status, when there is sufficient information available to show that the counterparty has applied for insolvency proceedings, or when debt instruments are more than 90 days overdue.

As in the previous year, Covestro did not reclassify any debt instruments between the levels of the general impairment model during the fiscal year. The Covestro Group held no collateral for debt instruments in fiscal 2022 or in the previous year.

Because of the low credit risk profile, the Covestro Group is not exposed to significant credit risk from debt instruments. For fiscal 2022 and for the previous year, the risk provision calculated using the general approach is immaterial both overall and for the individual stages.

Currency risks

Currency opportunities for and risks to the Covestro Group result from changes in exchange rates and the related changes in the value of financial instruments (including receivables and payables) and future cash inflows and outflows denominated in foreign currencies. Material receivables and payables in liquid currencies from operating and financial activities are generally fully hedged through forward exchange contracts. A value-at-risk approach is used to manage foreign currency exposures arising from planned receivables and liabilities. As in the previous year, the planned foreign currency exposure was not hedged. It will be hedged using forward contracts if the foreign currency risk increases significantly. The extent of the currency risk is presented below by means of a sensitivity analysis.

The currency risk shown in the sensitivity analysis results from the following:

- The unsecured portion of receivables and payables in nonfunctional currencies,
- Unsecured bank deposits and liabilities to banks in nonfunctional currencies, and
- Currency risks from embedded derivatives.

Sensitivities were determined based on a hypothetical scenario in which the euro depreciates by 10% against all other currencies compared with the year-end exchange rates. Under this scenario, the estimated hypothetical gains recognized in profit or loss as of December 31, 2022, would have totaled €6.2 million (previous year: €5.9 million). The table below shows the distribution of these effects among the individual currencies:

Sensitivity by currency

Currency	2021		Currency	2022	
	€ million			€ million	
USD	2.8		CNY	3.0	
CNY	1.4		USD	2.1	
AUD	0.6		CZK	0.3	
Other	1.1		Other	0.8	
Total	5.9		Total	6.2	

Liquidity risk

Liquidity risk is the risk of not being able to meet existing or future payment obligations. The liquidity status of all material Group companies is continuously planned and monitored. Liquidity is secured via cash pooling agreements as well as internal and external financing. The syndicated, revolving credit facility of €2.5 billion, which is available through March 2027, particularly provides additional financial flexibility.

The liquidity risks to which the Covestro Group was exposed from its financial instruments can be divided into obligations for interest and repayment installments on financial liabilities, payment obligations arising from derivatives and loan commitments. The following tables show the maturity structure of the nondiscounted contractually agreed payments arising from these line items:

Maturity analysis of financial liabilities and derivative financial instruments

	Carrying amount	Contractual cash flows					
	Dec. 31, 2022	2023	2024	2025	2026	2027	after 2027
	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Financial liabilities							
Bonds	1,988	44	544	35	535	31	1,044
Liabilities to banks	922	179	27	526	11	242	41
Lease liabilities	746	155	127	99	92	114	303
Other financial liabilities	1	-	-	-	-	-	1
Trade accounts payable	2,016	2,016	-	-	-	-	-
Other liabilities							
Accrued interest on liabilities	20	20	-	-	-	-	-
Refund liabilities	111	111	-	-	-	-	-
Miscellaneous other liabilities	37	24	2	-	-	-	11
Liabilities from derivatives							
Derivatives that do not qualify for hedge accounting	34	34	-	-	-	-	-
Receivables from derivatives							
Derivatives that do not qualify for hedge accounting	45	45	-	-	-	-	-
Loan commitments	-	117	-	-	-	-	-
	Carrying amount	Contractual cash flows					
	Dec. 31, 2021	2022	2023	2024	2025	2026	after 2026
	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Financial liabilities							
Bonds	1,492	20	20	520	11	511	528
Liabilities to banks	275	51	1	1	226	-	-
Lease liabilities	761	150	154	96	81	69	343
Other financial liabilities	2	1	-	-	-	-	1
Trade accounts payable	2,214	2,214	-	-	-	-	-
Other liabilities							
Accrued interest on liabilities	11	11	-	-	-	-	-
Refund liabilities	116	116	-	-	-	-	-
Miscellaneous other liabilities	42	26	4	-	-	-	12
Liabilities from derivatives							
Derivatives that do not qualify for hedge accounting	14	13	1	-	-	-	-
Receivables from derivatives							
Derivatives that do not qualify for hedge accounting	40	37	3	-	-	-	-
Loan commitments	-	219	-	-	-	-	-

In addition to Covestro's recognized nonderivative liabilities and derivative financial instruments, Covestro AG is obligated, under certain conditions, to grant initial funding loans to Bayer-Pensionskasse VVaG, Leverkusen (Germany), and Rheinische Pensionskasse VVaG, Leverkusen (Germany), which may lead to payments by Covestro AG in subsequent years. The pension funds requested loans in the amount of €102 million in December 2022, reducing the corresponding obligation to €117 million as of December 31, 2022 (previous year: €219 million). This is reflected in the loan commitments shown in the table above.

→ See note 25 "Contingent Liabilities and Other Financial Commitments."

In this analysis, foreign currencies were translated at closing rates. Derivative financial instruments are reported as net amounts.

Interest rate risks

Interest rate opportunities for and risks to the Covestro Group result from changes in capital market interest rates, which could lead to changes in the fair value of fixed-rate financial instruments and in interest payments in the case of floating-rate instruments. To minimize adverse effects, interest rate risk is managed centrally based on an optimized debt maturity structure.

A sensitivity analysis based on our net floating-rate receivables and payables position at the end of fiscal 2022, taking into account the interest rates relevant to our receivables and payables in all principal currencies, produced the following result: A hypothetical increase in the interest rates by 100 basis points or one percentage point would (assuming currency exchange rates remain constant) result in an increase in interest expense of €16.3 million (previous year: €3.6 million).

Raw Material Price Risks

The Covestro Group requires significant quantities of different forms of energy and petrochemical feedstocks for its production processes. Procurement prices for energy and raw materials may fluctuate significantly. Important raw materials are procured on the basis of long-term supply agreements and active supplier management to minimize substantial price fluctuations. During the past fiscal year, derivative financial instruments were not used to hedge raw material price risks.

Derivatives

As of the reporting date, the nominal volume of the forward exchange contracts used to hedge currency risk amounted to €2,914 million (previous year: €2,822 million). Other market risks are not hedged as of the reporting date.

Covestro has entered into master netting or similar agreements for derivative financial instruments. These take effect in particular in the event of the insolvency of one of the contractual partners involved. The derivative financial instruments covered by netting agreements from the perspective of the Covestro Group are presented in the table below:

Disclosures for netting of financial assets and liabilities as of December 31

	Gross amounts of financial assets / liabilities	Net amounts of financial assets / liabilities presented in the balance sheet	Balance sheet amounts eligible for netting covered by netting agreements	Net amounts after possible netting
	€ million	€ million	€ million	€ million
2022				
Receivables from derivatives	42	42	2	40
Liabilities from derivatives	32	32	2	30
2021				
Receivables from derivatives	34	34	4	30
Liabilities from derivatives	11	11	4	7

25. Contingent Liabilities and Other Financial Commitments

Contingent Liabilities

The following table shows contingent liabilities from warranty agreements and other contingent liabilities as of the reporting date:

Contingent liabilities

	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million
Warranty contracts	4	4
Other contingent liabilities	5	8
Total	9	12

Other Financial Commitments

Other financial obligations consisted of the following:

Other financial commitments

	Dec. 31, 2021	Dec. 31, 2022
	€ million	€ million
Orders already placed for started or planned investment projects	335	304
Loan commitments to pension funds	219	117
Total	554	421

Some of the pension obligations allocable to the Covestro Group are funded through pension institutions used jointly with other companies (especially Bayer AG, Leverkusen (Germany)). In such cases, it can generally be contractually ensured that Covestro participates accordingly in funding measures that serve to guarantee adequate funding status and/or adequate solvency capital of these pension institutions for the long term. To this end, Covestro AG agreed to grant interest-bearing loans of up to €208 million to Bayer-Pensionskasse VVaG, Leverkusen (Germany), and up to €11 million to Rheinische Pensionskasse VVaG, Leverkusen (Germany), for the effective initial fund to be drawn down as required. Upon drawdown of the initial fund loan, the loan commitments to the pension funds were reduced by €102 million to €117 million as of December 31, 2022 (previous year: €219 million).

→ See note 28.1 "Related Companies."

In fiscal 2022, Covestro received government grants on the basis of the guideline entitled "Subsidies for indirect CO₂ costs" published by the German Federal Ministry for Economic Affairs and Climate Action on September 1, 2022; these subsidies are subject to specific measures to improve energy efficiency being carried out in accordance with section 4.2.1a of this guideline. These requirements must be met by no later than December 31, 2024 and Covestro expects to be able to meet these requirements.

26. Legal Risks

As a company with international operations, the Covestro Group is exposed to numerous legal risks, particularly in the areas of product liability, competition and antitrust law, patent disputes, tax law, environmental law, and compliance issues such as corruption and export control. The outcome of any current or future proceedings cannot be predicted. It is therefore possible that legal judgments or regulatory decisions or future settlements could give rise to expenses that are not covered, or not fully covered, by insurers' compensation payments and could significantly affect the Covestro Group's earnings.

Legal proceedings currently considered to involve material risks are outlined below. The legal proceedings referred to do not necessarily represent an exhaustive list:

Carbon Monoxide Pipeline from Dormagen to Krefeld-Uerdingen

The carbon monoxide pipeline is intended to connect the chemical production sites at Dormagen (Germany) and Krefeld-Uerdingen (Germany) and complement the network already existing between Dormagen and Leverkusen (Germany). The aim is to ensure a safe and reliable supply of carbon monoxide to and across all sites. Although the pipeline was almost completed by the end of year 2009, it cannot currently be brought into operation because of ongoing court proceedings. Following confirmation by the Düsseldorf Administrative Court in the year 2011 that there were no grounds to challenge the material aspects of the planning permission decision, in particular the safety of the materials used and the legal conformity of the relevant pipeline act (Rohrleitungsgesetz), the plaintiffs and the regional government against which legal proceedings had been instituted lodged appeals before the Higher Administrative Court for the state of North Rhine-Westphalia in Münster (Higher Administrative Court). In the year 2014, the Higher Administrative Court raised no objections in principle to the safety and routing of the pipeline, but questioned the constitutionality of the pipeline act which forms the legal basis for the project. On December 21, 2016, Germany's Federal Constitutional Court dismissed the corresponding constitutionality question referred to it by the Higher Administrative Court as inadmissible and confirmed the legal opinion of the Covestro Group. Subsequently, the Higher Administrative Court again considered the facts of the appeal and, in a decision rendered on August 31, 2020, dismissed the actions against the planning permission decision. In addition, the Higher Administrative Court rejected an appeal against its ruling. The plaintiffs then filed a complaint against the denial of leave to appeal with the Federal Administrative Court in Leipzig in February 2021. The German Federal Constitutional Court dismissed the denial of leave to appeal on December 14, 2021. The judgment by the Higher Administrative Court is therefore final. Seven actions against the planning permission decision are still pending at Düsseldorf Administrative Court which could now proceed on the basis of the final judgment by the Higher Administrative Court.

Civil Class Action Lawsuits over Diisocyanates (in the United States)

On July 9, 2018, Covestro LLC, Pittsburgh, Pennsylvania (United States) – as one of numerous other defendants – was served the first of now 12 class action lawsuits initiated by various U.S. diphenylmethane diisocyanate (MDI) and toluene diisocyanate (TDI) customers. The plaintiffs allege that the defendants have violated various provisions of the Sherman Antitrust Act since January 1, 2015, by acting in coordination to limit production capacities of MDI and TDI and, at the same time, raising prices for these products in the market. On October 3, 2018, the Judicial Panel on Multidistrict Litigation ruled that all class action lawsuits in pretrial proceedings would be centralized in the District Court for the Western District of Pennsylvania. Based in essence on the same assertions and the violations of federal consumer protection and antitrust laws allegedly resulting from them, the attorney general of the state of Mississippi filed a separate civil complaint against Covestro LLC and numerous other defendants on behalf of the state and its citizens in September 2019. In November 2020, the parties suspended these lawsuits without prejudice for a period of two years. Owing to the time which has passed, the suspension of the limitation period agreed at the time with regard to the claims of the state and its citizens expired again in November 2022. Covestro currently considers these claims without merit and will therefore use all legal means to defend itself against these allegations – also in light of the official conclusion in November 2018 of the six-month investigation by the U.S. Department of Justice into possible anticompetitive practices in relation to MDI. The case is currently still in the discovery phase.

Other Information

27. Notes to the Statement of Cash Flows

27.1 Cash Flows from Operating Activities

The net cash inflow from operating activities of €970 million (previous year: €2,193 million) reflects the operating surplus and also takes into account changes in working capital and other noncash transactions.

The year-over-year decrease in cash flows from operating activities of €1,223 million (– 55.8%) was mainly the result of a €1,468 million decrease in EBITDA, which was partially offset by a €214 million reduction in cash outflows from working capital and an €8 million decrease in income tax payments.

27.2 Cash Flows from Investing Activities

Net cash outflow for investing activities in 2022 amounted to €477 million (previous year: €1,995 million).

This was primarily attributable to cash outflows for additions to property, plant, equipment and intangible assets of €832 million (previous year: €764 million) and cash outflows for noncurrent financial assets of €124 million. Cash inflows from other current financial assets in the amount of €374 million (previous year: €188 million) had an offsetting effect. The previous year was characterized, in particular, by cash outflows for acquisitions less cash acquired for the takeover of the RFM business in the amount of €1,469 million.

27.3 Cash Flows from Financing Activities

The net cash inflow from financing activities amounted to €64 million in 2022 (previous year: outflow of €965 million). Net borrowing amounted to €995 million (previous year: net credit repayment in the amount of €624 million). Short-term borrowing and debt repayment were netted.

There was an outflow of €150 million (previous year: €0 million) in 2022 for the acquisition of treasury shares as part of Covestro AG's share buyback program. The issuance of treasury shares concerns shares (€8 million) (previous year: €2 million) issued to employees in the context of the Covestment share-based participation program.

In April 2022, a dividend totaling €651 million (previous year: €251 million) was paid to Covestro AG shareholders.

The interest paid totaling €131 million (previous year: €81 million) reflected in cash flows from financing activities relates mainly to forward exchange contracts used to hedge foreign currency risks of €63 million (previous year: €20 million), lease liabilities of €25 million (previous year: €26 million), and bonds of €23 million (previous year: €23 million).

Reconciliation of financial debt in fiscal 2022

	Noncash changes							Carrying amounts Dec. 31, 2022 € million
	Carrying amounts Dec. 31, 2021 € million	Cash changes € million	Changes due to exchange rate movements € million	Changes in measurement € million	Acquisitions (IFRS 3) € million	Lease contracts € million	Other changes € million	
Bonds	1,492	494	–	2	–	–	–	1,988
Liabilities to banks	275	652	(5)	–	–	–	–	922
Lease liabilities	761	(160)	14	–	–	131	–	746
Other financial liabilities	2	9	–	–	–	–	(10)	1
Financial debt¹	2,530	995	9	2	–	131	(10)	3,657

¹ Excluding forward exchange contracts used to hedge currency risks

Reconciliation of financial debt in fiscal 2021

	Carrying amounts Dec. 31, 2020	Cash changes	Noncash changes				Carrying amounts Dec. 31, 2021
			Changes due to exchange rate movements	Changes in measurement	Acquisitions (IFRS 3)	Lease contracts	
	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Bonds	1,990	(500)	–	2	–	–	1,492
Liabilities to banks	227	19	–	–	29	–	275
Lease liabilities	672	(143)	31	–	4	197	761
Other financial liabilities	1	–	–	–	–	1	2
Financial debt¹	2,890	(624)	31	2	33	197	2,530

¹ Excluding forward exchange contracts used to hedge currency risks

28. Related Companies and Persons

28.1 Related Companies

Related entities as defined in IAS 24 (Related Party Disclosures) are those legal entities that are able to exert at least significant influence on Covestro AG and its subsidiaries or over which Covestro AG or its subsidiaries exercise control or have at least a significant influence, or which are controlled by a related person or a close family member of such a person. These include nonconsolidated subsidiaries, joint ventures and associated companies, post-employment benefit plans, and other related parties.

Receivables from and liabilities to related parties

	Dec. 31, 2021		Dec. 31, 2022	
	Receivables	Liabilities	Receivables	Liabilities
	€ million	€ million	€ million	€ million
Nonconsolidated subsidiaries and associates	–	6	1	4
Associates accounted for using the equity method	19	–	–	9
Post-employment benefit plans	–	–	101	–

Receivables from pension plans resulted from initial funding loans granted in the amount of €101 million (previous year: €0 million). Covestro AG has agreed to provide Bayer-Pensionskasse VVaG, Leverkusen (Germany), with an interest-bearing initial funding loan of up to €208 million and Rheinische Pensionskasse VVaG, Leverkusen (Germany), with an interest-bearing initial funding loan of up to €11 million, both at their request. The pension funds are entitled to draw down amounts necessary to meet their regulatory solvency requirements at any time up to the amounts disclosed. The outstanding receivables are subject to a five-year interest rate adjustment mechanism. Following the drawdown of the initial funding loans in December 2022, loan commitments to the pension funds decreased by €102 million to €117 million as of December 31, 2022 (previous year: €219 million). The loan commitments to the pension funds are recognized as other financial obligations.

→ See note 25 "Contingent Liabilities and Other Financial Commitments."

Sales and purchases of goods and services to/from related parties

	2021		2022	
	Sales of goods and services	Purchases of goods and services	Sales of goods and services	Purchases of goods and services
	€ million	€ million	€ million	€ million
Nonconsolidated subsidiaries and associates	48	67	45	65
Associates accounted for using the equity method	31	835	18	801

The goods and services received from associated companies accounted for using the equity method mainly resulted from the ongoing business operations with PO JV, LP, Houston, Texas (United States). Covestro benefits from fixed long-term supply quotas/volumes of propylene oxide (PO) from this company's production.

→ See note 15 "Investments Accounted for Using the Equity Method."

Receivables from and payables to related parties mainly relate to leases and financing arrangements, supply and service relationships, and other transactions. No impairment losses were recognized on receivables from related parties in the reporting year or in the previous year.

The services purchased from other related companies and persons comprise consulting services for Supervisory Board and Works Council elections priced at arm's length. In the reporting year 2022, services amounting to €147 thousand (previous year: €175 thousand) were purchased. There were no liabilities as of December 31, 2022 (previous year: €23 thousand).

28.2 Related Persons

Related persons as defined in IAS 24 include the corporate officers of Covestro AG, who are the members of the Board of Management and Supervisory Board.

Compensation of the Corporate Officers

The compensation for corporate officers of Covestro AG in fiscal 2022 amounted to €8,447 thousand (previous year: €17,023 thousand), including the compensation of the Supervisory Board amounting to €2,454 thousand (previous year: €1,732 thousand).

This compensation is shown below:

Compensation of the corporate officers according to IFRSs

	2021	2022
	€ thousand	€ thousand
Total short-term compensation	12,661	5,826
Total share-based compensation (long-term incentive)	2,188	860
Service cost for pension entitlements earned in the respective year	2,174	1,761
Aggregate compensation (IFRSs)	17,023	8,447

Aggregate compensation of the members of the Board of Management according to the German Commercial Code (HGB) amounted to €7,115 thousand (previous year: €15,102 thousand).

Since 2016, the members of the Board of Management have been entitled to participate in the Prisma long-term share-based compensation program, as long as they are employed by the Covestro Group, and acquire for their own account and hold an individually defined number of Covestro shares as specified by the guidelines. The fair value of the long-term share-based compensation (Prisma) granted to the Board of Management in fiscal 2022 was €3,743 thousand (previous year: €4,176 thousand).

For the members of the Board of Management serving during fiscal 2022 no provisions for the short-term variable cash compensation were recognized. Provisions of €5,626 thousand (previous year for the short-term and long-term variable cash compensation: €12,808 thousand) were recognized for the long-term variable cash compensation for the members of the Board of Management serving during fiscal 2022. At the end of the year, the present value of the defined benefit pension obligations for the current members of the Board of Management was €9,180 thousand (previous year: €12,594 thousand). No provisions (previous year: €202 thousand) were recognized for long-term share-based cash compensation for former members of the Board of Management. The present value of the defined benefit pension obligations for former members of the Board of Management was €5,447 thousand (previous year: €7,696 thousand).

Supervisory Board compensation is exclusively non-performance-related. In addition to their compensation as members of the Supervisory Board, those employee representatives who are employees of Covestro Group companies receive compensation unrelated to their service on the Supervisory Board. The total amount of such compensation was €1,253 thousand (previous year: €667 thousand). Pension obligations for employee

representatives on the Supervisory Board amounted to €1,984 thousand (previous year: €3,698 thousand). Pension obligations for employee representatives who had left the Supervisory Board and the company totaled €1,623 thousand (previous year: €0 thousand).

As in the previous year, the company did not grant any advances or loans to members of the Board of Management or the Supervisory Board in the fiscal year 2022.

→ For further information, please refer to the Compensation Report

29. Auditor's Fees

Since fiscal 2018, KPMG AG Wirtschaftsprüfungsgesellschaft, Düsseldorf (Germany) (KPMG AG), has been the elected statutory auditor of Covestro AG and the Covestro Group. Dr. Kathryn Ackermann has been the auditor primarily responsible for carrying out the audit of the consolidated financial statements since April 21, 2022. Dr. Kathryn Ackermann and Marc Ufer were responsible for carrying out the 2022 audit of the consolidated financial statements. Dr. Kathryn Ackermann first signed the Independent Auditor's Report on December 31, 2022.

The following fees were recognized as expenses in the given fiscal year for the services provided by KPMG AG:

Auditor's fees

	2021	2022
	€ million	€ million
Audit services	3.8	3.3
Other assurance services	0.2	0.3
Tax advisory services	0.2	–
Other services	0.2	0.3
Total	4.4	3.9

The fees for audit services for fiscal 2022 mainly comprise those for the statutory audit of the consolidated financial statements of the Covestro Group, the review of the Covestro Group's interim report for the period ended June 30, 2022, and the audit of the financial statements of Covestro AG and its subsidiaries in Germany, including audits relating to the German Energy Industry Act (EnWG) and similar standards.

The fees for other assurance services in fiscal year 2022 include, in particular, the audit of sustainability information and special energy industry audits. Other services primarily consist of fees for IT security audits and other consulting services.

30. Events after the End of the Reporting Period

No events have occurred since January 1, 2023, that have a material impact on the net assets, financial position and results of operations of the Covestro Group.

Leverkusen, February 24, 2023
Covestro AG
The Board of Management

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Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles for financial reporting, the consolidated financial statements give a true and fair view of the net assets, financial position, and results of operations of the Covestro Group, and the Group Management Report, which has been combined with the Management Report of Covestro AG, includes a fair review of the development and performance of the business and the position of the Covestro Group and Covestro AG, together with a description of the principal opportunities and risks associated with the expected development of the Covestro Group and Covestro AG.

Leverkusen, February 24, 2023

Covestro AG

The Board of Management

Dr. Markus Steilemann
(Chairman)

Sucheta Govil

Dr. Klaus Schäfer

Dr. Thomas Toepfer

Independent Auditor's Report

To Covestro AG, Leverkusen

Report on the Audit of the Consolidated Financial Statements and of the Combined Management Report

Opinions

We have audited the consolidated financial statements of Covestro AG, Leverkusen, and its subsidiaries (the Group), which comprise the income statement, the statement of comprehensive income of the Covestro Group for the financial year from January 1 to December 31, 2022, the statement of financial position of the Covestro Group as of December 31, 2022, the statement of cash flows and the statement of changes in equity of the Covestro Group for the financial year from January 1 to December 31, 2022, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the management report for the Company and the Group (hereinafter: the "combined management report") of Covestro AG, including the integrated non-financial group statement pursuant to Sections 315b (1) and 315c HGB for the financial year from January 1 to December 31, 2022.

In accordance with German legal requirements, we have not audited the content of those components of the combined management report specified in the "Other Information" section of our auditor's report.

The combined management report contains cross-references that are not required by law and which are marked as unaudited. In accordance with German legal requirements, we have not audited the cross-references and the information to which the cross-references refer.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as of December 31, 2022, and of its financial performance for the financial year from January 1 to December 31, 2022, and
- the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the combined management report does not cover the content of those components of the combined management report specified in the "Other Information" section of the auditor's report. The group management report contains cross-references that are not required by law and which are marked as unaudited. Our audit opinion does not extend to the cross-references and the information to which the cross-references refer.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the combined management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Section 317 HGB and the EU Audit Regulation No 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [*Institute of Public Auditors in Germany*] (IDW). We performed the audit of the consolidated financial statements in supplementary compliance with the International Standards on Auditing (ISAs). Our responsibilities under those requirements, principles and standards are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2)(f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the combined management report.

Note on emphasis of matter – Inherent risk due to uncertainties regarding the legal conformity of the interpretation of the EU Taxonomy Regulation

Please refer to management's comments in the "EU Taxonomy" section of the Group's non-financial statement pursuant to Section 315b (1) HGB contained in the section "Disclosures on sustainability reporting" of the combined management report. That section describes that the EU Taxonomy Regulation and the delegated acts issued in this context contain formulations and terms that remain subject to considerable interpretation uncertainties and for which clarifications have not yet been published in every case. Management explains how they have made the necessary interpretations of the EU Taxonomy Regulation and the delegated acts adopted in this context. Due to the inherent risk that undefined legal terms can be interpreted differently, the legal conformity of the interpretation is subject to uncertainty. We have not modified our opinion on the combined management report in respect of this matter.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1 to December 31, 2022. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, we do not provide a separate opinion on these matters.

Impairment testing of goodwill

Please refer to note 3 to the consolidated financial statements for information on the accounting policies applied and the assumptions used. Disclosures on the amount of goodwill and the amount of impairment losses recognized can be found under note 13 and information on the economic development of the business segments in the combined management report in the section "Performance of the segments".

THE FINANCIAL STATEMENT RISK

Goodwill amounted to EUR 729 million as of December 31, 2022, thus representing 5.0% of total assets.

Irrespective of any indication of impairment, goodwill is tested for impairment once a year on the level of the cash-generating units (strategic business areas) and on the level of the groups of CGUs (business units). If impairment triggers arise during the financial year, an indicator-based impairment test is also carried out during the year.

For goodwill impairment testing, the carrying amount is compared with the recoverable amount of the respective strategic business area or the respective business unit. If the carrying amount exceeds the recoverable amount, an impairment loss is recognized. The recoverable amount is the higher of fair value less costs to sell and value in use of the cash-generating units. The annual goodwill impairment was conducted in Q4 2022.

Impairment testing of goodwill is complex and based on a number of assumptions requiring judgment. These include the expected business and earnings performance of the respective cash-generating units over the planning horizon, the assumed long-term growth rates and the discount rate used.

Covestro AG's market capitalization fell below the carrying amount of the Group's equity as of June 30, 2022. Because of this and the significant rise in the risk-free rate, the assumptions of the previous impairment test for cash-generating units from financial year 2021 were reviewed. With regard to the cash-generating unit Standard Polyether-Polyole (SPET) in the Performance Materials segment, impairment of EUR 18 million was calculated based on the impairment test conducted. The impairment loss included EUR 16 million related to goodwill, which was thereby fully impaired, and EUR 2 million for other non-current assets of the cash-generating unit.

Due to the deteriorating economic environment, declining macroeconomic development and the significant cost increases for raw materials and energy, uncertainty surrounding the underlying future cash flows grew in the further course of financial year 2022. The increase in the cost of capital is further reason for an impairment test. Based on the annually performed impairment test, Covestro AG recognized impairment on goodwill of EUR 17 million for the Tailored Urethanes (TUR) group of cash-generating units, which was thereby fully impaired.

There is the risk for the consolidated financial statements that impairment losses are not recognized in the appropriate amount or other existing impairment losses affecting other strategic business areas or business units are not identified. There is also the risk that the related disclosures in the notes are not appropriate.

OUR AUDIT APPROACH

First, we obtained an understanding of the process for impairment testing of goodwill through explanations provided by accounting staff with the involvement of the controlling function, as well as an assessment of the Company's documentation.

With the involvement of our valuation experts, we then assessed (among other things) the appropriateness of the significant assumptions and the Company's calculation method for both the annual and indicator-based impairment testing. To this end, we discussed the expected development of business and earnings as well as the assumed long-term growth rates with those responsible for planning. We also reconciled this information with other internally available forecasts and reconciled the cash flows used for the impairment test with the budget prepared by the Board of Management and approved by the Supervisory Board. We also evaluated the consistency of the assumptions with external market assessments.

We also examined the accuracy of the Company's previous forecasts by comparing the budgets of previous financial years with actual earnings and by analyzing deviations. We compared the assumptions and data underlying the discount rate, in particular the risk-free rate, the market risk premium and the beta coefficient, with our own assumptions and publicly available data.

To ensure the computational accuracy of the valuation method used, we verified the Company's calculations on the basis of selected risk-based elements.

In order to take account of the existing forecast uncertainty for impairment testing, we examined the effects of possible changes in the discount rate, earnings performance and the long-term growth rate on the recoverable amount by calculating alternative scenarios and comparing them with the values stated by the Company (sensitivity analysis). The risk-oriented focus of our analyses during the year was on the Standard Polyether-Polyole (SPET) cash-generating unit within the Performance Materials segment. As part of the annual goodwill impairment test, all goodwill-carrying strategic business areas or business units were examined by us.

Finally, we assessed whether the disclosures in the notes regarding impairment of goodwill are appropriate.

OUR OBSERVATIONS

The calculation methods used for both the annual and indicator-based impairment testing of goodwill are appropriate and in line with the applicable accounting policies. The Company's assumptions and data used for measurement are within an acceptable range and are appropriate. The related disclosures in the notes are appropriate.

Impairment testing of property, plant and equipment

Please refer to note 3 to the consolidated financial statements, "Accounting policies and valuation principles", concerning "Property, plant and equipment" and "Impairment testing" for information on the accounting policies applied and the assumptions used. Please also refer to note 14 to the consolidated financial statements, "Property, plant and equipment", and the information on the economic development of the business segments in the combined management report in the section "Performance of the segments".

THE FINANCIAL STATEMENT RISK

Property, plant and equipment as of December 31, 2022, amounted to EUR 5,801 million and 39.8% of total assets, representing a considerable share of the Group's assets.

If impairment triggers for property, plant and equipment arise at the end of a reporting period, an indicator-based impairment test is carried out. For the impairment testing, the carrying amount is compared with the recoverable amount. If the carrying amount exceeds the recoverable amount, an impairment loss is recognized. The recoverable amount is the higher of an asset's fair value less costs to sell and its value in use. The recoverable amount is calculated regularly on the level of cash-generating units (strategic business areas) using the discounted cash flow method. Any identified impairment loss has to be allocated to the individual assets. In this regard, the carrying amount of an individual asset may not be impaired below its fair value less cost of disposal (minimum carrying amount).

Impairment testing of property, plant and equipment is complex and based on a range of assumptions that require judgment. These include the expected business and earnings performance of the respective cash-generating units over the planning horizon, the assumed long-term growth rates and the discount rate used.

Due to the deteriorating economic environment, declining macroeconomic development and the significant cost increases for raw materials and energy, as well as the increase in the cost of capital, property, plant and equipment of the cash-generating units underwent indicator-based impairment testing.

The impairment testing for all cash-generating units was based on updated planning of expected cash flows, which took into account the above developments' negative effects on future business and earnings prospects. As a result of the indicator-based impairment test, Covestro AG recognized an impairment loss of EUR 355 million for the property, plant and equipment of the cash-generating units.

There is the risk for the consolidated financial statements that the existing impairment loss is not recognized in the amount required or that further impairment has not been identified. There is also the risk that the related disclosures in the notes are not appropriate.

OUR AUDIT APPROACH

First, we obtained an understanding of the process for impairment testing of property, plant and equipment through explanations provided by accounting staff with the involvement of the controlling function, as well as an assessment of the Company's documentation.

With the involvement of our valuation experts, we then assessed the indicator-based impairment test to determine (among other things) the appropriateness of the key assumptions and the Company's calculation method. To this end, we discussed the expected business and earnings development, the cash flow forecast derived from those expectations, as well as the assumed long-term growth rates, with those responsible for planning. We also reconciled this information with other internally available forecasts and reconciled the cash flows used for the impairment test with the budget prepared by the Board of Management and approved by the Supervisory Board. We also evaluated the consistency of the assumptions with external market assessments.

We also examined the accuracy of the Company's previous forecasts by comparing the budgets of previous financial years with actual earnings and by analyzing deviations. We compared the assumptions and data underlying the discount rate, in particular the risk-free rate, the market risk premium and the beta factor with our own assumptions and publicly available data.

To ensure the computational accuracy of the valuation method used, we verified the Company's calculations on the basis of selected risk-based elements.

In order to take account of the existing forecast uncertainty for impairment testing, we examined the effects of possible changes in the discount rate, earnings performance and the long-term growth rate on the recoverable amount by calculating alternative scenarios and comparing them with the values stated by the Company (sensitivity analysis).

Finally, we assessed whether the disclosures in the notes on the impairment of property, plant and equipment are appropriate.

OUR OBSERVATIONS

The underlying calculation methods used in the impairment test of property, plant and equipment are appropriate and consistent with the applicable accounting policies. The Company's assumptions and data used for measurement are within an acceptable range and are reasonable overall. The related disclosures in the notes are appropriate.

Other Information

The Board of Management and/or the Supervisory Board are/is responsible for the other information. The other information comprises the following components of the combined management report, whose content was not audited:

- the corporate governance statement included in the section of the same name in the combined management report,
- the information in the non-financial group statement contained in the "Sustainability in the supply chain" section of the combined management report and marked as unaudited, and
- information extraneous to combined management reports and marked as unaudited.

The other information also includes the remaining parts of the annual report. The other information does not include the consolidated financial statements, the combined management report information audited for content and our auditor's report thereon.

Our opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the combined management report information audited for content or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

As part of a separate engagement, we performed an assurance engagement on the supplementary sustainability information. Please refer to our assurance report dated February 27, 2023, for information on the nature, scope and findings of this assurance engagement.

Responsibilities of the Board of Management and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

The Board of Management is responsible for the preparation of consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the Board of Management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the consolidated financial statements, the Board of Management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the Board of Management is responsible for the preparation of the combined management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the Board of Management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the combined management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) and supplementary compliance with the ISAs will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the combined management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the Board of Management and the reasonableness of estimates made by the Board of Management and related disclosures.
- Conclude on the appropriateness of the Board of Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.

- Evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the Board of Management in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the Board of Management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the actions taken or safeguards applied to eliminate independence threats.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Report on the Assurance on the Electronic Rendering of the Consolidated Financial Statements and the Combined Management Report Prepared for Publication Purposes in Accordance with Section 317 (3a) HGB

We have performed assurance work in accordance with Section 317 (3a) HGB to obtain reasonable assurance about whether the rendering of the consolidated financial statements and the combined management report (hereinafter the "ESEF documents") contained in the electronic file "covestroag-2022-12-31-de.zip" (SHA256 hash value: 2203d686bb8ab7a5b646a63077697d7a1279c092854b5cfd07890987e6d95a7) made available and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance work extends only to the conversion of the information contained in the consolidated financial statements and the combined management report into the ESEF format and therefore relates neither to the information contained in these renderings nor to any other information contained in the file identified above.

In our opinion, the rendering of the consolidated financial statements and the combined management report contained in the electronic file made available, identified above and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying combined management report for the financial year from January 1 to December 31, 2022, contained in the "Report on the Audit of the Consolidated Financial Statements and the Combined Management Report" above, we do not express any assurance opinion on the information contained within these renderings or on the other information contained in the file identified above.

We conducted our assurance work on the rendering of the consolidated financial statements and the combined management report contained in the file made available and identified above in accordance with Section 317 (3a) HGB and the IDW Assurance Standard: Assurance Work on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Section 317 (3a) HGB (IDW AsS 410 (06.2022)) and the International Standard on Assurance Engagements 3000 (Revised). Our responsibility in accordance therewith is further described below. Our audit firm applies the IDW Standard on Quality Management 1: Requirements for Quality Management in Audit Firms (IDW QS 1).

The Company's Board of Management is responsible for the preparation of the ESEF documents including the electronic rendering of the consolidated financial statements and the combined management report in accordance with Section 328 (1) sentence 4 item 1 HGB and for the tagging of the consolidated financial statements in accordance with Section 328 (1) sentence 4 item 2 HGB.

In addition, the Company's Board of Management is responsible for such internal control that they have considered necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB for the electronic reporting format.

The Supervisory Board is responsible for overseeing the process of preparing the ESEF documents as part of the financial reporting process.

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB. We exercise professional judgment and maintain professional skepticism throughout the assurance work. We also:

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.
- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.
- Evaluate the technical validity of the ESEF documents, i.e. whether the file made available containing the ESEF documents meets the requirements of the Commission Delegated Regulation (EU) 2019/815, as amended as of the reporting date, on the technical specification for this electronic file.
- Evaluate whether the ESEF documents provide an XHTML rendering with content equivalent to the audited consolidated financial statements and the audited combined management report.
- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) in accordance with the requirements of Articles 4 and 6 of the Commission Delegated Regulation (EU) 2019/815, as amended as of the reporting date, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor at the Annual General Meeting on April 21, 2022. We were engaged by the Audit Committee of the Supervisory Board on November 15, 2022. We have been the group auditor of Covestro AG without interruption since financial year 2018.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the Audit Committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

Other Matter – Use of the Auditor's Report

Our auditor's report must always be read together with the audited consolidated financial statements and the audited combined management report as well as the examined ESEF documents. The consolidated financial statements and combined management report converted to the ESEF format – including the versions to be entered in the company register – are merely electronic renderings of the audited consolidated financial statements and the audited combined management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the examined ESEF documents made available in electronic form.

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Dr. Kathryn Ackermann.

Düsseldorf, February 28, 2023

KPMG AG
Wirtschaftsprüfungsgesellschaft

Ufer
Wirtschaftsprüfer
[German Public Auditor]

Dr. Ackermann
Wirtschaftsprüferin
[German Public Auditor]

Limited assurance report of the independent auditor regarding the supplementary sustainability information¹

To the Board of Management of Covestro AG, Leverkusen

We have performed a limited assurance engagement on the sections marked as "Supplementary Information" in the "Covestro Annual Report 2022" of Covestro AG, Leverkusen, for the period from January 1 to December 31, 2022 (hereinafter the "supplementary information").

Responsibilities of Management

The Management of the Covestro AG is responsible for the preparation of the supplementary information in accordance with the reporting criteria. As reporting criteria, Covestro AG applies the "with reference to" option of the Sustainability Reporting Standards (SRS) of the Global Reporting Initiative (GRI) in conjunction with the Corporate Accounting and Reporting Standard (Scope 1 and 2) of the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) (hereinafter: "Reporting Criteria").

This responsibility includes the selection and application of appropriate non-financial reporting methods and making assumptions and estimates about individual non-financial disclosures of the group that are reasonable in the circumstances. Furthermore, management is responsible for such internal control as they consider necessary to enable the preparation of the supplementary information that is free from material misstatement, whether due to fraud or error.

Independence and Quality Assurance of the Assurance Practitioner's firm

We have complied with the independence and quality assurance requirements set out in the national legal provisions and professional pronouncements, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (*Institut der Wirtschaftsprüfer, IDW*) regarding quality assurance requirements in audit practice (IDW QS 1).

Responsibility of the Assurance Practitioner

Our responsibility is to express a conclusion with limited assurance on the supplementary information based on our assurance engagement.

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information" and the International Standard on Assurance Engagements (ISAE) 3410 „Assurance Engagements on Greenhouse Gas Statements“, issued by the IAASB. This standard requires that we plan and perform the assurance engagement to obtain limited assurance about whether any matters have come to our attention that cause us to believe that the company's supplementary information, are not prepared, in all material respects, in accordance with the reporting criteria.

¹ The English language text is a translation provided for information purposes only. The original German text shall prevail in the event of any discrepancies between the English translation and the German original. We do not accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may arise from the translation.

In a limited assurance engagement, the procedures performed are less extensive than in a reasonable assurance engagement, and accordingly, a substantially lower level of assurance is obtained. The selection of the assurance procedures is subject to the professional judgment of the assurance practitioner.

In the course of our assurance engagement we have, among other things, performed the following assurance procedures and other activities:

- Inquiries of personnel responsible for materiality analysis at Group level to gain an understanding of the approach used to identify material topics and corresponding reporting boundaries of Covestro AG.
- A risk assessment, including a media analysis, of relevant information on Covestro AG's sustainability performance in the reporting period.
- An assessment of the design and implementation of systems and processes for determining, processing and monitoring sustainability performance of disclosures and indicators within the scope of the audit, including the consolidation of data
- Inquiries of group level personnel responsible for determining the information on concepts, due diligence processes, results and risks, performing internal control procedures and consolidating the information
- Inspection of selected internal and external documents
- Analytical assessment of data and trends of quantitative disclosures reported for consolidation at Group level from all sites
- Assessment of the local data collection, validation and reporting processes as well as the reliability of the reported data through a sample survey at nine production sites
- Assessment of the overall presentation of the data and indicators of the sustainability performance and the supplementary sustainability information

Assurance Opinion

Based on the assurance procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the as "supplementary information" identified sections in the "Covestro Annual Report 2022" of Covestro AG, Leverkusen, for the period from January 1 to December 31, 2022 has not been prepared, in all material respects, in accordance with the principles and disclosures set out in the Global Reporting Initiative (GRI) Universal Standards 2021 on sustainability reporting ("with reference to" option).

Restriction of Use

This assurance report is solely addressed to the Board of Management of Covestro AG, Leverkusen.

Our assignment for the Board of Management of Covestro AG, Leverkusen, and professional liability is governed by the General Engagement Terms for Wirtschaftsprüfer (German Public Auditors) and Wirtschaftsprüfungsgesellschaften (German Public Audit Firms) (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2017 (https://www.kpmg.de/bescheinigungen/lib/aab_english.pdf). By reading and using the information contained in this assurance report, each recipient confirms having taken note of provisions of the General Engagement Terms (including the limitation of our liability for negligence to EUR 4 million as stipulated in No. 9) and accepts the validity of the attached General Engagement Terms with respect to us.

Cologne, February 27, 2023

KPMG AG
Wirtschaftsprüfungsgesellschaft

[Original German version signed by:]
Krause

ppa. Dietrich

Glossary

A

ADR / American Depositary Receipt

A depositary receipt issued by U.S. banks that documents ownership of a certain number of deposited shares of a foreign company and is traded on U.S. stock markets as representation of the original shares.

AktG / German Stock Corporation Act

Stipulates the legal provisions pertaining to German stock corporations.

APAC

Comprises all countries in the Asia and Pacific region.

C

Capital Employed

Capital employed is the sum of noncurrent and current assets less non-interest-bearing liabilities such as trade accounts payable.

Circular Economy

A renewable economic system in which resource input, waste production, emissions, and energy consumption are minimized based on long-lasting and closed material and energy cycles.

Climate Neutrality

A state in which human activities have no net impact on the climate system.

Cost of Capital for Impairment Testing

Weighted average cost of equity and debt that reflects the risk/return profile of the Covestro Group on the one hand and a specific capital structure of comparable companies (Covestro's peer group) on the other. This cost of capital, which is primarily derived from capital market information, is used for impairment testing according to IFRSs.

COVeC Approach

Covestro Venture Capital Approach in which Covestro invests in start-ups with innovative products, solutions, or business models. Covestro aims to actively support these new companies wherever they offer added value.

Covestment

Share-based participation program in which 99% of all employees worldwide can acquire Covestro shares at a discount.

CO₂ Sink

A "sink" is a procedure, an activity, or a mechanism with which a greenhouse gas, an aerosol, or a precursor substance of a greenhouse gas is removed from the atmosphere. In the case of CO₂, this occurs in, for example, forests, soils, the oceans, or underground (e.g. in former gas pits). Sink development measures such as reforestation can therefore help mitigate climate change.

D

DRS / German Accounting Standards

Pronouncements of the German Accounting Standards Committee e. V., which more precisely define the HGB requirements in reference to the application of group accounting principles.

Due Diligence

Information on the processes for identifying, preventing, and mitigating the actual or possible negative impact on nonfinancial factors.

E

Earnings per Share

Net income divided by the weighted average number of outstanding shares in the reporting period.

EBIT / Earnings Before Interest and Taxes

Income after income taxes plus financial result and income tax expense.

EBITDA / Earnings Before Interest, Taxes, Depreciation, and Amortization

EBIT plus depreciation and amortization of property, plant, equipment, and intangible assets.

EcoVadis

Rating agency that evaluates the degree to which supplier business practices are aligned with sustainability principles.

EMLA

Comprises all countries in Europe, the Middle East, Latin America (excluding Mexico), and Africa.

EURO STOXX 50

European stock index that reflects the share price performance of the 50 most important and highest-revenue companies in Europe.

F

FOCF / Free Operating Cash Flow

Operating cash flows (pursuant to IAS 7) less cash outflows for additions to property, plant, equipment and intangible assets.

G

GCGC / German Corporate Governance Code

A set of rules on responsible corporate governance drawn up by the Government Commission on the German Corporate Governance Code containing recommendations and suggestions for the management and oversight of publicly traded German companies.

GHG Protocol/ Greenhouse Gas Protocol

International accounting system for greenhouse gas emissions developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

GPS / Global Product Strategy

Initiative of the International Council of Chemical Associations (ICCA) with the aim of enshrining uniform global standards for product safety in the chemical industry.

GRI / Global Reporting Initiative

Guidelines on the preparation of sustainability reports by companies, governments, and nongovernmental organizations (NGOs).

H**HDI / Hexamethylene Diisocyanate**

A chemical compound from the class of aliphatic isocyanates, primarily used in polyurethane coating systems.

HGB / German Commercial Code

Comprises the majority of German accounting legislation.

HSEQ / Health, Safety, Environment, Energy, and Quality

A commonly used abbreviation for health, safety, environment, energy, and quality.

I**IAS / Accounting Standards**

International accounting standards as applicable in the EU or as published by the IASB or the IFRS IC.

IASB / International Accounting Standards Board

The International Accounting Standards Board is an independent, private-sector body that develops and adopts the International Financial Reporting Standards (IFRSs).

ICS / Internal Control System

Internal control system to ensure compliance with directives by means of technical and organizational rules.

IDW / Institut der Wirtschaftsprüfer in Deutschland e. V.

A professional association of German public auditors and German public audit firms that represents the interests of its members and supports their work.

IFRSs/ International Financial Reporting Standards

International accounting standards as applicable in the EU or as published by the IASB or the IFRS IC.

IPDI / Isophorone Diisocyanate

A chemical compound from the class of aliphatic isocyanates, primarily used in polyurethane coating systems.

L**LGBTIQ**

International abbreviation for lesbian, gay, bisexual, trans, intersex, and queer people.

LoPC / Loss of Primary Containment

Leaks of chemicals in amounts above defined thresholds leaking from their primary containers, such as pipelines, pumps, tanks, and drums.

LTRIR

Lost time recordable incident rate.

M**Mass Balance Approach**

A method of assigning sustainable attributes to products for which both fossil and sustainable raw materials were used during production.

Materiality Analysis

A materiality analysis enables companies to systematically identify the most important sustainability issues from the internal and external perspective.

MDI / Diphenylmethane Diisocyanate

A chemical compound from the class of aromatic isocyanates, primarily used in polyurethane foams.

N**NA / North America**

Region comprising Canada, Mexico, and the United States.

Net Financial Debt

Interest-bearing liabilities (excluding pension obligations) less liquid assets.

Net Income

Income after income taxes that is attributable to Covestro AG shareholders.

Net Zero Greenhouse Gas Emissions

Achievement of net-zero GHG emissions is defined as a balance between anthropogenic production of GHG emissions and anthropogenic reduction of GHG emissions.

NOPAT / Net Operating Profit after Taxes

EBIT after imputed income taxes.

NPS / Net Promoter Score

Performance indicator which measures our customers' willingness to recommend Covestro based on the question of how likely it is that they would recommend the company to a colleague or business partner, with scores ranging between -100 and +100.

P**PMDI / Polymeric Diphenylmethane Diisocyanate**

A chemical compound from the class of aromatic isocyanates, primarily used in polyurethane foams.

PO / Propylene Oxide

A chemical compound from the class of epoxides used in the production of polyurethanes.

Prisma

Prisma is a share-based compensation program with a four-year performance period for senior executives and other managerial employees.

PSP / Profit Sharing Plan

Covestro PSP is the Group's short-term variable compensation system. It is based exclusively on the achievement of targets for the key performance indicators relevant to Covestro (EBITDA, FOCF, ROCE above WACC, and selected ESG criteria).

R**REACH Regulation**

REACH stands for Registration, Evaluation, Authorisation, and Restriction of Chemicals. Regulation (EC) No. 1907/2006, which entered into force in 2007, standardizes EU chemicals law.

Responsible Care™ Initiative

Initiative by the German Chemical Industry Association (VCI) aimed at continuously improving health, environmental protection, and safety at its member companies.

RIR / Recordable Incident Rate

Total number of recordable workplace accidents and illnesses per 200,000 working hours.

ROCE / Return on Capital Employed

Ratio of EBIT after imputed income taxes to capital employed.

S**Scope 1, Scope 2, Scope 3 Emissions**

The GHG Protocol distinguishes between direct emissions of greenhouse gases (Scope 1), emissions from the generation of externally purchased energy (Scope 2), and all other emissions arising in the value chain either before or after our business activities (Scope 3).

SDGs

The 17 United Nations Sustainable Development Goals were ratified by all UN member states and entered into force on January 1, 2016. Their objective is to combat global poverty, protect the planet, and secure peace and prosperity for all.

Stakeholders

Internal and external interest groups which are directly or indirectly impacted by the company's business activities and/or may be impacted in the future.

STOXX Europe 600 Chemicals

A sector index maintained by the index issuer STOXX. The STOXX Europe 600 is comprised of 600 companies from across Europe.

T**TCFD / Task Force on Climate-related Financial Disclosures**

The TCFD was formed by the Financial Stability Board to develop a uniform framework for reporting on climate-related opportunities and risks.

TDI / Toluylene Diisocyanate

A chemical compound from the class of aromatic isocyanates, primarily used in polyurethane foams and coating systems.

Tfs / Together for Sustainability

An initiative undertaken by various companies in the chemical industry to standardize supplier assessments globally in order to improve sustainability practices in the supply chain.

U**UN Global Compact**

The world's largest responsible corporate governance initiative. The member companies undertake to implement 10 universal principles and regularly document their progress.

V**VCI / Verband der Chemischen Industrie**

German chemical industry association.

W**WACC / Weighted Average Cost of Capital**

Weighted average cost of capital reflecting the expected return on the company's equity and debt capital. Used for the internal measurement of the absolute value contribution.

Segment and Quarterly Overview

Segment information for the 4th quarter

	Performance Materials		Solutions & Specialties		Others/Consolidation		Covestro Group	
	4th quarter 2021	4th quarter 2022	4th quarter 2021	4th quarter 2022	4th quarter 2021	4th quarter 2022	4th quarter 2021	4th quarter 2022
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Sales (external)	2,259	1,916	2,005	1,975	74	73	4,338	3,964
Intersegment sales ¹	696	644	8	7	(704)	(651)	–	–
Sales (total)	2,955	2,560	2,013	1,982	(630)	(578)	4,338	3,964
Change in sales								
Volume	0.5%	–17.5%	–3.4%	–8.9%	75.3%	–3.3%	–0.2%	–13.2%
Price	37.6%	–1.3%	25.6%	3.3%	0.0%	0.0%	31.6%	0.8%
Currency	3.6%	3.6%	4.1%	4.1%	0.9%	1.9%	3.8%	3.8%
Portfolio	0.0%	0.0%	19.9%	0.0%	0.0%	0.0%	9.1%	0.0%
Sales by region								
EMLA	1,039	785	722	676	61	57	1,822	1,518
NA	582	516	457	533	10	13	1,049	1,062
APAC	638	615	826	766	3	3	1,467	1,384
EBITDA²	590	(89)	112	108	(39)	(57)	663	(38)
EBIT ²	445	(600)	41	(37)	(41)	(58)	445	(695)
Depreciation, amortization, impairment losses and impairment loss reversals	145	511	71	145	2	1	218	657
Cash flows from operating activities ³	665	563	175	514	(192)	(238)	648	839
Cash outflows for additions to property, plant, equipment and intangible assets	168	187	122	99	2	3	292	289
Free operating cash flow³	497	376	53	415	(194)	(241)	356	550
Trade working capital ⁴	1,392	1,135	1,560	1,592	–	(21)	2,952	2,706

¹ In accordance with internal reporting to the Board of Management since July 1, 2022, these figures also include sales recognized in the amount of cost of goods sold. To ensure comparability, the segment data is presented on a consistent basis.

² EBITDA and EBIT include the effect of intersegment sales on earnings.

³ An imputed tax rate of 25% has been used to calculate this since the year 2022 (previous year: effective tax rate); see note 4 "Segment and Regional Reporting" in the Notes to the Consolidated Financial Statements.

⁴ Trade working capital includes inventories plus trade accounts receivable and contract assets, less trade accounts payable, contract liabilities, and refund liabilities as of December 31, 2021/2022.

Segment information full year

	Performance Materials		Solutions & Specialties		Others/Consolidation		Covestro Group	
	2021	2022	2021	2022	2021	2022	2021	2022
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Sales (external)	8,142	9,095	7,554	8,558	207	315	15,903	17,968
Intersegment sales ¹	2,608	2,967	27	35	(2,635)	(3,002)	–	–
Sales (total)	10,750	12,062	7,581	8,593	(2,428)	(2,687)	15,903	17,968
Change in sales								
Volume	1.6%	–5.0%	11.8%	–6.3%	17.0%	49.1%	6.5%	–5.0%
Price	48.1%	10.9%	21.3%	9.4%	0.0%	0.0%	34.7%	10.1%
Currency	–0.8%	5.8%	–0.9%	6.0%	–0.7%	3.1%	–0.8%	5.9%
Portfolio	0.0%	0.0%	17.1%	4.2%	0.0%	0.0%	8.1%	2.0%
Sales by region								
EMLA	3,878	4,152	2,835	3,198	163	250	6,876	7,600
NA	1,926	2,447	1,594	2,140	33	52	3,553	4,639
APAC	2,338	2,496	3,125	3,220	11	13	5,474	5,729
EBITDA²	2,572	951	751	825	(238)	(159)	3,085	1,617
EBIT ²	2,003	(28)	503	461	(244)	(166)	2,262	267
Depreciation, amortization, impairment losses and impairment loss reversals	569	979	248	364	6	7	823	1,350
Cash flows from operating activities ³	1,875	1,091	418	472	(100)	(593)	2,193	970
Cash outflows for additions to property, plant, equipment and intangible assets	488	547	273	277	3	8	764	832
Free operating cash flow³	1,387	544	145	195	(103)	(601)	1,429	138
Trade working capital ⁴	1,392	1,135	1,560	1,592	–	(21)	2,952	2,706

¹ In accordance with internal reporting to the Board of Management since July 1, 2022, these figures also include sales recognized in the amount of cost of goods sold. To ensure comparability, the segment data is presented on a consistent basis.

² EBITDA and EBIT include the effect of intersegment sales on earnings.

³ An imputed tax rate of 25% has been used to calculate this since the year 2022 (previous year: effective tax rate); see note 4 "Segment and Regional Reporting" in the Notes to the Consolidated Financial Statements.

⁴ Trade working capital includes inventories plus trade accounts receivable and contract assets, less trade accounts payable, contract liabilities, and refund liabilities as of December 31, 2021/2022.

Quarterly Overview

	1st quarter 2021	2nd quarter 2021	3rd quarter 2021	4th quarter 2021	1st quarter 2022	2nd quarter 2022	3rd quarter 2022	4th quarter 2022
	€ million							
Sales (external)	3,307	3,956	4,302	4,338	4,683	4,703	4,618	3,964
Performance Materials	1,740	1,957	2,186	2,259	2,388	2,461	2,330	1,916
Solutions & Specialties	1,529	1,951	2,069	2,005	2,222	2,165	2,196	1,975
EBITDA	743	817	862	663	806	547	302	(38)
Performance Materials ¹	630	644	708	590	620	367	53	(89)
Solutions & Specialties ¹	181	237	221	112	224	213	280	108
EBIT	556	607	654	445	589	307	66	(695)
Performance Materials ¹	489	502	567	445	475	204	(107)	(600)
Solutions & Specialties ¹	138	170	154	41	152	139	207	(37)
Financial result	(29)	(18)	(20)	(10)	(28)	(44)	(40)	(25)
Income before income taxes	527	589	634	435	561	263	26	(720)
Income after taxes	395	450	473	301	417	198	11	(907)
Net income	393	449	472	302	416	199	12	(899)
Cash flows from operating activities ²	428	553	564	648	157	(272)	246	839
Cash outflows for additions to property, plant, equipment and intangible assets	110	179	183	292	140	190	213	289
Free operating cash flow²	318	374	381	356	17	(462)	33	550

¹ The earnings of the Performance Materials and Solutions & Specialties reportable segments include the effect of intersegment sales on earnings.

² An imputed tax rate of 25% has been used to calculate this since the year 2022 (previous year: effective tax rate); see note 4 "Segment and Regional Reporting" in the Notes to the Consolidated Financial Statements.

Five-Year Summary

Five-Year Summary

	2018	2019	2020	2021	2022
	€ million				
Sales (external)	14,616	12,412	10,706	15,903	17,968
Performance Materials ¹	7,757	6,173	5,468	8,142	9,095
Solutions & Specialties ¹	6,673	6,069	5,060	7,554	8,558
EBITDA	3,200	1,604	1,472	3,085	1,617
EBIT	2,580	852	696	2,262	267
Financial result	(104)	(91)	(91)	(77)	(137)
Net income	1,823	552	459	1,616	(272)
Earnings per share (€) ²	9.46	3.02	2.48	8.37	(1.42)
Operating cash flows ³	2,376	1,383	1,234	2,193	970
Cash outflows for additions to property, plant, equipment and intangible assets	707	910	704	764	832
Free operating cash flow³	1,669	473	530	1,429	138
Trade working capital ⁴	2,353	1,965	1,949	2,952	2,706
Net financial debt	348	989	356	1,405	2,434
ROCE	29.5%	8.4%	7.0%	19.5%	2.0%
Employees (in FTE)	16,770	17,201	16,501	17,909	17,985

¹ Reference information for the segments for the period from fiscal 2018–2019 are based on unaudited figures due to the new organizational structure.

² Figures based on weighted average number of voting shares outstanding that were subject to relevant changes resulting from, among other factors, the share buyback program between November 21, 2017 and December 4, 2018, the share buyback program launched on March 21, 2022, and the capital increase on October 19, 2020.

³ An imputed tax rate of 25% has been used to calculate this since the year 2022 (previous year: effective tax rate); see note 4 "Segment and Regional Reporting" in the Notes to the Consolidated Financial Statements.

⁴ Trade working capital includes inventories plus trade accounts receivable and contract assets, less trade accounts payable, contract liabilities, and refund liabilities as of the December 31 reporting date for the years 2018 to 2022. The reference information for 2018 and 2019 was restated accordingly; see note 4 "Change in Presentation of Rebates Granted to Customers and Trade Working Capital" in the Annual Report 2020.

FINANCIAL CALENDAR

Annual General Meeting 2023	April 19, 2023
Quarterly Statement First Quarter 2023	April 28, 2023
Half-Year Financial Report 2023.....	August 1, 2023
Quarterly Statement Third Quarter 2023.....	October 27, 2023

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