Annual Report 2020
SMA Solar Technology AG

Future Energy. Delivered.

Sustainably. Reliably. Inspiring.

SMA Solar Technology AG at a glance

SMA group		2020	2019	2018	2017	2016
Sales	€ million	1,026.6	915.1	760.9	891.0	946.7
Export ratio	%	79.6	76.1	80.6	81.8	87.9
Inverter output sold	MW	14,416	11,409	8,449	8,538	8,231
Capital expenditure	€ million	38.8	27.6	40.3	33.2	29.0
Depreciation	€ million	43.6	46.0	82.6	53.2	76.7
EBITDA	€ million	71.5	34.2	−69.1	97.3	141.5
EBITDA margin	%	7.0	3.7	−9.1	10.9	14.9
Net income	€ million	28.1	−8.6	−175.5	30.1	29.6
Earnings per share [1]	€	0.81	−0.25	−5.06	0.87	0.85
Employees [2]		3,264	3,124	3,353	3,213	3,345
in Germany		2,262	2,186	2,212	2,077	2,093
abroad		1,002	938	1,141	1,136	1,252

SMA group		2020/12/31	2019/12/31	2018/12/31	2017/12/31	2016/12/31
Total assets	€ million	1,051.2	1,107.3	989.3	1.216.2	1.210.8
Equity	€ million	439.1	416.9	424.5	611.5	585.1
Equity ratio	%	41.8	37.6	42.9	50.3	48.3
Net working capital [3]	€ million	210.6	159.5	177.4	167.9	225.4
Net working capital ratio [4]	%	20.5	17.4	23.3	18.8	23.8
Net cash [5]	€ million	226.0	303.0	305.3	449.7	362.0

1 Converted to 34,700,000 shares
2 Reporting date; without temporary employees
3 Inventories and trade receivables minus trade payables and liabilities from advanced payments received for orders
4 Relating to the last twelve months (LTM)
5 Total cash minus interest-bearing financial liabilities to banks

ENERGY

THAT
CHANGES

As a leading global specialist for photovoltaic system technology, SMA is setting the standards today for the decentralized and renewable energy supply of tomorrow.

More than 3,000 SMA employees in 18 countries have devoted themselves to this task.

Our innovative solutions for all photovoltaic applications and our unsurpassed service offer our customers worldwide greater independence in meeting their energy needs.

In collaboration with our partners and customers, we are helping people around the world transition to a self-sufficient, decentralized and renewable energy supply.

SMA

DR.-ING. JÜRGEN REINERT

Chief Executive Officer SMA Solar Technology AG

FOREWORD BY THE BOARD OF DIRECTORS

Dear Shareholders,

When we published the sales and earnings guidance for the past fiscal year at the beginning of February 2020, we on the SMA Managing Board assumed that a ”normal year like any other” lay ahead. Then the coronavirus pandemic broke out and rapidly tightened its grip over the world. In many countries, lockdowns or shutdowns were imposed, borders were closed and supply chains were disrupted. A considerable amount of uncertainty reigned in political, social and economic life. This set of circumstances also obviously presented SMA with some major challenges. We had to protect the health of our employees while also maintaining our delivery capacity – from purchasing and production to logistics. Despite stricter restrictions on social contact, we wanted to continue to be there for our customers around the world and we had to make the move to remote working practically overnight.

All of this required us to go above and beyond, but we succeeded thanks to the considerable efforts of our employees, close and constructive collaboration with our suppliers, service providers and customers and our excellent IT infrastructure. We did not have to suffer a single day of production downtime or utilize any government support, and – despite all the obstacles standing in our way – we achieved the growth targets that we had set before the outbreak of the pandemic.

WE DOUBLED THE OPERATING RESULT DESPITE THE CORONAVIRUS PANDEMIC

In 2020, SMA sold inverters with a total capacity of 14.4 gigawatts, which is equivalent to the capacity of twelve nuclear power station blocks. Overall, SMA inverters with a capacity of over 100 gigawatts have thus been installed around the world. Sales increased by 12.2% to €1,026.6 million in the past fiscal year. Earnings before interest, taxes, depreciation and amortization doubled to €71.5 million. While the coronavirus depressed sales slightly in the Business Solutions segment, we reported strong growth in residential PV rooftop systems (Home Solutions) – especially in Europe. With the SMA EV Charger, we successfully entered the market for private electric vehicle charging solutions in fall. The high demand for the EV Charger is far outstripping our original production schedule. In the segment for large-scale PV power plants (Large Scale & Project Solutions), we concluded contracts to supply system solutions with a total output of 1.6 gigawatts in Australia in 2020, which consolidated our strong market position. We were also particularly successful in the U.S., yet again gaining market shares in the power plant business. Our achievements also included supplying 98 Sunny Central Storage inverters to the world’s largest battery-storage power plant in California.

STRATEGY 2025 PAVING THE WAY TO A SUCCESSFUL FUTURE

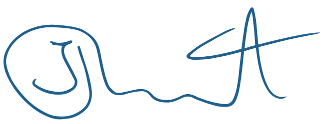
In 2020, we also looked ahead into the future. The global coronavirus pandemic is not only an immense challenge, it has also prompted many politicians, businesses and citizens to contemplate what they want the world to look like in the future. This is evident from initiatives such as the European Union's Green Deal, the climate protection agenda of the new U.S. government and the commitment that over 100 countries and a large number of companies around the world are making to meet climate neutrality targets. All these initiatives are providing additional impetus to the transition of the energy supply to sustainable, decentralized sources – and SMA will have an important role to play here.

To prepare ourselves in the best way possible, we refined our strategy and adapted it to future requirements in a broad, participatory strategy process involving employees from all the regions and corporate functions. The company's further transformation into a systems and solutions provider remains core to the Strategy 2025. We will leverage our excellent systems expertise to develop complete, future-proof solutions that inspire our customers in close collaboration with our strong partners. Sustainability, or the respect for people and the environment, will also still be of paramount importance for all areas of the company and all SMA employees. After all, it has been part of our corporate DNA since the very beginning.

WE WILL CONTINUE TO GROW AND INCREASE OUR PROFITABILITY IN 2021

In 2021, the coronavirus pandemic will again result in significant restrictions, but we are optimistic looking to the months ahead. SMA is well positioned to take advantage of the PV market growth that we expect to see in Europe, the U.S. and on the global storage solutions market. We will bring more new solutions to market and expand our partner network. For 2021, the Managing Board expects sales to increase to between €1,075 million and €1,175 million and the operating result (EBITDA) to grow to between €75 million and €95 million.

Our marvelous employees will make a crucial contribution here. Last year, under the difficult conditions caused by the coronavirus pandemic, they demonstrated yet again their burning passion for renewable energies and for SMA. On behalf of the SMA Managing Board, I would like to thank them for this incredible commitment, which is not at all taken for granted.



Dr.-Ing. Jürgen Reinert
Chief Executive Officer
SMA Solar Technology AG

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ULRICH HADDING

Board Member for Finance, Human Resources and Legal

Ulrich Hadding (b. 1968) held different positions at the SCHOTT Group in Germany and abroad for ten years, most recently as Head of Legal & Compliance for SCHOTT Solar AG. He moved to SMA in 2009, initially establishing an internationally oriented Legal department and then the Compliance function. He played a major role in nearly all of SMA's recent M&A activities and successively took on further management functions, e. g., for Tax, Insurance, Controlling and Financial Project Management. Since the end of 2015, he has been Head of Finance and Legal and member of SMA's Executive Management Committee. Since January 1, 2017, Ulrich Hadding has been a member of the Managing Board with responsibility for Finance, Human Resources and Legal. He also serves as labor director of SMA and is responsible for capital market communication.

THE MANAGING BOARD TEAM

DR.-ING. JÜRGEN REINERT

Chief Executive Officer

After he studied electrical engineering in South Africa, Dr.-Ing. Jürgen Reinert (b. 1968) received his doctorate at the Institute for Power Electronics and Electrical Drives (ISEA) at RWTH Aachen, Germany, and began his career as senior engineer there. From 1999 to 2011, he worked for Emotron AB in Sweden, where in his last position, as General Manager, he was responsible for Technology and Operations. From 2011 to 2014, as Executive Vice President, Technology, he was responsible for the division Power Plant Solutions at SMA. Under his leadership, SMA was successful in expanding its worldwide project business and developing turnkey system solutions for large-scale PV power plants. Since April 2014, Dr. Reinert has been a member of the Managing Board. He was appointed Chief Executive Officer in October 2018. Dr. Reinert is responsible for Strategy, Sales and Service, Operations and Technology. He is a member of the Supervisory Board at Danfoss A/S.

SUPERVISORY BOARD REPORT

Dear Shareholders,

SMA continued on its path to sustainable profitability in the 2020 fiscal year. This is all the more gratifying given that the difficulties caused by the coronavirus pandemic in the company's environment and within the company itself were challenging and demanded a very high level of commitment from management and the workforce.

Following this year's election of Supervisory Board members by the workforce and the shareholders, trust, openness and constructive dialogue within the Supervisory Board and between the Supervisory Board and Managing Board continue to be the defining characteristics of the collaboration. The Supervisory Board assisted the Managing Board in an advisory capacity and continuously monitored the Managing Board with regard to the management of the company in accordance with the law, Articles of Incorporation and Rules of Procedure. For its part, the Managing Board involved the Supervisory Board and its committees early on in all decisions of fundamental importance to SMA, keeping them regularly, promptly and comprehensively informed by means of written and oral reports. The subject matter of these reports included all strategy issues relevant to the company, the market and competitive situation, and business developments. The Managing Board also reported to the Supervisory Board on the company's and the group's position, sales and results of operations. Furthermore, the Managing Board presented detailed information on proposed business policies and other important questions concerning corporate planning, in particular financial, investment, production and personnel planning, as well as significant business transactions. Deviations in how events actually transpired in comparison to previously reported objectives were provided, including reasons for the variances. In addition, the Supervisory Board was informed about the company's and the group's profitability, above all the return on equity, risk and opportunity management, risk status and compliance.

The Supervisory Board closely scrutinized and discussed business transactions requiring the approval of the Supervisory Board as well as instances where business performance deviated from corporate planning. Even beyond the regular Supervisory Board meetings, the Chairman of the Supervisory Board and his deputy were in frequent contact with the Managing Board and discussed subjects concerning strategy, planning, business development, position of risk, risk management and compliance, as well as significant business transactions and upcoming decisions. The Supervisory Board members took general and specialized training necessary for their tasks on their own accord, and in doing so, they received appropriate support from the company. In addition, the members newly elected to the Supervisory Board were given the opportunity to familiarize themselves with the company, its products, sales markets and working methods in separate meetings with the Managing Board. No Supervisory Board or Managing Board members reported any conflicts of interest to the Supervisory Board.

Focus of Supervisory Board consultations

The Supervisory Board examined all material events and discussed them with the Managing Board at six regular meetings and adopted necessary resolutions in accordance with the law, Articles of Incorporation and Rules of Procedure. In three circulation procedures, it also adopted resolutions on the conduct of the virtual Annual General Meeting and the appointment of Supervisory Board committees, among other things. Kim Fausing participated in three regular meetings. Uwe Kleinkauf participated in three of four regular meetings held during his term of office. Roland Bent took part in five regular meetings. The other Supervisory Board members participated in all four and/or six regular meetings held during their term of office.

In preparation for the meetings, the Supervisory Board received written reports from the Managing Board on a regular basis and on time. At each regular meeting, the subject matter of the deliberations were current business developments, the evolution of markets of particular importance to the SMA group and corporate planning. Members of the Managing Board participated in all regular Supervisory Board and Audit Committee meetings, but were not present for discussions of matters relating to the Supervisory Board or Managing Board itself.

At its meeting on February 6, 2020, the Supervisory Board dealt with the Corporate Governance Report included in the 2019 Annual Report, and the Supervisory Board Report for 2019. The Supervisory Board also discussed the contents of the Non-Financial Statement presented by the Managing Board. Moreover, the meeting and resolutions dealt with the evaluation of target achievements and the determination of the variable remunerations of the Managing Board.

At its meeting convened to adopt the accounts on March 24, 2020, the Supervisory Board acknowledged the 2019 Annual Financial Statements, approved the 2019 Consolidated Financial Statements after in-depth consultation and also passed the proposal to the Annual General Meeting on profit appropriation for 2019. In addition, it reviewed the proposal for selection of the Financial Statements and the Consolidated Financial Statements auditor for 2020.

At its meeting on June 3, 2020, the Supervisory Board focused on current issues affecting the product quality of SMA and its competitors. Additionally, the discussions and resolutions covered the company's personnel-related plans as well as strategies and efforts to improve sustainability.

At its meeting on June 4, 2020, the newly elected Supervisory Board appointed a Chairman and a Deputy Chairman, as well as the members of the Mediation Committee. Furthermore, the Supervisory Board issued the audit mandate to the auditor for 2020.

The company's medium-term strategy was the focus of the meeting on September 9, 2020. In addition, the Supervisory Board familiarized itself with the company's product innovations and product roadmap and discussed the results achieved in the partnership with Danfoss A/S. Furthermore, the Supervisory Board was informed about the economic developments of SMA AG's subsidiaries.

At its meeting on December 8, 2020, the Supervisory Board dealt in depth with the budget for the 2021 fiscal year submitted by the Managing Board. Furthermore, it discussed the Managing Board's report on the orientation of SMA's sales and service. The Managing Board and the Supervisory Board also adopted a new Declaration of Conformity pursuant to Section 161 (1) sentence 1 of the German Stock Corporation Act (AktG) to comply with the recommendations of the German Corporate Governance Code.

Focus of committee meetings

To improve the efficiency of the work carried out by the Supervisory Board, the Supervisory Board maintains four permanent committees: the Presidial Committee, Audit Committee, Nomination Committee and Mediation Committee. You will find the names of the persons appointed to these committees on our website at www.SMA.de/en/investor-relations as well as in the Corporate Governance Statement 2020.

The committees prepare the topics and resolutions to be reviewed by the entire Supervisory Board, and, within the framework of the competencies assigned to them, they resolve those matters they have been assigned instead of the Supervisory Board. The content of the committee meetings is reported on by the committee chairman at the subsequent plenary session of the Supervisory Board. All members of the Supervisory Board receive the content and resolutions of the committees in writing.

The **Presidial Committee** met four times in 2020. The committee's work focused in particular on dealing with matters relating to the Managing Board and preparing Supervisory Board resolutions on Managing Board composition, allocation of responsibilities, and Managing Board remuneration. Kim Fausing participated in one meeting and the other members participated in all meetings of the committee held in their respective terms of office.

The **Audit Committee** convened seven times in 2020, three times via telephone conferences. The meetings focused on discussing the company's business performance and cost efficiency, the Quarterly Statements and Half-Yearly Financial Report. In addition, the committee familiarized itself with the main points and overall findings of the auditor for the 2019 Annual Financial Statements and upon review confirmed the auditor's independence. The Audit Committee also dealt with tax issues. Another key area of the committee's work was reviewing the internal risk management systems (Internal Control System, Internal Audit and Compliance), with the committee members gathering comprehensive information about these systems' methods and effectiveness. Furthermore, the committee handled the Half-Yearly Financial Report prepared by the Internal Audit department and the Compliance Report, neither of which showed any significant irregularities in SMA business processes. Other topics of the committee meetings were the contents of the Non-Financial Statement of the company pursuant to Section 289c of the German Commercial Code (HGB) and the extended Auditors' Report. The Audit Committee also reviewed the recommendation made for the entire board to consider regarding profit appropriation, selecting the auditor for 2020 and granting the audit mandate. All the meetings were attended by all members of the Committee.

The **Nomination Committee** held one meeting in 2020. The subject of the meeting was the proposal to the Annual General Meeting for the election of shareholder representatives to the Supervisory Board. The meeting was attended by all members of the Committee.

The **Mediation Committee** did not convene in 2020.

Corporate Governance

In 2020, the Supervisory Board also dealt with the contents of the German Corporate Governance Code that had been newly adopted in December 2019. For the reporting year, the Supervisory Board and the Managing Board issued a Declaration of Compliance pursuant to Section 161 of the German Stock Corporation Act (AktG) in compliance with the recommendations of the German Corporate Governance Code. The joint report issued by the Supervisory Board and the Managing Board on compliance with the rules of the German Corporate Governance Code pursuant to clause 22 of the German Corporate Governance Code (Corporate Governance Report) has been made permanently available on our website at www.SMA.de/en/investor-relations and is also mentioned on pages 38 et seq. of the Annual Report. This is also where you will find statements on conflicts of interest and how they are handled.

Annual Financial Statements and Consolidated Financial Statements

The Annual Financial Statements prepared by the Managing Board as of December 31, 2020, the Combined Management Report for the 2020 fiscal year of SMA AG, the Consolidated Financial Statements as of December 31, 2020, and the Combined Management Report for the 2020 fiscal year of the SMA group were audited by the accounting firm Deloitte GmbH, Hanover, Germany. The Supervisory Board granted the audit assignment in accordance with the resolution adopted by the General Meeting on June 4, 2020. The Supervisory Board also monitored the independence of the auditor.

The Consolidated Financial Statements of the company were prepared in line with Section 315a of the German Commercial Code (HGB) on the basis of the International Financial Reporting Standards (IFRS) as applicable in the EU. The auditor granted an unqualified audit opinion for the Annual Financial Statements and the Combined Management Report of SMA AG as well as for the Consolidated Financial Statements and the Combined Management Report of the SMA group.

The reporting documents, including the Non-Financial Statement of the company, and the Managing Board's proposal on the appropriation of profits, as well as the audit reports were made available to the Supervisory Board in good time. These were first discussed by the Audit Committee at its meetings on February 3, 2021, and March 23, 2021, with the auditors and then by the Supervisory Board at its meeting on March 24, 2021, in the presence of the auditor's representatives. The auditor's representatives reported on the audit findings and provided detailed explanations of the net assets, financial position and results of operations of the company and the group. The questions posed by the Supervisory Board were answered and the reporting documents were reviewed in detail with the auditor's representatives and discussed and examined by the Supervisory Board. The Supervisory Board raised no objections after concluding its examination. Thereafter, the findings of the audit were approved. Accordingly, the Supervisory Board approved the Financial Statements prepared by the Managing Board and the related Combined Management Report for the 2020 fiscal year at its meeting convened to adopt the accounts on March 24, 2021. Hence, the company's Annual Financial Statements have been approved as set out in Section 172 of the German Stock Corporation Act (AktG).

Finally, at its meeting held on March 24, 2021, the Supervisory Board approved the Managing Board's proposal on the appropriation of the balance sheet profit. In this respect, the Supervisory Board discussed the company's liquidity position, the financing of planned investments and estimated business development. In doing so, the Supervisory Board came to the conclusion that the proposal was in the interests of the company and the shareholders.

Changes to the Managing Board and Supervisory Board

At the end of the Annual General Meeting on June 4, 2020, the term of office of the Supervisory Board existing until then ended. In addition to eight people who had already served on the previous Supervisory Board, the elections by the workforce and the Annual General Meeting chose Uwe Kleinkauf and Jan-Henrik Supady as new members for the shareholder side and Romy Siegert and Martin Breul as new members for the employee side on the Supervisory Board. After many years of service on the Supervisory Board, Dr. Erik Ehrentraut and Peter Drews did not stand for re-election. Through their work, both have played a decisive role in shaping the direction and culture of the company and thus its character as a company that is stable in its values, forward-looking and committed to its employees. Their visions have given SMA important impetus in both good and bad years. The Supervisory Board would like to sincerely thank Dr. Erik Ehrentraut and Peter Drews for their dedication for the good of the company. The Supervisory Board would also like to thank Heike Haigis and Hans-Dieter Werner, who are no longer represented on the Supervisory Board as employee representatives, for their commitment to the SMA cause.

In 2020, SMA succeeded in taking further visible steps toward sustainable profitability and in further developing into a systems and solutions provider. We must now continue to follow this path to participate in the promising future of renewable energies.

The Supervisory Board would like to thank the Managing Board and all employees for their dedicated work and their strong commitment to lead SMA to a successful future, under the stresses caused by the coronavirus pandemic.

Niestetal, March 24, 2021

The Supervisory Board

Uwe Kleinkauf
Chairman

ROLAND BENT

Shareholder Representative

MARTIN BREUL

Employee Representative

OLIVER DIETZEL

Employee Representative

KIM FAUSING

Shareholder Representative (Deputy Chairman)

JOHANNES HÄDE

Employee Representative

ALEXA HERGENRÖTHER

Shareholder Representative

UWE KLEINKAUF

Shareholder Representative (Chairman)

ILONKA NUSSBAUMER

Shareholder Representative

YVONNE SIEBERT

Employee Representative

ROMY SIEGERT

Employee Representative

JAN-HENRIK SUPADY

Shareholder Representative

DR. MATTHIAS VICTOR

Employee Representative

COMBINED MANAGEMENT REPORT [1]

[1] The present Combined Management Report has been drawn up for both the SMA group and SMA AG. It was prepared in accordance with Sections 289, 289a, 315 and 315a of the German Commercial Code (HGB) and German Accounting Standards (GAS) numbers 17 and 20.

BASIC INFORMATION ABOUT THE GROUP

Business activity and organization

SMA Solar Technology AG (SMA) and its subsidiaries (SMA group) develop, produce and sell solar and battery inverters, monitoring systems for PV systems, medium-voltage technology, transformers and chokes. In addition, the company offers intelligent energy management solutions and services, including operation and maintenance services for photovoltaic power plants (O&M business). Another business segment provides digital services related to the future energy supply.

Organizational structure

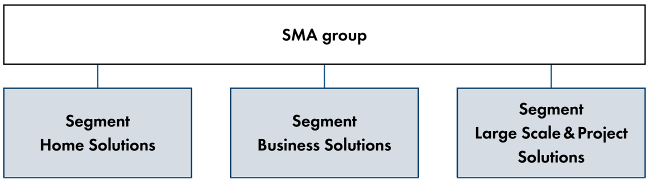
LEGAL STRUCTURE OF THE GROUP

As the parent company of the SMA group, SMA AG, headquartered in Niestetal near Kassel, Germany, takes over all of the functions required for its operative business. The parent company holds, either directly or indirectly, 100% of the shares of all the operating companies that belong to the SMA group. The Annual Report includes information regarding the parent company and all 28 group companies (2019: 29), including seven domestic companies and 21 companies based abroad. In addition, SMA Solar Technology AG holds a 33.34% interest in elexon GmbH. The joint venture in the field of charging infrastructure facilities was established in 2019 and is recognized as an associate in the Consolidated Financial Statements according to the equity method.

ORGANIZATIONAL AND REPORTING STRUCTURE

The SMA group operates under a functional matrix organization. In this organization, the Home & Business Solutions and Large Scale & Project Solutions business units manage development, operational service and sales as well as production and procurement/logistics. The Home Solutions and Business Solutions segments are presented separately in the reporting structure.

REPORTING STRUCTURE



MANAGEMENT AND CONTROL

In accordance with the German Stock Corporation Act, the executive bodies consist of the Annual General Meeting, the Managing Board and the Supervisory Board. The Managing Board manages the company. The Supervisory Board appoints, supervises and advises the Managing Board. The Annual General Meeting elects shareholder representatives to the Supervisory Board and grants or refuses discharge to the Managing Board and the Supervisory Board.

COMPOSITION OF THE MANAGING BOARD

Since October 15, 2018, the Managing Board of SMA Solar Technology AG has comprised the following members: Dr.-Ing. Jürgen Reinert (Chief Executive Officer, Board Member for Strategy, Sales and Service, Operations and Technology) and Ulrich Hadding (Board Member for Finance, Human Resources and Legal).

COMPOSITION OF THE SUPERVISORY BOARD

Since the election of the shareholder representatives at the Annual General Meeting on June 4, 2020, the SMA Supervisory Board, which represents shareholders and employees in equal measure, has consisted of Roland Bent, Kim Fausing (Deputy Chairman), Alexa Hergenröther, Uwe Kleinkauf (Chairman), Ilonka Nussbaumer and Jan-Henrik Supady as shareholder representatives. Since the scheduled election on May 14, 2020, the employees have been represented on the Supervisory Board by Martin Breul, Oliver Dietzel, Johannes Häde, Yvonne Siebert, Romy Siegert and Dr. Matthias Victor.

Before the new appointments, the shareholder representatives on the Supervisory Board included the following members: Roland Bent, Peter Drews, Dr. Erik Ehrentraut (Chairman), Kim Fausing (Deputy Chairman), Alexa Hergenröther and Ilonka Nußbaumer. The employees were represented on the Supervisory Board by Oliver Dietzel, Johannes Häde, Heike Haigis, Yvonne Siebert, Dr. Matthias Victor and Hans-Dieter Werner.

Products and services [1]

As a specialist in system technology, SMA develops and sells PV inverters and storage solutions, hardware and software, as well as services that allow energy to be intelligently managed and efficiently used. SMA's portfolio contains a wide range of efficient PV inverters, holistic system solutions for PV systems of all power classes, battery storage solutions, intelligent energy management systems, charging solutions for private and commercial electric vehicles, and complete solutions for PV diesel hybrid applications. In addition, SMA offers extensive services up to and including operation and maintenance services for photovoltaic power plants (O&M business) and develops digital energy services for private and business customers. SMA inverters already come integrated with all the functions required to generate maximum yields, without any additional cost to the customer. These functions include effective shade management with SMA ShadeFix and inverter monitoring with SMA Smart Connected.

In the **Home Solutions segment**, SMA caters to global markets for small PV systems with and without connection to a smart home solution. Our SMA Energy System Home provides an end-to-end, single-source system package featuring all the hardware, software and service components required for an independent and cost-effective household electricity supply. SMA's portfolio in the Home Solutions segment comprises single- and three-phase string inverters in the lower output range of up to 12 kW, integrated services, energy management solutions, storage systems, charging solutions for electric vehicles, communication products and accessories, alongside services such as extended warranties, spare parts and modernization of PV systems (Repowering) to enhance performance as well as digital energy services. With this portfolio of products and services, SMA provides solutions for private PV systems in all major photovoltaic markets worldwide.

In the **Business Solutions segment**, the focus is on global markets for medium-sized PV systems with and without an energy management solution. SMA Energy System Business, featuring ideally matched hardware, software, tools and services, gives commercial enterprises the option of producing, storing and selling solar power themselves and organizing their companies' energy flows in a transparent and cost-efficient way. The product portfolio in this segment comprises the three-phase inverters of the product families Sunny Tripower with outputs of more than 12 kW and Sunny Highpower. Storage solutions, holistic energy management solutions for medium-sized PV systems and electric vehicle fleet charging solutions based on the ennexOS platform, medium-voltage technology and other accessories complement the range of products. In addition, SMA offers services up to and including system modernization and operational management of commercial PV systems (O&M business) as well as digital services.

The **Large Scale & Project Solutions segment** focuses on international PV power plant markets with its powerful string inverters in the Sunny Highpower product family and the central inverters in the Sunny Central product family. The outputs of inverters in this segment range from 150 kW to the megawatts. Furthermore, the SMA portfolio includes complete solutions comprising central inverters with their grid service and monitoring functions as well as all medium- and high-voltage technology and accessories. Another focus is on storage solutions for large-scale PV and storage power plants. The portfolio is supplemented by services, such as for the modernization and functional enhancement of PV power plants (Repowering), and operation and maintenance services (O&M business). This segment also includes the PV diesel hybrid projects that SMA undertakes in sunbelt areas around the world and large-scale storage projects in select markets.

Important sales markets and competitive situation [2]

SMA estimates that 137 GW of new PV power was installed worldwide in 2020. This is 23% above last year's level (2019: approximately 112 GW; figures exclude inverter retrofitting and battery inverter technology). SMA estimates that global PV inverter technology sales (including inverter retrofitting and battery inverter technology) increased to €6.2 billion in the reporting period (2019: €5.8 billion).

According to SMA estimates, the share of the photovoltaic markets in Europe, the Middle East and Africa (EMEA) in global sales decreased to approximately 26% in 2020 (2019: 30%). American photovoltaic markets slightly increased to a share of around 21% (2019: 20%). The Chinese market accounted for approximately 20% of global sales in 2020 (2019: 15%) due to the strong growth. The Asia-Pacific photovoltaic markets (excluding China) accounted for around 33% of sales, slightly less than in the previous year (2019: 35%).

[1] The following section is not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

[2] The estimated values in the following section are not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

SMA IS WELL POSITIONED INTERNATIONALLY AND HAS A WIDE RANGE OF PRODUCTS

With its companies and experienced photovoltaics specialists in 18 countries and a portfolio of products and solutions for all segments, the SMA group is in a good position to benefit from the growth of global photovoltaic markets.

The SMA production facility in Niestetal (Germany) has an overall annual capacity of 21 GW. The competence center for coils (electromagnetic components) is based in Modlniczka, near Krakow (Poland). With its international positioning and product and service portfolio for all types of applications and different regional requirements, SMA can react quickly to shifts in demand anytime.

HIGHER SALES AND INVERTER OUTPUT SOLD DESPITE THE CORONAVIRUS PANDEMIC

SMA also felt the effects of the coronavirus pandemic in the reporting year. However, rapid and cautious crisis management prevented any substantial negative impact on business development. In 2020, SMA increased volumes and sales despite the challenges imposed by the coronavirus pandemic. The cumulative output of inverters sold was 14,416 MW (2019: 11,409 MW), while sales increased to €1,026.6 million (2019: €915.1 million). The excellent IT infrastructure, which enabled a rapid switch to mobile working, contributed to the success, as did the intensive collaboration with suppliers and service providers to avoid delivery bottlenecks. Intensive customer support and service were continued using new communication tools and channels, and processes and procedures in production and logistics were adapted in such a way that production capacity was maintained without interruption, while ensuring the highest possible level of health protection for employees. SMA did not have to take advantage of any state aid.

In addition, we further advanced SMA's strategic positioning in major future fields and consequently its continued development into a provider of systems and solutions in the reporting period. With the SMA EV Charger, which enables the intelligent charging of electric vehicles with a high proportion of cost-effective solar power, we have successfully launched e-mobility. We have also introduced comprehensive apps for installers and end customers to the markets. In the area of operations and maintenance services for PV power plants (O&M business), we have further strengthened our position among the leading providers through several major orders.

Strategy

Energy supply structures are undergoing fundamental change all over the world. After the pioneering phase of renewable energy sources, the digitalization of the energy industry is the next step. In the foreseeable future, the energy supply will be decentralized, highly renewable, fully digital and interconnected. Photovoltaics will play an essential part as the most cost-effective and decentralized source of energy. With a wide portfolio of products, systems and solutions, extensive system expertise and a global presence, SMA is in a good position to utilize the opportunities offered. Back in 2016, SMA's management created the strategic framework for the company's further success with the formulation of the SMA Strategy 2020.

In the reporting year, the management worked on further refining and realigning the SMA Strategy to future requirements for the period up to 2025. Representatives from all regions and corporate functions were involved in a broad-based participatory strategy process and contributed their specialist knowledge and expertise. The company's further transformation into a systems and solutions provider remains core to the Strategy 2025 in order to participate in the great potential of the changing energy supply structures worldwide. We are leveraging our systems expertise to develop complete, future-proof solutions of significant customer benefit in close collaboration with our strong partners and to tap into new business areas.

Purpose, vision and mission [1]

Within the strategy process, all employees were given the opportunity to play a part in developing the corporate mission statement with the core elements of purpose, mission and vision. Employees were also asked to have their say on the final formulation of the corporate purpose in a survey. The purpose that was formulated reflects the strong entrenchment of sustainability within the company. It is: "Our energy inspires the world's most important customer. Our future."

The same is true of our vision, which sets out SMA's vision for the future and the standard we are setting ourselves: "We pioneer access to clean energy."

[1] The following section is not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

Our mission outlines how we are striving to meet the ambitions and needs of our customers and other stakeholders and achieve our purpose: “We leverage 40 years of expertise and passion in renewables to drive the world’s energy transition with our partners.” In our daily interactions, we embody our company values of Trust, Performance and Team Spirit, and allow our actions – within and outside the company at all levels – to be influenced by our brand values: We are **sustainable** and respect people and the planet, we are **passionate** in all that we do, we are **connected** and work together to achieve our goals, we are **visionary** and dare to innovate, and we are a **reliable** partner.

Strategic corporate goals

In the course of refining the SMA Strategy, the strategic corporate goals were revised and assigned goal categories under which strategic initiatives are listed. The strategic goals form the basis for future company success.

CLOSER TO OUR CUSTOMERS

We impress our customers with our exceptionally user-friendly products and solutions-focused collaboration.

Under the customer needs goal category, we have set ourselves the goal of working together with our customers to further improve our understanding of what they need, now and in the future. Our aim by 2025 is also to deliver an inspiring customer experience across the board through our user-friendly service range and a seamless customer journey. We want to continue to optimize the sales process for all stakeholders by using existing customer channels more efficiently and developing alternative channels. By 2025, the entire SMA organization is to be geared toward customer-centricity in our decisions, processes and organizational structures. We see our knowledge about our customers, their requirements and the market as a unique selling proposition and are continuously expanding our knowledge, skills and capabilities across all relevant SMA areas.

STABILITY THROUGH PROFITABILITY

We are consistently improving our profitability by further enhancing our core business and purposefully branching out into new business areas.

One of the goal categories here is sales and earnings increase: We want to achieve an EBITDA margin of at least 10% by no later than 2025. Under the quality and cost discipline goal category, we have set ourselves the target of continuously reducing quality costs and cost of sales. We intend to strengthen the company’s liquidity by generating a consistently positive free cash flow and optimizing working capital. The all-encompassing objective is to continuously increase company value. Finally, by 2025, employees are to be given greater levels of participation in the company as shareholders through a stock participation program.

INTEGRATED SUSTAINABILITY

We are as sustainable as possible in all areas of the company and take a leading role in climate protection.

For the environmental and climate protection goal category, this means that by 2025, SMA’s global production activities will be climate-neutral and the principle of the circular economy will have been implemented right the way along the value chain. Under the social responsibility goal category, we are striving to be an exemplary employer and contribute to positive social development and generational fairness. We achieve exemplary governance through fairness, transparency and compliance in all areas. We base our manner of corporate governance on recognized standards and are continuously improving our (supervisory) structures and processes. We want to secure sustained business success and thus SMA’s future with long-term, innovative business models that inspire our customers.

SHAPING THE FUTURE THROUGH INNOVATION

We are leveraging our technology expertise, experience and capacity for innovation to position SMA for the future in existing and new business areas.

Under the customer success goal category, we want to prioritize our innovation activities and investments in customer added value. We are enhancing our capacity for innovation by systematically using our innovativeness to generate new ideas and implement them successfully. We will continue right up to 2025 to develop our expertise in addressing complex issues so that complex processes can be structured holistically and cross-functionally with a high degree of effectiveness within the organization. Digitalization also plays a key role in this regard, so we will set up consistent digital system landscapes that are also able to map out new business models in a flexible way.

STRONG PARTNERSHIPS

We are developing a strong partner network and taking advantage of the opportunities that may arise.

Under the new business opportunities goal category, our ambition is to expand our scope of action through our new range of impressive customer solutions with external partners by 2025. Another aim of our collaboration with strong partners is to continue developing our capabilities over the long term and generate synergy effects. Effective integration of our partners allows us to improve our efficiency, productivity and competitiveness and thereby increase our internal and external impact. By establishing a strategic partner management process, we can also optimize our integration capacity. Achieving these goals is vital for SMA's further transformation into a systems and solutions provider because strong partnerships are key here.

Enterprise management

Leading indicators

To be able to react to market changes in a timely manner, it is exceedingly important for SMA to recognize opportunities and risks early on. To achieve this, we will have ongoing discussions about what are commonly referred to as operative leading indicators at both the Managing Board and business unit level with the business unit heads, vice presidents and the general managers of SMA subsidiaries. Indicators relevant to SMA include changes in PV system incentive programs and their effect on regional market potential, growth and competitiveness of SMA in regional markets, customer acceptance of new products as well as market-related information stemming from discussions with customers, suppliers and associations. The myriad of influencing factors and the complex way they interact make it difficult to produce a detailed forecast that holds up long term.

As part of annual and medium-term planning, the Managing Board specifically discusses opportunities and risks with regard to markets and sales volumes with the sales and business unit heads and records the final assumptions for planning. In the reporting period, the Managing Board and business unit management were informed on a monthly basis about the financial development of the entire SMA group and the individual business units. They were continuously compared with planning assumptions. In the event of deviations or unforeseen events, short-term countermeasures could therefore be taken on the basis of intra-year forecasts.

Financial management parameters

In 2020, SMA used the following key financial management parameters for its operative business as explained below. Compared with the previous year, there were no changes in the calculation of key figures or in the management system.

SALES

Sales include all the sales generated over the reporting period. Because the market for inverters was shaped partly by plummeting prices, we measure inverter output sold along with sales. We calculate sales at both the group and segment level.

OPERATING PROFIT (EBIT)/OPERATIVE EARNINGS MARGIN

In addition to sales and the cost of sales, the operating profit includes functional costs and other operating expenses and income. SMA uses this key figure to measure the profitability of the individual segments and the group. To determine the operative earnings margin, we calculate operating profit in relation to total sales. We measure the operating profit and operative earnings margin at both the group and segment level.

EARNINGS BEFORE DEPRECIATION AND AMORTIZATION (EBITDA)

SMA calculates operating earnings before interest, taxes, depreciation and amortization (EBITDA) based on operating earnings (EBIT), plus depreciation and amortization of fixed and intangible assets. SMA uses this key figure to measure profitability at the group level, excluding imputed depreciation of investments made.

NET WORKING CAPITAL/NET WORKING CAPITAL RATIO

In addition to inventories, net working capital comprises trade receivables, trade payables, prepayments received from customers and prepayments made to suppliers. We measure our customers' and suppliers' accounts receivables as well as product manufacturing inventories regularly in relation to sales over the last 12 months. We measure and manage net working capital at the corporate group level.

CAPITAL EXPENDITURE

Capital expenditure is another key driver of liquidity planning. To manage capital expenditure, we formulate budgets as part of our annual planning, which the Managing Board approves over the course of the fiscal year. This applies particularly to large-scale capital expenditure projects, which are additionally evaluated with a profitability calculation. We manage capital expenditure at the corporate group level.

NET CASH

With net cash, we review our own financing possibilities for the ongoing business like net working capital and capital expenditure. It includes liquid funds and securities contained within working capital and cash on hand pledged as collateral less interest-bearing financial liabilities. We manage net cash at the corporate group level.

Intragroup reporting and management

INTRAGROUP REPORTING

The monthly reporting includes, among other information, detailed status reports on orders placed and order volumes, the amount of inverter output sold, sales figures, results of operation, cash flow statements, research and development activities, investments and net working capital. The aim is to compare changes in decisive items on the income statement and balance sheet both with the budget and figures of the previous month and to take any corrective measures necessary. An electronic management information system (SAP Business Warehouse) serves as the "home" for the information used for reporting.

INTRAGROUP MANAGEMENT SYSTEM

In the reporting period, the basic elements of the intragroup management system were the regular Managing Board meeting and monthly discussions on results with the business unit managers. Strategy implementation was also discussed during quarterly business reviews with the business units as was an assessment on the progress of objectives. In addition, the SMA intragroup management system encompasses the regular Risks and Opportunities Report and the report prepared by the Internal Audit department.

Research and development

SMA uses its systems expertise to develop holistic solutions for different photovoltaic applications and for comprehensive energy management across all segments and sectors (power generators, household appliances, storage systems, heating, ventilation and air-conditioning, e-mobility). To offer our customers technically mature and economic system solutions in all market segments and regions, we selectively collaborate with strong partners. With our continuous research and our market- and customer-focused development, we can further reduce the consumer cost of PV electricity and decrease the complexity in the new, decentralized and digital energy world through hardware and software solutions and innovative services, thus making a significant contribution to a successful global energy transition.

Forward-looking development approach

Thorough understanding of different market requirements and close proximity to our customers enable us to anticipate future system technology demands. With the growing importance of photovoltaics for the global power generation and the increasing integration of PV systems into complete systems, system integration and connectivity are taking center stage. In addition, cyber security is playing an ever more important role. In this context, the PV inverter is classified as a system-critical component, so customers place higher demands on the transparency of companies. [1]

In product development, we are pursuing a platform strategy aimed at systematically reducing product costs and being able to quickly react to market changes. By standardizing the core inverter, we are capable of increasing the proportion of identical components across the entire portfolio. Customization in line with different markets and customer needs is implemented partly through the connection area and software as well as through different power classes based on the platform. [1]

SMA was granted 1,635 patents and utility models worldwide by the end of the reporting period. In addition, more than 500 other patent applications were still pending as of December 31, 2020. Furthermore, SMA holds the rights to 1,285 trademarks.

In addition to the (further) development of solutions for the efficient generation and use of solar energy and intelligent energy management across various sectors, the focus of development also was on e-mobility in the reporting period. The first charging solution for electric vehicles has already been launched.

Research and development expenses of the SMA group

in € million	2020	2019	2018	2017	2016
Research and development expenses	71.2	63.1	67.8	83.0	78.3
of which capitalized development projects	15.2	10.9	18.8	18.4	12.5
Depreciation on capitalized development projects (scheduled)	9.1	9.0	21.4	18.2	19.8
Research and development ratio in % in relation to sales	6.9	6.9	8.9	9.3	8.3

Holistic solutions for the energy supply of the future [2]

RESIDENTIAL SYSTEMS: NEW APPS AND CHARGING SOLUTIONS FOR THE WORLD OF DIGITAL ENERGY

In the Home Solutions segment, the focus in the reporting period was on digital energy solutions. SMA thus began to introduce a series of energy apps for installers and system operators. A new charging solution for electric vehicles was also launched.

The SMA 360° app for solar power professionals has been available since May. With this innovative app, SMA supports installers in all areas of their day-to-day business and in all phases of the planning and operation of PV systems. None of our competitors has combined so many functions in one app to date. With the SMA 360° app, solar power professionals always have all system data to hand immediately. All steps – from simulation and commissioning of photovoltaic systems to mobile monitoring of all systems in the portfolio through to servicing at the customer site – can be performed directly on a cell phone or tablet.

[1] This paragraph is not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

[2] The following section is not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

The SMA 360° app is regularly enhanced with new functions. In the future, this will also include automatic notifications when servicing is required.

SMA has been making the SMA Energy app available to private system operators ever since the third quarter of 2020. This will enable them to digitally monitor and, in some cases, control all energy generators and loads in their own four walls, including storage systems and electric vehicles, thereby identifying potential to save energy and reduce costs.

In the field of e-mobility, SMA has been offering a flexible charging solution for private households in the form of the EV Charger Home since September. It allows consumers to charge their electric vehicles intelligently and cost-effectively with self-generated solar power or with electricity from the grid, depending on the preferences they have set. The intelligent system always takes account of all loads while charging, automatically adjusts the charging power when several loads are in operation at the same time, and prevents the home connection from becoming overloaded. Users therefore always charge with the maximum available power permitted by the home connection and the vehicle.

Furthermore, the software package SMA Charge S, which is available as an e-product, was developed in conjunction with car manufacturer Audi. Since November, the common EEBUS interface has made it possible to hook up the connect charging system for the fully electric Audi e-tron to the home energy management system featuring SMA ennexOS. This makes it easy to coordinate charging with all the connected generators and loads in the household, ensuring that the electric vehicle is charged in a sustainable and cost-efficient manner.

COMMERCIAL APPLICATIONS: FLEXIBLE SOLUTION FOR ROOFTOP AND GROUND-BASED PV SYSTEMS AND NEW CHARGING SOLUTION FOR ELECTRIC VEHICLES

In the Business Solutions segment, SMA closed a gap in its portfolio in the reporting period with the launch of the new Sunny Tripower CORE2 inverter. With 12 MPP trackers and 24 strings, the Sunny Tripower CORE2 offers maximum flexibility when it comes to designing and installing PV systems. The particularly cost-effective inverter is suitable for rooftop and ground-based PV systems with DC voltage of up to 1,100 volts. The integrated service SMA Smart Connected ensures automatic notification in the event of a fault, thereby reducing the costs of servicing and maintenance work. The Sunny Tripower CORE2 is also suitable for bifacial PV modules and has met with a very positive response from the market.

In the fast-growing market for commercial electric vehicle charging solutions, SMA is positioning itself with its EV Charger Business. The solution has already been installed in various pilot systems and will be made available in greater quantities starting the first quarter of 2021. It meets all the requirements for charging infrastructure for electric vehicle fleets at commercial enterprises. The SMA EV Charger Business forms part of the SMA Energy System Business. This provides a complete solution comprising hardware, software, monitoring and control for the generation, storage and intelligent consumption of solar power in commercial applications. As another important component, in collaboration with the subsidiary coneva, SMA has developed an innovative charging management system based on the SMA energy management platform ennexOS. In addition to the control and management of charging parks in commercial applications, it particularly enables drivers of all-electric company cars or hybrid vehicles to charge their vehicles both at the company and at public charging stations or at home and to bill the charging costs via a system.

PV POWER PLANTS: OPTIMAL GRID INTEGRATION FOR RENEWABLE ENERGY

In the Large Scale & Project Solutions segment, development in the reporting period focused on the integration of large quantities of renewable energy into utility grids.

With the SMA Power Plant Manager, launched worldwide in March, renewable power plants are optimally prepared for the requirements for decentralized energy generation and flexible energy marketing. It implements the complete power and energy management and displays all the system's current and past energy flows at the power plant and device level. System-wide access to operating data and parameters also saves time when it comes to commissioning and maintenance. Based on the SMA energy management platform ennexOS, the SMA Power Plant Manager not only monitors, optimizes, controls and displays grid-compliant energy generation, it also facilitates the integration of large battery-storage systems and other decentralized energy generators into the overall system. Together with grid-forming battery inverters from SMA, conventional power plant functions such as black start, automatic grid synchronization and a back-up power supply can also be provided. These functions become much more important in grids with high penetration of renewable generators, and their application is under discussion all around the world. A project at the utility company Versorgungsbetriebe Bordesholm (VBB) convincingly demonstrated their practicability. This was the first time in Germany that an entire small town was successfully disconnected from the utility grid, for one hour supplied with renewable energy only, and then reconnected to the grid equally unobtrusively.

SMA has also successfully enhanced the portfolio for operation and maintenance (O&M) services for PV power plants, with innovative and comprehensive service models generating new orders during the reporting period. This means that SMA now performs O&M services for PV power plants worldwide with an accumulated total output of nearly 5 GW.

Non-financial statement [1]

[GRI 102–14] Since SMA was founded, sustainability has been an essential part of its corporate mission statement. In addition, "Integrated sustainability" was included as an independent goal in the SMA Strategy 2025 in the reporting year.

We understand sustainability as combining long-term economic success with protection of the environment and social responsibility. Our sense of identity includes satisfied employees thanks to an attractive corporate culture, a fair and honest business policy, social commitment, exemplary handling of environmental issues and resources through sustainable production, and the use of renewable energy sources at all levels of the value chain. With our products and services, we are driving the transition to a globally sustainable, renewable energy supply and are helping to curb global climate change.

The SMA Managing Board is committed to the ten principles of the UN Global Compact, which SMA signed back in 2011. Based on these principles and the 17 UN Sustainable Development Goals (SDGs), we continuously develop our commitment to sustainability. In this way, we want to help meet the challenges associated with the global climate change, a steadily growing population and increasingly scarce resources. An overview of the Sustainable Development Goals that SMA has contributed to can be found at the end of the Annual Report on page 136. Our work focuses particularly on Goal 7: "Affordable and clean energy," Goal 11: "Sustainable cities and communities," Goal 12: "Responsible consumption and production" and Goal 13: "Climate action."

[GRI 102–11, 12, 14, 18, 48–52, 54] On the following pages, we report on the developments and progress we made in terms of sustainability in the 2020 fiscal year. Significant risks from the company's business activities and from its products and services that could have negative effects on the aspects covered in the Non-Financial Statement are described in the Risks and Opportunities Report starting on page 62. An overview of sustainability key figures can be found at the end of the Annual Report on page 138 et seq. In addition, we publish information about sustainability at SMA on our website at www.SMA.de/en.

The report uses the Core option of the Global Reporting Initiative (GRI) standards. The disclosures also fulfill the criteria of the UN Global Compact annual progress report. In the future, we will also report on how our corporate activities measure up against each of the 17 UN Sustainable Development Goals. The precautionary principle, as outlined in the Rio Declaration on Environment and Development, is also an integral part and driving force of our sustainability commitment.

Sustainability – an important element of the SMA strategy

[GRI 102–14, 22, 23, 34] SMA knows that a comprehensive, credible commitment to sustainability is possible only when it is an established part of the corporate strategy. That is why sustainability is already an essential element of the SMA Strategy 2020. In the further development of the SMA strategy in the reporting year, "Integrated sustainability" was defined as an independent goal within the corporate strategy 2025. Our aspiration here is to practice sustainability in all areas of the company and to take a leading role in climate protection. Further information on the strategy can be found on page 18 et seq.

[1] The content of the "Non-Financial Statement" section, which contains the disclosures pursuant to Sections 289b – e and Sections 315b – c of the German Commercial Code (HGB), is not subject to auditing in accordance with Section 317 (2) Sentence 4 HGB. It is relevant only to verify that the non-financial statement, separate non-financial report, non-financial group statement or separate non-financial group report has been submitted.

We have defined four areas of action as the focal points of our commitment to sustainability that comprise the following topics:

PRODUCTS AND PROCESSES	ENVIRONMENT AND ENERGY	EMPLOYEES	SOCIAL RESPONSIBILITY
Quality and safety	Resource efficiency	Culture of feedback	Responsibility in the supply chain
Customer satisfaction	Preventive environmental protection	Advanced training	Stakeholder dialogue/ transparency
Circular economy	Holistic energy management	Diversity	International principles and values
Sustainable profitability	Sustainable mobility	Occupational safety and health management	Social commitment

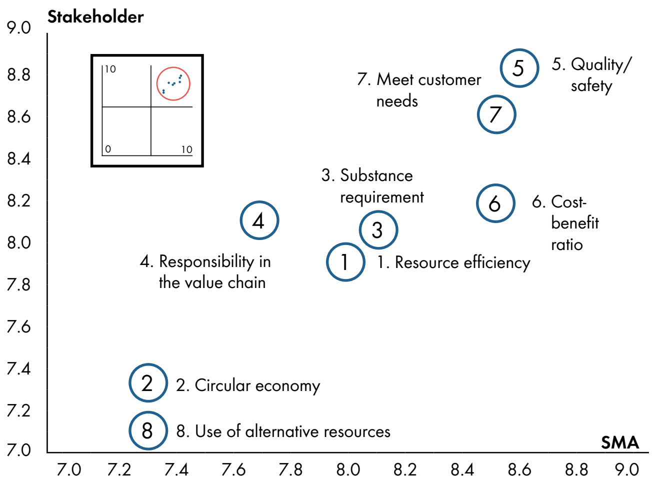
In terms of content, they relate to factors both at the company and product level.

For all company activities, the Global Quality unit coordinates implementation of the sustainability commitment. Decisions are made by the Group Management Committee, which consists of the Managing Board and top-level managers.

KEY FACTORS DETERMINED USING STAKEHOLDER ANALYSIS

[GRI 102–40, 42–44, 46, 47, 103–1] Ongoing dialogue with various interest groups and the general public is important to us. In 2017, we carried out a stakeholder analysis to identify key areas of action for a sustainable company strategy. Our survey gave internal and external interest groups (customers, suppliers, employees, NGOs) the chance to directly influence the development of SMA's sustainability commitment. The survey included three sections: sustainable company, sustainable product design and sustainable value chain. The results of the stakeholder analysis serve as the basis for continuous development of our commitment to sustainability.

Using the example of sustainable product design, the graphic below shows the analysis of the key areas of action. Internal and external stakeholders were asked about the relevance (materiality) of presorted issues from the points of view of the stakeholders and SMA. The materiality analysis revealed that many of the issues relating to sustainable product design we identified were highly relevant. We review and update the stakeholder analysis at regular intervals.



During the reporting period, we maintained contact with key stakeholders despite the coronavirus crisis and initiated increased communication relating to the topic of sustainability. In doing so, we have also taken particular account of the growing interest of the public and consumers in honest and transparent corporate sustainability communication. Internal stakeholders were also regularly surveyed on aspects of sustainability.

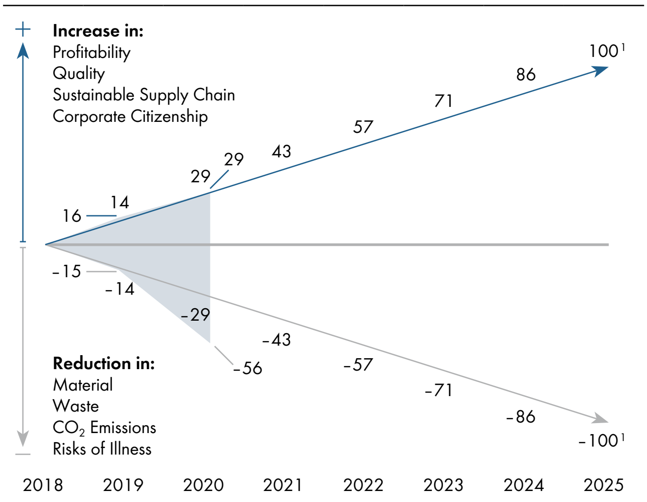
SUCCESS MEASURED BY COMPANY AND PRODUCT KPI

We have defined two key figures as primary variables that help us measure the success of our commitment to sustainability: the Company Key Figure and the Product Key Figure. In dialogue between specialists from different areas of the company, we specified the main sustainability drivers in the four areas of action and determined the key parameters required to measure them. Each driver is allocated a formula and a measurable target, which can then be used as the basis for measuring the sustainability performance in the Company Key Figure and the Product Key Figure. This gives all stakeholders a clear picture of the progress that SMA is making with its sustainability performance – both on the basis of a large number of individual key performance indicators and in the overall view of the interaction of all factors based on an overarching sustainability key figure. The merging of different parameters illustrates that sustainable business is possible only if there is a balance between economic, environmental and social aspects.

The Company Key Figure measures the use of resources and the value that this creates within the company. The aim here is to create more value with fewer resources. The bigger the gap between the value created and the resources used to do so, the more sustainable the company. For this, we have defined the following parameters and goals based on the underlying values determined for the 2018 fiscal year:

Driver	Target by 2025
Profitability	Increase in EBITDA margin to > 10%
Quality	1% field failure rate
Sustainable supply chain	55% overall score for suppliers in EcoVadis assessment
Corporate citizenship	Increase in CC index by 5%
CO_2 emissions	50% reduction in scope 1 + 2 CO_2 emissions in kg/kW of inverter output produced
Waste	25% reduction in waste per metric ton of product produced
Use of materials	25% reduction of the ratio of material input to product output
Accident frequency	Lost time incident rate of <1.5

In 2020, SMA again achieved a high sustainability performance, and in some cases significantly exceeded the goals set:



[1] Planned level of target achievement by 2025 in %

Performance achieved

The excellent successes in reducing CO_2 emissions and the extremely low accident frequency in the past fiscal year in particular contributed to the goals being exceeded.

The Product Key Figure follows the same pattern as the Company Key Figure and measures the increase in sustainability of our products and services. Here, we do not limit ourselves to performance within the company, but rather incorporate the entire product life cycle from raw material extraction to disposal or recycling and reuse. We evaluate this using the following sustainability criteria and goals, which are based on the results of our stakeholder analysis and internal expert dialogue:

Driver	Target by 2025
Use of renewable energy sources	50% ratio of renewables in total energy consumption
Quality/longevity	1% field failure rate
Design for recycling/disassembly	90% of recyclable product components
Preferable materials	25% increase in the ratio of secondary raw materials used
Product footprint	25% reduction in CO_2 emissions in kg/kW of inverter output
Use of materials	30% reduction in product weight in kg/kW of inverter output
Non-preferable materials	15% reduction in the quantity of non-preferable materials
Waste	50% reduction in special waste disposal

To determine the Product Key Figure, we mostly consult data from our product life cycle assessments. Important factors include not only materials, CO_2 emissions and energy consumption during raw material extraction, production and operation of the products, but also the quality and service life of our products. As a baseline and comparative figure, we have determined the data for 2019. When it comes to the Product Key Figure, data recording for performance determination is subject to a high degree of complexity and requires considerable effort, especially since we include the entire product life cycle. Significant progress is also measured from product generation to product generation. Against this background, a performance assessment for the reporting year is not yet possible.

Developments in the four areas of action in the reporting year

[GRI 103–1–3] As a result of the integrated management system implemented at the headquarters in Niestetal/Kassel, we follow clearly defined management approaches and also meet the requirements in accordance with DIN EN ISO 9001, DIN EN ISO 14001, DIN EN ISO 50001 and DIN EN ISO 45001. These also influenced the specification of key aspects within the four areas of action. Our management systems were reviewed and recertified in the reporting year. We report below on the measures implemented and progress achieved during the reporting year in the four areas of action.

AREA OF ACTION: PRODUCTS AND PROCESSES

Customer satisfaction is the basis for the long-term economic success of the company. With our high capacity for innovation and high quality along the entire value chain, we develop sustainable products and processes that meet the changing demands of an increasingly digitalized world, the requirements for sustainability and a circular economy. Here we concentrate on the following issues:

Ongoing improvement of quality and waste reduction in all business processes – construction of new Test Center almost completed

[GRI 416–1–3] When serving our customers, our goal is to fulfill the highest quality requirements at all times. We aim for added value, zero defect tolerance and flexible quality concepts on a global level. SMA's headquarters in Kassel/Niestetal have been certified by the DIN EN ISO 9001 standard for over 20 years, thus guaranteeing compliance with internationally recognized quality principles. Our high standard of quality is also enhanced by the accreditation of our in-house Test Center for Electromagnetic Compatibility (EMC) by ISO/IEC 17025, the international standard for test and calibration laboratories. In addition to these and other management certifications, our products meet all the safety standards required by each of our markets (e. g. UL, JET, VDE, etc.). Furthermore, our sustainable product design concept focuses on the longevity of the products. Our practices of continuously reducing wearing parts and using efficient maintenance routines serve this purpose.

Effective and efficient inspection and testing procedures help us achieve our quality goals. In the reporting period, we constructed a new EMC Test Center for large-scale inverters, which will go into operation in the first quarter of 2021. We have introduced recognized quality and risk management practices for customer support and in supplier management that we are continuously developing. Thanks to a sound quality index system, we can also identify sources of error at an early stage and address risks to a large extent.

Sustainable profitability and limited capital tie-up – SMA inverters avoid environmental damage amounting to €10 billion

[GRI 201–2, 203–2] In the reporting year, SMA successfully overcame the considerable challenges posed by the coronavirus crisis and achieved the goals set at the beginning of the year. Thanks to prudent and forward-looking management, ongoing close collaboration with customers and suppliers and the high commitment of our employees, we were able to increase our sales and profitability despite the constraints imposed by the coronavirus pandemic.

In addition, environmental damage avoided will increasingly be taken into account in the economic analysis of companies. Assuming an average value, SMA's total current inverter output of 100 GW to date is equivalent to avoided environmental damage amounting to €10 billion. Our inverters enable a cost-effective and environmentally friendly energy supply worldwide, helping support the fight against climate change and contributing to the achievement of UN Sustainable Development Goals 7, 11 and 13. The PV inverters produced by SMA to date help prevent nearly 56 million tons of CO_2 emissions every year worldwide (calculation: 100 GW of output x 1,300 kWh of power generation a year per kW x 0.43 kg CO_2/kWh). The total value of CO_2 savings and the avoided environmental damage are both lower than in the previous year because the underlying savings per kWh were revised downward in the calculation for 2020 in line with the increasing share of renewable energies in the German fuel mix.

Achieving a comprehensive circular economy – guidelines for sustainable product design integrated into development process

[GRI 301–2, 3] As a sustainability-conscious company aiming for high resource efficiency, creating a circular economy is hugely important to us. Our inverters already stand out due to a long service life. Defective devices that need to be serviced are immediately replaced by reconditioned devices, repaired wherever possible, and transferred to the replacement device pool. In our Global Repair Program, we are consistently developing this approach in order to return equipment parts that are no longer usable to the material cycle, in addition to providing optimum customer service and recycling used equipment and components as comprehensively as possible.

This is part of our integrated circular economy strategy, which we began developing in 2019. It contributes to our Product Key Figure and the factors it encompasses. The aim of the strategy is to return as many materials as possible to the material cycle as secondary raw materials once our inverters reach the end of their useful lives. We thereby wish to become less dependent on raw material extraction, which involves working and environmental conditions that are difficult to control, and simultaneously improve our supply reliability. We developed the guidelines for sustainable product design with the aim of implementing this in our product development. And in 2020, we integrated the guidelines into our product development process as a binding component.

We intend to define recyclability quotas for our inverter categories and to continuously improve them on the basis of key figures. At the same time, we are also working on steadily increasing the percentage of secondary raw materials that we use in our products. Another aspect involves materials that we would like to scale down in the future or replace with substitutes, so-called non-preferable materials. This includes not only materials that are subject to legal regulations, but also materials to be classified as critical with respect to supply reliability or based on environmental, health or human rights factors. In 2020, we conducted a comprehensive analysis based on a sample inverter for this purpose. In addition to evaluating individual parameters, we focused on obtaining a comprehensive picture of the most sustainable solutions and choices when selecting substances and materials. Based on this, we have created a matrix which allows us to compare materials within the various categories, such as materials that are harmful to the environment and health or recyclability. Comparing materials across all categories allows us to make informed sustainable decisions for our products.

Other key issues that we are bearing in mind in relation to circular economy are the high quality and service life of our products as well as their material and energy efficiency. Goals in relation to this include waste reduction, increased recovery rates and improved disposal (see also Area of Action: Environment and Energy).

We are successively expanding the guidelines for sustainable product design to make new product generations ever more sustainable. New project results from within the company are continually incorporated.

Increase in customer satisfaction – close collaboration with customers continued despite restrictions resulting from the coronavirus pandemic

[GRI 102–43, 44] To understand exactly what our customers expect from us, we engage in constant dialogue with them and actively request feedback, independent of regular operational customer support. This takes place at customer events, as part of the SMA partner program, at SMA Solar Academy seminars and regular international trade fairs. Despite the significant restrictions imposed due to the coronavirus pandemic, we continued this dialogue and close collaboration with our customers in 2020. To this end, we have developed various virtual formats and communication channels. Besides virtual product presentations and a global virtual customer event with around 1,000 participants, this includes 590 webinars from our Solar Academy with a total of around 25,000 participants worldwide.

AREA OF ACTION: ENVIRONMENT AND ENERGY

SMA will continuously reduce its use of resources in terms of raw materials, energy, mobility and waste along the entire value chain, increase its use of renewable energies, environmentally friendly materials and sustainable forms of mobility as well as improve its recycle and reuse rates. This will be taken into consideration early on in the development of new products and solutions. Important issues here are:

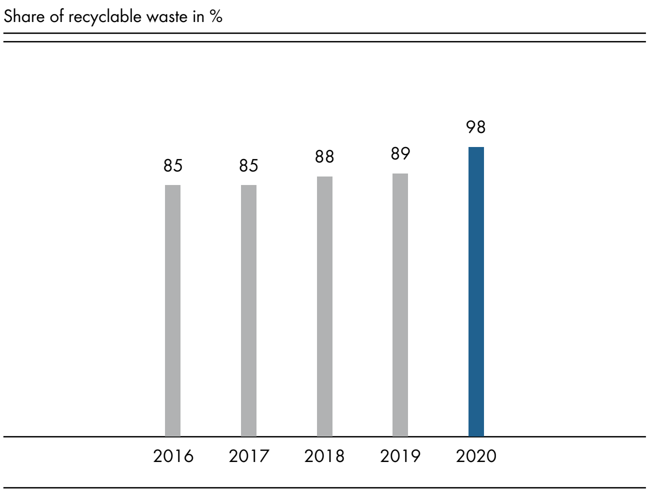
Increasing resource efficiency throughout the entire product life cycle – material efficiency increased again

[GRI 301–1, 303–1, 304–1, 2, 306–2, 307–1] In resource efficiency, SMA sees a responsibility to the environment and also an economic advantage. Here the product life cycle assessment helps us find the greatest possibilities within our value chain, define the right goals and continuously improve the product sustainability key figure. The results of the assessment have already largely been incorporated into our guidelines for sustainable product design. We have used this method in recent years for inverters of the Sunny Boy, Sunny Tripower and Sunny Central product families. We will continue this practice in order to review the impact of measures aimed at improving the product footprint. The results of previously prepared product life cycle assessments showed that the high efficiency and high-quality standard of our inverters and their associated long service life have a positive influence. We record the effects of the upstream supply chain with a detailed survey of the relevant parameters of our most important suppliers. These include, for example, the use of secondary raw materials and the CO_2 footprint in component production. The aim of working closely with our suppliers is to make our products more sustainable along the entire value chain.

Material efficiency – We once again increased the material efficiency of our inverters in 2020. Whereas in the previous year the weight of our string inverters had averaged 2.47 kg/kW output, in the reporting year, this was brought down to just 2.25 kg/kW. We also increased the power density of our central inverters such that the weight across all products is now just 1.05 kg/kW output. Our latest generation of Sunny Central inverters now even weigh only 0.85 kg/kW output. The high power density also reduces the number of inverters required within a PV power plant. We know that material savings partially go hand in hand with the use of critical raw materials. That is why, in addition to the warranty with which we already comply to avoid the use of conflict minerals in our inverters, we aim to act in accordance with material requirements such as REACH and RoHS and to gradually reduce the use of critical and rare substances. Our standard for the use of hazardous substances includes both the requirements of the Montreal Protocol and SMA's own restrictions. Our suppliers have an obligation to comply with the standard. These are all aspects that we are focusing on in our circular economy strategy and the enhancement of our product development process. The matrix for evaluating sustainable substances and materials described in the "Products and processes" area of action enables us to make informed decisions.

Waste – The issue of waste reduction is to be closely connected with our circular economy strategy. We regard waste products as a secondary raw material and seek to avoid waste as much as possible and to reuse materials. In addition to the comprehensive separation of all garbage categories introduced in all office areas, we are optimizing the homogeneous separation of production waste. Due to the concentration of our production at one site in Niestetal, Germany, during the reporting year, we were only able to test and optimize the separation of production waste by type on a pilot line in the second half of the year. The transition has already enabled us to achieve a significant increase in the recycling rate on site. The share of recyclable waste in total waste generation was 98.4% at the end of 2020. Starting 2021, the process will be transferred to all production lines, to achieve our target of a 100% recycling rate. We are also working to reduce and avoid hazardous waste materials. The packaging for some of our product groups already consists almost completely of environmentally friendly materials.

Share of recyclable waste in total waste generation



In addition to improving the recycling performance of our products, we also raised employee awareness of e-waste in 2020. We achieved this by providing information on the topic at the Hessian Sustainability Day and setting up containers for outdated small electrical appliances, which are subsequently recycled. In addition, we participated in a campaign initiated by the Naturschutzbund Deutschland (NABU) to recycle outdated cell phones. The more than 400 cell phones handed in by SMA employees were not only returned to the material cycle, but the proceeds were also used by NABU for insect protection projects.

Water – Water consumption does not play a significant role in production at SMA. In some buildings, we use well water to cool the building in an environmentally friendly way. We direct the water close to the surface, which has had the positive side effect of creating a wetland habitat. In our upstream supply chain, we expect our key suppliers to have an environmental plan in place that provides for ways of reducing water consumption where production processes are water intensive.

Biodiversity – Some of SMA's properties border on conservation areas. We comply in full with the conditions imposed on us in this respect. There have been no administrative penalty proceedings in this regard since the company was founded. We offset the unavoidable space our production and administration buildings take by using green roofs on most of our buildings.

Preventive environmental protection – energy supply at SMA headquarters is completely CO_2-neutral and regionally based

[GRI 302–2, 5, 305–1–5] The environmental management system used for our inverter production is certified in accordance with DIN EN ISO 14001. This system ensures that we avoid environmental damage at every stage of the value chain and act in accordance with current environmental legislation.

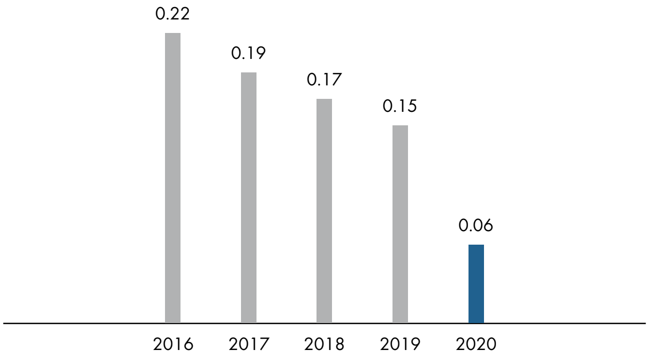
It is important to us to keep the environmental impact of our products as low as possible, beginning in the development phase. Our guidelines for sustainable product design therefore lay down key design criteria that ensure that our products become more sustainable from one generation to the next. It is not just material efficiency, efficiency and safety that contribute to sustainable design, but also the definition of "non-preferable materials." Efforts to avoid these materials, which pose environmental or health risks, or whose production involves a violation of human rights, are to be taken into consideration in the pre-development stage and tracked through to the upstream supply chain. We also evaluate "preferable materials." These are materials that should be used as a matter of preference because they contain secondary raw materials or otherwise have a very minimal impact on health, environmental and social factors.
The Product Key Figure will illustrate the progress that has been achieved in each individual area. To reach this figure, we take into account all stages of the value chain. Here responsibility throughout the supply chain plays a decisive role. Our life cycle assessments have shown us that the biggest lever for improving our product life cycles is our suppliers' use of renewable energy sources. In addition to the company's internal climate neutrality, the collaboration with our suppliers therefore plays a decisive role on the path to completely climate-neutrally produced products.

By collecting data in accordance with the GHG Protocol Standard, we transparently map our CO_2 footprint. At the Kassel/Niestetal location, thanks to our excellent energy and mobility management, energy-efficient buildings and a CO_2-neutral electricity supply, we already have an exemplary CO_2 balance. The heat supply at the headquarters has also been completely CO_2-neutral since the beginning of 2020. The aim is to extend this to all locations worldwide and become a fully CO_2-neutral company in the medium term that meets the highest standards of climate neutrality and considers CO_2 offsets only where no other solution is possible. We are demonstrating our path to this goal with the further development of our SMA Climate Roadmap. Furthermore, the long-term plan is to expand this to the entire value chain and also factor in the production of raw materials, all our suppliers, the utilization phase and recycling of our products. We will also join the Carbon Disclosure Project (www.cdp.net) in 2021 and publish our emissions even more transparently. Furthermore, in the future, we will extend our climate roadmap from our own locations to those of our suppliers, helping them make their energy supply sustainable and efficient.

Our goal is to reduce our already very low emissions as defined in GHG Scope 1 and GHG Scope 2 by another 5% per year. Following the very good successes in electricity and heat supply, we will expand our focus in the coming years to include mobility and cooling supply. We are able to determine GHG Scope 3 emissions to a limited extent only. Here, the data situation will continue to improve as a result of joining the Carbon Disclosure Project. In addition, we can refer to our primary key figures, which show the CO_2 footprint of the company and its products. We are currently working on recording CO_2 emissions in the supply chain. However, the results of our life cycle assessments already provide us with better insights into the main emission factors in the value chain.

Development of CO_2 emissions per produced kW of inverter output

CO_2 emissions Scope 1 + Scope 2 in kg/kW, Germany only



In the course of merging our production activities at one of our production facilities, we started to optimize energy use at our Solar Factory 3 in 2020. We will take inspiration from the energy optimization of Solar Factory 1, which we completed in 2018 and has helped lower energy consumption in the heating/cooling area alone by 3,300 MWh per year compared to 2016. We already switched the hall lighting in Solar Factory 3 over to efficient LED lighting. This enabled us to reduce our lighting energy consumption by up to 50%. We also achieved an exceptionally high energy efficiency performance in the new test area for large-scale central inverters. Overall in 2020, we continued to reduce energy consumption per produced kW of inverter output to 2.22 kWh (2019: 2.81 kWh) at our headquarters in Germany. In addition to the improvements mentioned above, this was due in particular to better utilization of our production capacities and the increased use of mobile working by our employees as a result of the coronavirus pandemic. A special energy management software makes it possible for us to monitor all types of consumption on an ongoing basis.

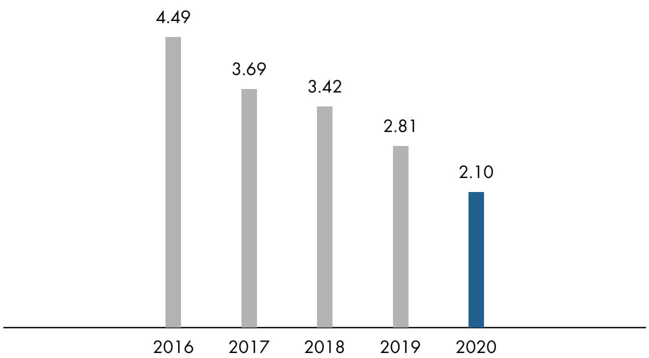
Excellence in energy management – use of renewable energy sources and energy efficiency again increased

[GRI 302–1–5] Another important starting point for sustainability is our DIN EN ISO 50001-certified corporate energy management policy. In 2020, SMA was recertified according to the new version of DIN EN ISO 50001 without any deviations. SMA's energy concept is based on three levels from which we work to improve energy-related performance: avoiding energy consumption, using energy more efficiently and increasing the share of renewable energies used.

SMA has already undertaken a number of flagship projects in the past with its CO_2-neutral inverter production facility at its Solar Factory 1 in Kassel, Germany, the Solar Academy in Niestetal near Kassel, which functions independently from the utility grid; and the Data Processing Center, which was completed in 2013 and is one of the most resource-efficient centers of its kind. These projects are a testament to the high priority SMA places on its sustainable energy strategy. In 2020, the amount of self-produced solar power in our total electricity consumption in Germany increased to 42% (2019: 38%). Since the turn of the year 2020/2021, we have been procuring the remaining electricity via certificates from wind turbine systems in the region. By the end of the reporting year, we had thus achieved our goal of supplying the German SMA locations entirely with decentralized renewable energy from the immediate surroundings.

Development of energy consumption per produced kW of inverter power

Total energy consumption in kWh/kW, Germany only



Sustainable mobility – proportion of e-vehicles in company fleet doubled to 40%

[GRI 305–5] SMA's commitment to sustainability also includes corporate mobility management that has already won multiple awards and that raises employee awareness of environmentally friendly forms of transportation. Our fleet organization, recognized by nonprofit environmental and consumer protection association Deutsche Umwelthilfe as a good example of climate protection, includes a bonus/malus system for our vehicle fleet's CO_2 emissions. Among other things, we aimed to reduce vehicle CO_2 emissions to 95 g/km by 2020 through greater use of e-mobility. Unfortunately, we have not yet been able to achieve this goal. This is due in particular to new and stricter requirements for measuring vehicle emissions. At our headquarters in Kassel/Niestetal, we currently provide our employees and visitors with 45 charging stations, at which electric vehicles can be charged with CO_2-neutral electricity. In 2020, we did not survey the amount of CO_2 saved by employees using electric cars to get to work, as it would not be comparable with previous years due to the high proportion of employees working from home as a result of the coronavirus pandemic.

Along with providing the charging infrastructure, we are promoting e-mobility by giving all employees the option of electric vehicle leasing. We are also gradually changing over the in-house vehicle fleet to e-mobility. The proportion of electric vehicles in our fleet doubled to 40% in 2020. This means that we have narrowly missed our goal for 2020 of powering at least half of the fleet vehicles electrically using renewable energy.

Another aspect of the corporate mobility management system relates to increasing the proportion of cyclists. In 2020, around 400 employees made use of the bicycle leasing system introduced in 2016. These and other measures have enabled us to almost double the percentage of employees who cycle to work from 9% to 17% within the past ten years (most recent data collected in 2019). Not only this, but the flexible working option we give our employees to work from home also results in a CO_2 saving on their commute to work. During the coronavirus pandemic, this was of particular benefit to us. The excellent SMA IT infrastructure enabled a high proportion of mobile work at SMA without any preparation time. We will continue to pursue this concept and anchor it in a corresponding works council agreement, particularly to support a reduction in the volume of traffic during peak hours.

This also applies to avoiding air travel. The special circumstances here caused by the coronavirus pandemic have shown that we are able to replace many flights with videoconferencing. We will continue to build on this experience in the coming years.

AREA OF ACTION: EMPLOYEES

The high level of commitment and willingness of our employees to always learn are essential factors in SMA's success. In the competition for talent, it is extremely important to us to be perceived as an attractive employer. That is why we are continuously developing our corporate and leadership culture, which is characterized by fairness and respect, putting our values of trust, performance and team spirit into practice in our day-to-day work and creating scope for responsible, entrepreneurial action and opportunities for shaping international collaboration. This paid off in 2020, given the significant challenges posed by the coronavirus pandemic. In addition to the very good SMA IT infrastructure, it is thanks in particular to the high level of commitment, flexibility and extraordinary willingness to learn on the part of SMA employees that business operations were seamlessly maintained under the conditions of the pandemic and that our close collaboration with customers and suppliers was successfully continued using new tools and communication channels.

New positions filled in strategically important future fields

[GRI 102–7, 8, 401–1; UNGC 6] As of December 31, 2020, SMA had 3,264 employees worldwide (December 31, 2019: 3,124 employees; figures do not include temporary employees). Employee figures increased in Germany to 2,262 (December 31, 2019: 2,186) and to 1,002 abroad (December 31, 2019: 938). This increase was due to the creation of jobs in strategically important future fields and for the implementation of major orders such as operation and maintenance services for PV power plants in the U.S.

SMA still uses temporary employees to absorb order fluctuations. As of the reporting date, the number of temporary employees decreased by 54 to 388 worldwide (December 31, 2019: 442). Temporary employees at SMA are paid the same hourly rate as SMA employees performing similar duties.

Employees

Reporting date	2020/ 12/31	2019/ 12/31	2018/ 12/31	2017/ 12/31	2016/ 12/31
Employees (excl. temporary employees)	3,264	3,124	3,353	3,213	3,345
of which domestic	2,262	2,186	2,212	2,077	2,093
of which abroad	1,002	938	1,141	1,136	1,252
Temporary employees	388	442	290	701	530
Total employees (incl. temporary employees)	3,652	3,566	3,643	3,914	3,875

Full-time equivalents

Reporting date	2020/ 12/31	2019/ 12/31	2018/ 12/31	2017/ 12/31	2016/ 12/31
Full-time equivalents (excl. trainees and temporary employees)	3,065	2,950	3,177	3,006	3,118
of which domestic	2,089	2,028	2,053	1,888	1,881
of which abroad	976	922	1,124	1,118	1,237

Additional key figures on employees, in particular on the gender balance at management level, can be found in the overview of sustainability key figures on page 139.

High transparency and strong feedback culture

[GRI 102–41, 402–1; UNGC 3] As a global company, SMA ensures that respect for human rights, including freedom of association and the International Labour Organization (ILO) rules, is guaranteed at all locations at any time. Open and trustful interaction with each other as well as the highest possible transparency and involvement of employees in corporate decisions are highly important to us. That is why we provide our employees with regular and comprehensive information about developments and changes in the company.

We use our annual employee appraisals to coordinate the tasks of each employee and the associated qualification requirements, to measure performance and to provide feedback on collaboration in an exchange between manager and employee. Global employee surveys, carried out at least every two years, complement our culture of feedback. We derive internal measures from the results of these surveys.

The “Global Leadership Fundamentals” that were jointly developed in 2018 and 2019 by employees from all countries, all hierarchical levels and all divisions of SMA, were rolled out throughout the entire company in virtual workshops in 2020. The fundamentals globally specify what employees can expect from their managers and what managers can expect from their employees. Leadership ambassadors from all areas help the managers with the process of implementation.

Lifelong learning and targeted development of talent

[GRI 404–1, 2] SMA operates in a dynamic environment that places high demands on our employees. Radical developments, such as rapid digitalization of the energy supply and Work 4.0, require new skills and competencies. For us, sustainable personnel development therefore means providing our employees with opportunities for lifelong learning, individual development and building qualifications to current and future challenges. In addition to external training, SMA employees benefit from a diverse internal training program comprising a variety of topics. Furthermore, we offer our Technology and Sales employees, in particular, subject-specific content via our SMA University and Online Sales Academy. To make existing knowledge accessible throughout the company and to ensure we learn from each other, information is exchanged and channeled through peer groups. We also continue to give attention to the topic of “new work.” We focused on supporting initiatives from motivated employees, in particular, and on continuously developing working environments that are conducive to agile working practices in changing project teams.

The extremely quick and flexible switch to mobile and virtual collaboration, with which we were able to successfully meet the particular challenges posed by the coronavirus pandemic, has shown that SMA is already operating at a very high level. Through the interdisciplinary development of guidelines for mobile working in the reporting year, we intend to build on this very good foundation. In this way, we create optimal conditions for our employees to work independently and flexibly in a way that meets their needs, while motivating them to take responsibility for their own individual learning and knowledge sharing.

We also continued our talent management in a virtual format in 2020. Our talent management team aims to give employees with distinct potential long-term development opportunities at the company. We support talented employees with individual development plans and group-oriented measures over a period of at least 12 months and prepare them for project management or management tasks. We thus want to create a global network to ensure success in current and future business fields.

The Leadership Development Program, designed to promote a culture of leadership and cross-divisional global collaboration, is aimed at middle-management executives from all departments. The program includes various aspects of leadership topics, which are communicated through individual coaching and working on global projects and serve to promote entrepreneurial thinking and action with a focus on strategic management. We work to ensure that the composition of these programs is at least representative of the proportion of women in the company as a whole.

Vocational training as a key element in securing and fostering the next generation is also a high priority at SMA. We currently offer training at the Kassel/Niestetal location in five different training occupations in the industrial/technical and commercial sectors. As of December 31, 2020, 58 young people were in vocational training at SMA (December 31, 2019: 59 people). Following vocational training, a transfer concept creates the possibility for further employment at SMA. The trainees benefit from the international nature of the organization and, apart from the opportunity to complete language training courses, they have the chance to complete an internship on project work at an international location for a defined period of time. We are committed to supporting the next generation of MINT (mathematics, information technology, natural sciences and technology) trainees in several ways, including running the annual Girls Camp at SMA.

Continuously increasing diversity

[GRI 405–1] We see the diversity of our employees as an asset to our company. SMA is committed to equal opportunities and promotes collaboration in “mixed” teams. In joining the “Diversity Charter” in 2011, we undertook to create a work environment in which all employees have the same opportunities for development, regardless of gender, nationality, religion or ideology, disability, age or sexual orientation.

Given the company’s strong technology orientation, the proportion of male employees is comparatively high. On December 31, 2020, 74.4% of employees were male and 25.6% female. Our aim is to continuously increase the percentage of female employees. We offer our employees family-friendly working conditions. This includes flexible working hours and models, the possibility of working from home, childcare and other family services. Other measures to support female employees include mentoring and targeted support for self-managed internal networks.

We also intend to integrate different cultures and strengthen collaboration between employees of different nationalities. SMA employs people of 62 different nationalities in 18 countries. In addition to promoting international collaboration, the possibility of deployment to our international locations and intercultural training, in 2017, we started implementing a concept to integrate refugees into our vocational training program. In the reporting year, this involved refugees from Syria.

Performance-based remuneration for motivated employees

[GRI 202–1, 401–2] In addition to appreciating our employees in the form of qualified feedback and further development opportunities, it is important to us to acknowledge their commitment and performance through appropriate remuneration. Our job level model, which has been implemented at the vast majority of global SMA locations since 2016, helps create transparency and enable comparison of pay across all areas of the company. It is based on the requirements of each position and the individual performance.

For us, it goes without saying that there are no systematic differences in the remuneration of female and male employees. In addition to fixed and performance-related remuneration components, our remuneration system also includes non-cash remuneration and components of the company pension plan. In addition, both permanent employees and temporary staff participate financially in the company's success. In recognition of their high level of commitment under the difficult conditions caused by the coronavirus pandemic, all employees and temporary staff were paid an additional coronavirus bonus of €400 at the end of 2020. Temporary employees at SMA are paid the same hourly rate as SMA employees performing similar duties. It also goes without saying that SMA complies with the legal provisions on minimum wage.

Attractive employer with exemplary occupational safety and health management

[GRI 403–1–7] Occupational safety and health management, a health promotion policy and workplace rehabilitation management are part of sustainable safeguarding of the company's future. The focus of occupational safety and health management at SMA is on avoiding work-related accidents and illnesses. The systematic performance of hazard assessments; regular safety inspections and training; the inclusion of occupational safety and health management in workplace design; and the introduction of binding regulations for occupational safety and health responsibility are just a handful of the measures that enforce prevention and ensure a safe workplace environment. Integrating laws and ordinances as well as implementing technical standards into our business processes has always been a matter of course for us. Occupational safety and health management processes are regulated by the provisions of the management system BS OHSAS 18001, which was introduced at the Kassel/Niestetal headquarters in 2012 and was superseded in 2018 by the new DIN EN ISO 45001 standard. Various subject-specific and department-specific meetings take place regularly to ensure that the topic of occupational safety and health management is firmly established within the company. These include the quarterly meetings held by the occupational safety committee, chaired by the responsible Managing Board member, with the participation of the occupational health physicians.

In 2019, the SMA Crisis Management department was also given its own website and an emergency number, clearly distinguishing it from Emergency Management. The objective of crisis management at SMA is to enable the company and all its subsidiaries to manage the impact of unforeseeable circumstances in an effective and efficient manner. Crisis management aims to avert risks to employees and to the company's material and immaterial assets and to limit expected losses. In 2020, Crisis Management was used for the first time during the coronavirus pandemic and proved fully effective. In February already, the SMA Corona Taskforce was founded with employees from all relevant functions. Since then, it has generally met every working day to assess the current situation and decide on and coordinate appropriate measures in close consultation with the Managing Board. The taskforce provides information to all employees in a weekly newsletter and makes additional information available on the intranet. Thanks to the measures implemented at an early stage, some of which were prescribed by new occupational health and safety standards, internal infection chains were prevented and business operations were maintained in full and without interruption.

The management of the SMA Corona Taskforce and other measures in connection with the pandemic took up almost all the resources of SMA Health Management in the reporting year. In addition to generating knowledge for the interdisciplinary taskforce team and continuous exchange with external experts, this included a telephone hotline as well as a consultation hour for employees specifically related to the coronavirus, case management and support for the introduction of new infection control measures.

In 2020, we also made further progress in ergonomics management, a key health program at SMA. In the production, testing and logistics areas, for example, projects were completed on age-appropriate workplace design. This brings us another step closer to our goal of 70% age-appropriate workstations in these areas. The sickness rate, including long-term sickness, fell to 5.2% in 2020 (2019: 5.9%).

AREA OF ACTION: CORPORATE SOCIAL RESPONSIBILITY

As an international company, SMA meets its societal and moral responsibilities with regard to all relevant interest groups. Internationally applicable laws and standards are binding for both our locations and the entire supply chain. We are a member of national and international organizations and associations to promote the growth of renewable energy sources.

Compliance with all international regulations, fair and transparent along the entire value chain

[GRI 102–12, 16, 205–1–3, 407–1, 408–1, 409–1, 412–1, 3, 413–1] Respect for human rights and compliance with legal regulations are of the utmost priority to SMA. By signing the UN Global Compact in 2011, we made a public declaration of our commitment to responsible corporate governance. At the core of the UN initiative are ten principles in the areas of human rights, labor standards, environmental protection and anti-corruption.

Since 2009, SMA has recognized the code of conduct of the German Association for Supply Chain Management, Procurement and Logistics (BME e. V.) and used this as the basis for its own guidelines for suppliers (SMA Supplier Code). In the reporting year, this Code was revised with the participation of stakeholders and newly implemented under the name "SMA Code of Conduct for Business Partners." Our goal here is to enshrine general principles with regard to fairness, integrity and corporate responsibility in business relationships and the supply chain. The "SMA Code of Conduct for Business Partners" prescribes standards for sustainable activity and gives expression to what we expect of suppliers and significant other business partners with regard to social, ecological and ethical aspects. The key points of the guidelines are a ban on child labor, forced labor, abuse and discrimination of employees, fighting against corruption, fair working conditions, occupational health and safety, environmental protection, and quality and product safety. Suppliers and select other business partners must sign the "SMA Code of Conduct for Business Partners" as a binding commitment when concluding a contract.

Compliance – with legal provisions and internal directives – has become increasingly important in recent years. A risk-oriented and preventive compliance strategy is now more important than ever. The SMA Group Compliance function has formulated the business principles and directives from which basic work sequences and processes are derived and implemented globally. SMA is committed to the "Business Principles for Countering Bribery" of Transparency International. All employees are obligated, in the context of their work for SMA, to act ethically in accordance with the directives, laws and regulations of their country. Compliance with these obligations is consolidated through regular, global obligatory compliance training. At the end of 2018, we also published the SMA Compliance Manual, in which all corporate compliance guidelines were revised and compiled. At regular intervals, Group Compliance reports to the Managing Board and Supervisory Board with information on the latest developments, suspicious cases, measures and processes. The SMA Compliance Board, in which the entire Managing Board is represented alongside other management functions, meets on a quarterly basis. In 2020, no risks of corruption or complaints were determined in this respect.

For employees with questions or suspicions about compliance, Group Compliance officers are on hand as a direct point of contact and information is also available on the intranet and via the Speak-Up Line, which can be accessed by telephone or online (at www.sma.de/en/company/group-compliance) and guarantees the anonymity of users. SMA assures all employees freedom from sanctions for reports made in good faith. Our executives are supported by the legal provisions task force on important issues in environmental and occupational safety law. There were no violations identified in these areas during the reporting period. SMA actively promotes the shaping of corporate co-determination. In Germany, the foundations for this are regulated by the Works Council Constitution Act and elsewhere.

Responsibility along the entire supply chain – 90% of goods volume tested for sustainability

[GRI 102–9, 308–1, 2, 414–1, 2] In 2020, SMA purchased goods of more than €500 million from around 450 suppliers in Europe, North and South America and the Asia-Pacific region. Based on our comprehensive analyses of the environmental and societal impact of our products as part of our product life cycle assessments, we defined the supply chain as a key point of focus. In 2017, we began the evaluation of our entire supply chain's performance in terms of sustainability. Since 2018, this has been handled by the external company EcoVadis. Supplier participation in the evaluation is mandatory. We evaluated suppliers corresponding to around 90% of our goods volume. This revealed a largely positive picture and a continuous improvement in the sustainability performance of our suppliers. The evaluation criteria include guaranteed compliance with internationally recognized standards such as the United Nations Global Compact as well as with the universal SMA standards, such as respect for human rights, freedom of association, avoidance of child labor and forced labor, and the use of a sustainable, climate-friendly energy supply. Our commitment to the supply chain is complemented by our Supplier Sustainability Guideline, which goes beyond our Supplier Code and in particular includes environmental targets in the upstream supply chain.

SMA also subjects itself to assessment by EcoVadis as a means of comparing its sustainability performance with that of its suppliers and having an external organization to show up potential areas for improvement. In 2019, EcoVadis awarded us a silver medal. The assessment for 2020 is not yet available.

Social commitment – paving the way for a sustainable, reliable and cost-effective energy supply

[GRI 102–13] For SMA, supporting and guiding social development for a sustainable future is a matter of course. Over the past years, we have thus supported projects, organizations and initiatives from different areas – on a regional and national level as well as in newly industrialized and developing countries. The traditional Christmas donation by SMA employees is used to support regional projects and initiatives via the fund-raising organization A.M.S. Employee donations are usually collected every year at the SMA Christmas party, but as this took place digitally in 2020 due to the coronavirus pandemic, the possibility of donating overtime and vacation days in addition to money was introduced. In total, donations amounting to around € 85,000 were collected. This amount was supplemented by the Managing Board with a corporate contribution, which was in line with previous years.

Our social commitment focuses on encouraging the widespread use of renewable energies. This can contribute to countries' national and international obligations to reduce greenhouse gas emissions and to increase climate and resource protection. In this regard, as part of its close partnership with the University of Kassel, SMA funds an endowed chair for the specialist field of economics with a focus on the decentralized energy industry. Since 2020, we have also been a member of the Climate Protection Council of the city of Kassel, Germany, and are supporting the implementation of the goal to make the Kassel region climate-neutral by 2030. We are also committed to numerous networks, partnerships and initiatives that play a significant role in further development of photovoltaics, climate protection and the digitalization of the energy supply. For example, SMA is represented on the managing boards of the German Solar Association (Bundesverband Solarwirtschaft) and the European industry association SolarPower Europe (SPE). As part of the German Renewable Energy Federation (Bundesverband Erneuerbare Energie), we are committed to the cross-technology use and integration of renewable energies. We also provide technological expertise on the company advisory board. In this context, we work with politicians, industry associations and the general public advocating for increased installation of renewable energy in conjunction with cross-sector energy management and optimizing the conditions for a completely decentralized and digital energy supply based on renewable sources. To this end, we are also increasingly using our company's own social media channels.

SMA supports the EU initiative to implement measures for a circular economy and to develop a uniform eco-design directive and energy efficiency labeling for PV systems.

Our principles on political dialogue and representation of interests form the basis for a set of responsible, reliable and honest practices aimed at reconciling commercial and social interests. One such practice is neutrality with respect to political parties and lobby groups.

Transparent stakeholder dialogue – providing information openly and responding to suggestions

As a globally operating company, we are subject to a wide variety of political changes and decisions that affect our business activities. To safeguard the future of SMA, it is important to us to communicate our company's interests in open dialogue with governments, industry associations and organizations, as well as societal stakeholders. We also respond to our stakeholders' suggestions and interests with the same openness, valuing them as reliable partners.

We place high value on ongoing, transparent dialogue with important interest groups. We report important events within the company in ad hoc messages, press releases, on our website and social media channels. By sharing information on all relevant issues, we ensure that we are always acting in the interests of our core stakeholders. Our stakeholder analysis, performed in 2017, enabled us to explore in more detail the key issues of a sustainable company and sustainable products. All internal stakeholders are assessed at regular intervals to check materiality. In addition, we will update the analysis of all stakeholders in the coming years. The international customer satisfaction analysis carried out in 2019 has already yielded important findings with regard to further activities.

Another contribution to the stakeholder dialogue was the participation of the CEO in an international panel discussion on sustainability in the solar industry. The discussion was part of an initiative by the specialist publication PV Magazine that SMA is sponsoring, which is looking to increase sustainability in the PV industry. The Managing Board also addressed this issue in interviews with trade and business media. With the online company magazine "Sonnenallee" (www.sonnenallee.sma.de/en), SMA also established an innovative medium in the reporting year that focuses on sustainability topics for important target groups far beyond the company.

We will continue this open and transparent dialogue with key interest groups in the future.

CORPORATE GOVERNANCE

Corporate Governance Report

In this declaration, SMA Solar Technology AG reports on its corporate governance principles in accordance with Section 289f (1), (2) and 315d of the German Commercial Code (HGB) and on corporate governance in the company in accordance with Section 161 of the German Stock Corporation Act (AktG) and clause 22 of the German Corporate Governance Code (DCGK). The declaration includes the Declaration of Compliance, information on corporate governance practices, which comprises information on where they can be accessed by the public, as well as information on the composition and description of the function of the Managing Board, Supervisory Board and respective committees and material corporate governance structures.

Complying with the principles of good corporate governance is extremely important to SMA. SMA is guided by the recommendations and suggestions in the German Corporate Governance Code (DCGK). The Managing Board and Supervisory Board dealt with meeting these requirements, especially with the amendments to the DCGK in the version dated December 16, 2019. The company declared emergent deviations from the German Corporate Governance Code in the Declaration of Compliance of December 8, 2020. This declaration is reproduced below and published on our website at www.SMA.de/en/investor-relations.

Declaration of compliance with German Corporate Governance Code

In accordance with Section 161 of the German Stock Corporation Act, the Managing Board and Supervisory Board of SMA Solar Technology AG declare:

SMA Solar Technology AG follows all recommendations of the version of the German Corporate Governance Code dated December 16, 2019 ("2020 Code"), as announced by the Federal Ministry of Justice and Consumer Protection in the official section of the Federal Gazette on March 20, 2020, and will continue to pursue them in the future, with the following exceptions:

Section G.I. of the 2020 Code contains new recommendations concerning board remuneration that are not fully met by the Managing Board remuneration system approved by the SMA Solar Technology AG Annual General Meeting on May 24, 2017. The Supervisory Board will therefore submit an amendment to Managing Board remuneration for approval at the Annual General Meeting on June 1, 2021, in light of the altered recommendations of the 2020 Code.

Niestetal, December 8, 2020

The Managing Board The Supervisory Board

Corporate governance practices

In the reporting year, in a broad, participatory strategy process involving representatives from all the regions and corporate functions, management adapted the SMA Strategy to future requirements for the period up to 2025 as well as further refining and realigning it. The SMA Strategy 2025 comprises a forward-looking vision and mission, the values that all SMA employees align themselves with and clear strategic targets for the years to come. The Strategy establishes a framework for our actions and the basis for the future success of the company. Further details can be found on page 18.

Since 2009, SMA has recognized the code of conduct of the German Association for Supply Chain Management, Procurement and Logistics (BME e. V.) and used this as the basis for its own guidelines for suppliers (SMA Supplier Code). In 2020, the SMA Supplier Code was revised with the involvement of stakeholders and newly implemented under the name "SMA Code of Conduct for Business Partners." This continues to commit SMA to fair dealings with suppliers. The guidelines are based on, among other things, the UN Global Compact, the conventions of the International Labour Organization (ILO) and the United Nations' Universal Declaration of Human Rights. SMA's objective is to enshrine general principles with regard to fairness, integrity and corporate responsibility in business relationships and the supply chain. For SMA, these behavioral guidelines also complement its mission statement and corporate culture, in which fairness, integrity, sustainability and corporate responsibility are deeply rooted. In addition to these guidelines, the SMA code of conduct for business partners prescribes standards for sustainable activity and gives expression to what SMA expects of suppliers and business partners with regard to social, ecological and ethical issues. The key points of the guidelines are a ban on child labor, forced labor, abuse and discrimination of employees, fighting against corruption, fair working conditions, occupational health and safety, environmental protection, and quality and product safety. The BME's code of conduct is accessible on its website at www.bme.de/en. The latest version of the SMA code of conduct for business partners is reproduced on the SMA website www.SMA.de/en.

Furthermore, in 2011, SMA had already made a declaration to the General Secretary of the United Nations to adopt the ten principles of the UN Global Compact as compulsory guidelines for its corporate governance. The principles of the UN Global Compact define standards for upholding human rights, the protection of workers' rights, environmental protection and avoidance of corruption. They can be viewed on the website at www.unglobalcompact.org.

In January 2012, the Managing Board also enacted the SMA business principles. The SMA business principles are the core of the compliance management system and shape SMA's values into clear behavioral standards. The SMA business principles are obligatory for all SMA employees worldwide.

In compliance with the provisions of Section 76 (4) sentence 2 AktG, in 2017, the Managing Board resolved to set a target of 8% for the proportion of female employees in the first management level below the Managing Board and 14.6% for the second level by June 30, 2022. The targets correspond to the current ratio of genders at both management levels as of the date of the resolution. At the end of the reporting period, the quota for the first management level was 0%, owing to departing personnel not being replaced. At 11.8%, the quota for the second management level was also below the target figure. This is mainly due to the personnel growth in this management level, which could not be covered by female staff to the desired extent despite the company's intensive efforts to increase its target group-specific attractiveness.

Transparency

Transparency is a key element of good corporate governance. Our aim is to provide all shareholders, financial analysts, media and interested members of the public at large with timely information about our business situation and significant corporate changes. All important information is also made available on our website at www.SMA.de/en. Reporting on the business situation and the operating results takes place in the Annual Report, in the annual press conference on financial statements and in the Quarterly Statements and Half-Yearly Financial Reports. Furthermore, the public is informed through press releases, via social networks and, if stipulated by law, by means of ad hoc statements. In addition, once a year SMA invites investors, analysts and the press to its Capital Markets Day to inform them about the market and competition, SMA's strategic direction, unique selling propositions and financial developments.

Transparency is particularly important whenever deliberations and company decisions might lead to conflicts of interest for members of the Supervisory Board or Managing Board. Any conflicts of interest that may have arisen are therefore disclosed by those members of the corporate bodies affected when discussion of the subject commences. The member concerned does not participate in the adoption of any necessary resolutions by the Managing Board or the Supervisory Board.

According to a disclosure made by the members of the Managing Board and the Supervisory Board, they held, either directly or indirectly, 6.36% (2019: 4.91%) of all shares issued as of the end of the fiscal year. The Managing Board members held a total stake of 0.03% (2019: 0.03%) in the share capital and the Supervisory Board members held a stake of 6.33% (2019: 4.88%) in the share capital. In addition, Danfoss A/S, in which Supervisory Board member Kim Fausing acts as chief executive officer and Supervisory Board member Ilonka Nußbaumer acts as Senior Vice President, Head of Group HR, holds 20.00% (2019: 20.00%) of the share capital.

Remuneration Report

The Remuneration Report is a constituent of the audited Combined Management Report and is shown on pages 44 et seq. of the Annual Report.

The company's corporate bodies and their functions

SMA Solar Technology AG is a stock corporation governed by German law. Accordingly, it possesses a dualistic management structure in which one corporate body is devoted to managing the company (the Managing Board) and is supervised by another corporate body (the Supervisory Board). Both bodies are endowed with different powers and work closely with one another in an atmosphere of trust when managing and supervising the company. At the Annual General Meeting, electing the auditor and the shareholder representatives to the Supervisory Board takes place as does determining the appropriation of profits, along with making decisions that impact member rights of shareholders.

Managing Board

The Managing Board is responsible for independently and jointly managing the company. It is obliged to sustainably ensure and increase the company value and is responsible for managing the business. In agreement with the Supervisory Board, it decides on fundamental issues of business policy and corporate strategy as well as on short- and medium-term financial planning. The Managing Board is in charge of preparing the Quarterly Statements, Half-Yearly Financial Reports and Annual Financial Statements for SMA Solar Technology AG and the SMA group, as well as for adherence to all legal and official provisions and internal policies. In compliance with the provisions in Section 111 (5) AktG, the Supervisory Board set a target of 25% for the proportion of women on the Managing Board in the period by June 30, 2022. The Supervisory Board strives to achieve this target by selecting suitable candidates when appointing new members to the Managing Board.

As a collective body, the Managing Board, in principle, strives to adopt resolutions jointly. However, the Rules of Procedure for the Managing Board, adopted by the Supervisory Board, stipulate that individual members of the Managing Board are in charge of specific areas of responsibility. The Managing Board, with the consent of the Supervisory Board, lays out how responsibilities are assigned. The members of the Managing Board notify each other on an ongoing basis about all material events in their area of responsibility and about any matters covering multiple areas of responsibility. Under legal provisions or the Rules of Procedure, in certain transactions, a unanimous resolution of the Managing Board is mandatory. For a predetermined number of transactions, the Supervisory Board has a reservation of consent. The Managing Board has not instituted any committees.

The company's diversity concept for the Managing Board to be described in accordance with Section 289f HGB comprises, in part, consideration of the various personal and professional competencies required to fulfill the respective tasks on the Managing Board. Other elements include decisions on the proportion of women on the Managing Board and the age limit for the Managing Board described in Section 1 (4b) of the Supervisory Board's Rules of Procedure. The aim of the concept is to best meet the requirements for the work carried out by a Managing Board through a broad and varied range of knowledge and experience. The current makeup of the Managing Board upholds the prescribed age limit of 65 years and reflects different professions and professional backgrounds as well as personal and professional competencies. Long-term succession planning for the Managing Board takes place partly through regular monitoring by the Supervisory Board to adjust the quantitative and qualitative makeup of the Managing Board as well as the prevailing conditions brought about by the members of the Managing Board, such as a member reaching the age limit. In addition, the Managing Board is working to identify potential candidates within the company who would be suitable for taking on a role on the Managing Board given various time frames and, if necessary, after developing appropriate management skills. Detailed information about the individual Managing Board members is provided on page 8 et seq.

On the Managing Board, Dr.-Ing. Jürgen Reinert, as Chief Executive Officer of SMA Solar Technology AG, is responsible for Strategy, Sales and Service, Operations and Technology. Ulrich Hadding is in charge of Finance, Human Resources and Legal, as well as Corporate Governance, including Compliance, Investor Relations and Internal Auditing.

Supervisory Board

The Supervisory Board advises the Managing Board in all matters and supervises its activity. The Managing Board involves and consults with the Supervisory Board on all matters of fundamental significance and whenever particularly important business decisions need to be made. Under the Rules of Procedure applicable to the Managing Board, which were adopted by the Supervisory Board, the Managing Board must obtain prior approval from the Supervisory Board for certain decisions. Such decisions include approval of the annual budget, comprising the investment plan, incorporation, acquisition or sale of companies and acquisition or sale of real estate, whenever stipulated threshold values are exceeded. The Supervisory Board must also consent to the allocations of responsibility on the Managing Board.

The Supervisory Board is made up of 12 members and its composition complies with the provisions of the German Stock Corporation Act and the Codetermination Act. Under these provisions, the employees of German group companies and their shareholders (Annual General Meeting) each elect six representatives to the Supervisory Board. The current members of the Supervisory Board are: Martin Breul, Oliver Dietzel, Johannes Häde, Yvonne Siebert, Romy Siegert and Dr. Matthias Victor as employee representatives, and Roland Bent, Kim Fausing (Deputy Chairman), Alexa Hergenröther, Uwe Kleinkauf (Chairman), Ilonka Nußbaumer and Jan-Henrik Supady as shareholder representatives.

Alexa Hergenröther, as independent member of the Supervisory Board, possesses the necessary expertise in the fields of accounting or auditing as stipulated under Section 100 (5) of the AktG. The length of time spent as a member of the Supervisory Board can be found in the members' résumés, accessible on the company's website at www.SMA.de/en/investor-relations.

The Committees of the Supervisory Board are made up as follows:

Presidial Committee	Uwe Kleinkauf (Chairman), Yvonne Siebert (Deputy Chairwoman), Kim Fausing, Dr. Matthias Victor
Audit Committee	Alexa Hergenröther (Chairwoman), Jan-Henrik Supady (Deputy Chairman), Oliver Dietzel, Johannes Häde
Nomination Committee	Uwe Kleinkauf (Chairman), Ilonka Nußbaumer (Deputy Chairwoman), Alexa Hergenröther, Jan-Henrik Supady
Mediation Committee	Romy Siegert (Chairwoman), Kim Fausing (Deputy Chairman), Martin Breul, Uwe Kleinkauf

The committees prepare topics and resolutions for review by the Supervisory Board at its plenary session. They regularly meet with stakeholders such as the Managing Board, the auditor or the heads of Internal Audit or Corporate Governance & Compliance for this purpose. The committee chairperson reports on the content of the committee meetings at the next plenary session of the Supervisory Board. Any member of the Supervisory Board may attend committee meetings, provided the relevant committee chairperson does not decide otherwise. The meeting minutes and resolutions adopted by committees are made available to all the members of the Supervisory Board.

The Supervisory Board and the committees regularly conduct self-assessments to review the extent to which the committees are effectively handling the tasks allocated to them. The Supervisory Board and the committees assign themselves this efficiency check regularly as separate agenda items, according to which the members examine how tasks have been completed in the past and whether they can identify any improvements for future processes. In the reporting year, the Audit Committee conducted one of these self-assessments for its work.

The Supervisory Board reports annually on the focus of its activities and deliberations in the Supervisory Board Report. You may refer to the Supervisory Board Rules of Procedure on our website at www.SMA.de/en/investor-relations. The Supervisory Board members take general and specialized training necessary for their tasks of their own accord, and in doing so, they receive appropriate support from the company.

In the past, the Supervisory Board already has regularly considered the personal and professional requirements of its members and, with regard to the provisions of recommendation C.1 of the German Corporate Governance Code, has decided on appropriate objectives for its composition and established a competence profile. The competence profile addresses the requirements for members of the Supervisory Board, which are provided in particular by law, the German Corporate Governance Code and the objectives of the Supervisory Board for its composition.

These requirements and the competence profile continue to form the diversity concept of the Supervisory Board within the meaning of Section 289f (6) of the HGB, the objective of which is to ensure that the Supervisory Board has the broadest possible range and variation of knowledge and experience. The Supervisory Board considers that increasing the diversity of the Supervisory Board is already an objective of various provisions of the law and of the German Corporate Governance Code. It incorporated this objective when selecting new members and took it into consideration when creating its competence profile and the objectives for its composition, and will continue to do so in the future while implementing the diversity concept.

The objectives of the Supervisory Board for its composition are as follows:

1. The minimum proportion of women on the Supervisory Board is determined by legal provisions.

2. Maintain the composition of the Supervisory Board members with a background of international experience at least in the previous scope

3. Special consideration given to candidates with knowledge and experience in the application of financial reporting standards and internal control processes as well as in the field of auditing

4. Special consideration given to candidates with technical expertise, particularly in the field of renewable energies, preferably in the field of photovoltaics

5. Special consideration given to candidates with knowledge in the field of digitalization and about the internal structures and functions of the company

6. At least half of the shareholder representatives are to be independent. At the same time, at least one member is to possess expertise in the field of accounting or auditing.

7. Consideration of the age limit of 75 years at the end of the term of office when selecting new members

These objectives have been implemented as follows:

As regards 1: The Supervisory Board now has four female members, Alexa Hergenröther, Ilonka Nußbaumer, Romy Siegert and Yvonne Siebert.

As regards 2 to 5 and 7: In the opinion of the Supervisory Board, these objectives have also been achieved. The qualifications of the Supervisory Board members can be found in their respective résumés on our website at www.SMA.de/en/investor-relations.

As regards 6: The company currently considers six shareholder representatives – Roland Bent, Kim Fausing, Alexa Hergenröther, Ilonka Nußbaumer, Uwe Kleinkauf and Jan-Henrik Supady – independent in accordance with the rules of the current German Corporate Governance Code. Of these, Alexa Hergenröther, as an independent member, possesses expertise in accounting and financial auditing.

Cooperation between the Managing Board and the Supervisory Board

The Managing Board and the Supervisory Board work closely with one another in an atmosphere of trust for the good of the company, thus meeting both the requirements of effective enterprise control and the need to be able to make decisions quickly. Their common goal is to secure the continued existence of the company and steadily increase its value. The Managing Board keeps the Supervisory Board promptly and comprehensively informed, both in writing and speech, and during regular meetings about the company's position, current business developments and all relevant questions pertaining to strategic planning, risk management, risk status and important compliance matters. The Quarterly Financial Statements and the Half-Yearly Financial Report are discussed with the Managing Board on a regular basis during Audit Committee meetings prior to their publication.

Outside meetings, the Chairman of the Supervisory Board and his deputy are also in contact with the Managing Board to discuss significant business transactions and upcoming decisions and are immediately informed about key developments.

Shareholders and Annual General Meeting

SMA Solar Technology AG shareholders discuss their co-determination and control rights at the Annual General Meeting, which takes place at least once a year. The Annual General Meeting adopts resolutions with binding effect, and each share grants one vote. Every shareholder who registers on time is entitled to participate in the Annual General Meeting. In addition, shareholders may have their voting rights exercised by a credit institution, a shareholder association, the proxies deployed by SMA Solar Technology AG and bound by the shareholder's instructions or by another authorized representative. The invitation to the Annual General Meeting and all reports and information necessary for adopting resolutions, including the Annual Report, are published in accordance with the provisions of the Stock Corporation Act and are available in the run-up to the Annual General Meeting on our website at www.SMA.de/en/investor-relations.

Information concerning takeovers required by HGB sections 289a and 315a

Number 1: The share capital of SMA Solar Technology AG amounts to €34.7 million. The capital is divided up into 34,700,000 no-par value bearer shares. The rights and obligations associated with the shareholdings fall under the regulations in the German Stock Corporation Act.

Number 2: Each share has the right to one vote. On October 1, 2010, the four founders and main shareholders of SMA Solar Technology AG, Günther Cramer (Dr.-Ing. E.h.), Peter Drews, Werner Kleinkauf (Prof. (em.) Dr.-Ing.) and Reiner Wettlaufer transferred equity stakes to the next generation within their families by way of a gift. The acquiring shareholders had again signed a pooling agreement. During the term of this agreement, the voting rights emanating from the shares transferred were allowed to be exercised only as a block vote. In addition, the shares were allowed to be sold to third parties only with the consent of the other members of the pool or if narrowly defined prerequisites are satisfied. The members of the pool informed the company that the pooling agreement ended effective January 30, 2020. Beyond this, the Managing Board is not aware of any restrictions affecting voting rights or the transferability of shares.

Number 3: Danfoss A/S, Denmark, holds 20.00% of the company's share capital.

Numbers 4 and 5: The shareholders do not have any special rights conferring them any particular powers of control.

Number 6: Appointment and dismissal of the Managing Board takes place pursuant to Sections 84 and 85 of the German Stock Corporation Act (AktG) together with Section 31 of the Codetermination Act (MitBestG). Under Article 5 of the Articles of Incorporation, the Managing Board consists of at least two members and the exact number is laid down by the Supervisory Board. Under Section 179 of the AktG, the Articles of Incorporation may be amended by a resolution adopted by the Annual General Meeting with a majority of three-quarters of the share capital represented at the vote.

Number 7: The Articles of Incorporation include the provisions on the powers of the Managing Board regarding Authorized Capital II. The Managing Board, after obtaining the consent of the Supervisory Board, is entitled to increase the share capital on one or several occasions by up to a total of €3.4 million by issuing new bearer shares in return for cash contributions and/or contributions in kind in the period ending May 23, 2023. The Managing Board, with the consent of the Supervisory Board, is entitled to cancel the statutory subscription rights of shareholders: (a) in the case of capital increases in return for contributions in kind for the acquisition of or investment in companies, parts of companies or investments in companies, (b) for the purpose of issuing shares to employees of the company and companies affiliated with the company, (c) to exclude fractions and (d) in the case of capital increases in return for cash contributions if the issue amount of the new shares does not fall significantly below the stock exchange price of shares of the same class and terms that are already listed at the time the Managing Board sets the final issue amount, and the total pro rata amount of the issued capital attributable to the new shares in respect of which the subscription right is excluded does not exceed 10% of the issued capital available at the time the new shares are issued.

Furthermore, following a resolution adopted by the Annual General Meeting on May 31, 2016, the Managing Board, in the period up to May 30, 2021, is entitled on behalf of the company to acquire its own shares up to a value of 10% of the existing capital stock at the time the resolution was adopted by the Annual General Meeting and to dispose of shares acquired in this way with the consent of the Supervisory Board by means other than through the stock exchange or an offer made to all the shareholders, provided the shares are sold in return for cash at a price that does not fall significantly below the stock exchange price of shares in the company issued under the same terms or the shares are sold in return for in-kind contributions, or they are offered in return for shares held by persons that either had or have an employment relationship with the company, or with one of its affiliated companies, or members of bodies in companies that depend on the company. Furthermore, if the Managing Board sells the company's own shares by offering them to all the shareholders with the consent of the Supervisory Board, the Managing Board is entitled to exclude the shareholders' right of subscription for fractions. In addition, the Managing Board is entitled to cancel any own shares acquired after obtaining the consent of the Supervisory Board.

Number 8: Credit lines agreed with banks with a volume of €100 million contain a change of control clause that includes the special termination right of the relevant bank.

Number 9: If the employment contract with a member of the Managing Board ends after being terminated by the member of the Managing Board within a period of six months after a change of control, this member is entitled to severance pay amounting to his/her remuneration rights for the remaining term of the employment contract, however, no longer than a period of two years.

Remuneration Report

The Remuneration Report summarizes the principles that are decisive when it comes to determining remuneration for the Supervisory Board and the Managing Board and also explains the remuneration structure and the emoluments payable.

Managing Board remuneration and emoluments

The remuneration system for the Managing Board (including the most important contractual elements) is decided at a Supervisory Board plenary session. The Supervisory Board regularly examines the remuneration system for the Managing Board and defines targets for the variable components of the emoluments. The criteria for determining remuneration include evaluating the tasks of the individual Managing Board members, their personal performance, the overall financial situation and company success, using compensation peer benchmarking and the company's usual remuneration structure. In its assessment, the Supervisory Board also included Managing Board remuneration in relation to remuneration of the top-level executives and the workforce as a whole, taking into account changes over time, and thus, laid out comparable peer groups from top-level executives and the workforce. The remuneration is assessed in a way that ensures it is competitive with the market for highly qualified managerial staff. The remuneration system complies with statutory requirements, the stipulations of the German Corporate Governance Code in the version dated February 7, 2017 and case law and was approved by the Annual General Meeting on May 23, 2017. The remuneration of the Managing Board consists of the components described below in which the fixed component of the emoluments amounts to 60% and the variable component and long-term bonus in the case of good business performance to 40% of the total remuneration before additional benefits. 60% of the variable component of the emoluments must correspond to the long-term bonus. The percentages provided are approximate values. A deviation of up to five percentage points is permitted.

NON-PERFORMANCE-BASED FIXED REMUNERATION

The annual fixed emoluments are divided into 12 monthly salaries.

PERFORMANCE-BASED VARIABLE REMUNERATION

Managing Board members also receive a performance-based variable salary, which depends on sales and earnings before tax and income tax (EBIT) [1] as recorded in the Consolidated Financial Statements for a fiscal year audited by the financial auditor as well as on achieving personal goals. The performance-based variable salary consists of three components: "profit," "sales" and "personal performance." "Profit" counts for 40% and "sales" and "personal performance" count for 30% each of the performance-based variable salary. The "profit" and "sales" components can also be fulfilled up to 150%. If the defined lower limits of the respective components are not met, they are graded with a "0." Values in-between are determined on a linear basis. If the sum of the percentages of the components reaches 100% or more, this entitles payment of the full agreed remuneration. If the agreed targets are exceeded, this does not entitle to payment of an overall higher variable remuneration (cap).

The target values (EBIT, sales) and personal objectives are redefined by the Supervisory Board every year, and the corresponding remuneration based on the objectives achieved after the Consolidated Financial Statements have been approved is generally paid in March of the following year. If the Managing Board members' duties do not extend beyond one full fiscal year, then they receive one-twelfth of the performance-based variable remuneration determined for the entire fiscal year for each month of the fiscal year, in which they carry out their duties.

[1] Contrary to the provision introduced in the 2017 Annual General Meeting.

LONG-TERM BONUS

Managing Board members also receive a long-term bonus, which depends on the mean EBIT margin as recorded in the Consolidated Financial Statements audited by the auditors over a period of three fiscal years. The upper and lower limits of the target value (EBIT margin) are determined annually by the Supervisory Board for the following three fiscal years. If the upper limit of the target value is achieved, then the full agreed long-term bonus may be claimed, whereas if the lower limit of the target value is not met, no bonus is payable. Values in-between are determined on a linear basis. If the target value is exceeded, this does not entitle to payment of a higher long-term bonus (cap). The bonus is payable, at the very earliest, upon expiration of the three-year period. Payment takes place after the third Consolidated Financial Statements have been approved, usually at the end of March, even if the employment contract ends before the end of the performance period. If the employment contract still has a term of at least two years to run when payment becomes due, then the Managing Board members are expected to invest the net amount payable, in part, in shares in SMA Solar Technology AG and to hold these shares until their Managing Board duties with the company have ended.

ADDITIONAL BENEFITS

All Managing Board members are entitled to:

→ A company car

→ Reimbursement of travel costs and any expenses incurred on company business

→ Continued payment of remuneration for up to nine months in the event of temporary sick leave

→ Employer's contribution up to the contribution assessment ceiling of statutory social insurance (pension, health, long-term care), even in the case of voluntary insurance and without furnishing any proof as well as appropriate directors and officers liability insurance.

Any taxes due must be borne by the Managing Board member.

OTHER CONTRACTUAL BENEFITS

In the event of death or long-term sick leave, remuneration will continue to be paid for six months.

In the event of early termination of Managing Board duties without good cause, the compensation payable is limited to the total remuneration for the remaining term of the contract and up to a maximum of two years' emoluments (severance pay cap). If an employment contract with a member of the Managing Board ends after being terminated by the member within a period of six months from a change of control, [1] this member is also entitled to severance pay amounting to his/her remuneration rights for the remaining term of the employment contract, however, no longer than a period of two years.

The post-contractual covenant not to compete enshrined in the remuneration system for Managing Board members has been withdrawn starting from the 2020 fiscal year.

In the 2020 fiscal year, the total emoluments payable to all members of the Managing Board in office in the fiscal year amounted to €2.805 million (2019: €1.458 million). This included variable emoluments of €1.123 million paid to the Managing Board in 2020 (2019: €0.007 million). Managing Board members receive no separate remuneration for carrying out work at subsidiaries or third-party companies relating to their Managing Board activities at SMA.

The table below provides information on the remuneration of the Managing Board in accordance with the rules of the German Corporate Governance Code dated February 7, 2017, as the rules of the German Corporate Governance Code approved in December 2019 were not yet required to be implemented in the 2020 fiscal year. The values in the "Inflow" table relate to the emoluments of individual Managing Board members for the 2020 fiscal year. The "Grants" table also shows the minimum and maximum remuneration achievable with regard to the variable remuneration components for the fiscal year.

No credits were granted nor were any advances paid to Managing Board members during the fiscal year. There are no pension commitments.

[1] Contrary to the provision introduced in the 2017 Annual General Meeting.

Inflow

in €'000	Ulrich Hadding Board Member for Finance, HR and Legal Joined 2017/01/01 2019	2020	Dr.-Ing. Jürgen Reinert Chief Executive Officer, Board Member for Strategy, Sales and Service, Operations and Technology Joined 2014/04/01 2019	2020
Fixed remuneration	600	683	800	949
Additional benefits/Others	29	29	22	21
Total	629	712	822	970
One-year variable remuneration	7	475	0	648
Multi-year variable remuneration				
Long-term variable remuneration 2017 – 2019	0		0	
Long-term variable remuneration 2018 – 2020		0		0
Total	7	475	0	648
Pension contribution	0	0	0	0
Total	**636**	**1,187**	**822**	**1,618**

In the 2020 fiscal year, Ulrich Hadding received a special bonus of €225,000 and Jürgen Reinert of €300,000 following a resolution adopted by the Presidial Committee and Supervisory Board. This special bonus is included in the one-year variable remuneration shown here.

Grants

in €'000	Ulrich Hadding Board Member for Finance, HR and Legal Joined 2017/01/01 2019	2020	2020 (Min)	2020 (Max)	Dr.-Ing. Jürgen Reinert Chief Executive Officer, Board Member for Strategy, Sales and Service, Operations and Technology Joined 2014/04/01 2019	2020	2020 (Min)	2020 (Max)
Fixed remuneration	600	683	683	683	800	949	949	949
Additional benefits/Others	29	29	29	29	22	21	21	21
Total	629	712	712	712	822	970	970	970
One-year variable remuneration [1]	160	250	0	250	220	348	0	348
Long-term variable remuneration 2019 – 2021	240				330			
Long-term variable remuneration 2020 – 2022		307	0	307		428	0	428
Total	400	557	0	557	550	776	0	776
Pension contribution	0	0	0	0	0	0	0	0
Total	**1,029**	**1,269**	**712**	**1,269**	**1,372**	**1,746**	**970**	**1,746**

1 For the 2019 fiscal year, Ulrich Hadding waived €100,000 and Jürgen Reinert waived €135,000 of the short-term variable remuneration (10% of the total target remuneration). The amounts shown here are the unabridged target figures.

Supervisory Board remuneration and emoluments

In accordance with the regulations on Supervisory Board remuneration in effect since the 2013 fiscal year, Supervisory Board members receive fixed remuneration of €25,000 a year. The remuneration payable to the Chairman amounts to twice the amount mentioned above and the remuneration payable to the Chairman's deputy amounts to one and a half times the aforementioned amount.

Members of the Audit Committee receive an annual remuneration of an additional €7,500. For members of the Presidial Committee, the total annual remuneration is an additional €5,000. The chairpersons of these committees receive twice the aforementioned amounts. Members of other committees do not receive any special remuneration for their committee duties.

Supervisory Board members receive an additional €750 per meeting day for their meeting participation. If they take part in several meetings in one day, they receive a maximum payment of twice the aforementioned amount. The remuneration is payable at the end of the fiscal year. Supervisory Board members who have only sat on the Supervisory Board or a committee for part of the fiscal year receive remuneration pro rata temporis.

No other remuneration or benefits for personally rendered services, in particular consulting and mediation services, were granted to Supervisory Board members. Similarly, in the reporting year, the Supervisory Board members were granted no credits or advances.

As of December 31, 2020, four of the members of the Supervisory Board held SMA shares.

The emoluments payable to the members of the Supervisory Board amounted to a total of €0.406 million in the reporting year (previous year: €0.419 million).

Beyond the remuneration of the Supervisory Board, the employee representatives that are employees of the company receive fee payments unrelated to their Supervisory Board duties.

Other

The company has taken out professional indemnity insurance (D&O insurance) for the members of the corporate bodies of all SMA group companies. It is effected or extended every year. The insurance covers the personal liability risk of the members resulting from a breach of duty when exercising their duties in the event that any claims for economic losses are asserted against them. The deductible in the policy for the 2020 fiscal year was 10% of the damage, however, no higher than one and a half times the fixed annual emoluments of the member of the corporate body.

Remuneration of the Supervisory Board

	Remuneration for supervisory duties		Remuneration for committee duties		Total	
in €'000	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**
Roland Bent	28.0	28.8	0.0	0.0	28.0	28.8
Martin Breul (as of 2020/6/4)	0.0	16.6	0.0	0.0	0.0	16.6
Oliver Dietzel [2]	29.5	29.5	12.8	12.8	42.3	42.3
Peter Drews (up to 2020/6/4)	29.5	12.9	0.0	0.0	29.5	12.9
Dr. Erik Ehrentraut (Chairman up to 2020/6/4)	54.5	23.6	25.0	12.0	79.5	35.6
Kim Fausing [1] (Deputy Chairman)	0.0	0.0	0.0	0.0	0.0	0.0
Johannes Häde	29.5	29.5	12.8	12.8	42.3	42.3
Heike Haigis [2] (up to 2020/6/4)	29.5	12.9	0.0	0.0	29.5	12.9
Alexa Hergenröther	28.8	29.5	20.3	20.3	49.1	49.8
Uwe Kleinkauf (Chairman as of 2020/6/4)	0.0	30.2	0.0	5.8	0.0	36.0
Ilonka Nußbaumer [1]	0.0	0.0	0.0	0.0	0.0	0.0
Yvonne Siebert	29.5	29.5	7.3	8.0	36.8	37.5
Romy Siegert [2] (as of 2020/6/4)	0.0	16.6	0.0	0.0	0.0	16.6
Jan-Henrik Supady (as of 2020/6/4)	0.0	16.6	0.0	7.3	0.0	23.9
Dr. Matthias Victor	29.5	29.5	7.3	8.0	36.8	37.5
Hans-Dieter Werner (up to 2020/6/4)	29.5	12.9	0.0	0.0	29.5	12.9
Reiner Wettlaufer (up to 2019/6/30)	15.5	0.0	0.0	0.0	15.5	0.0
Total	**333.3**	**318.6**	**85.5**	**87.0**	**418.8**	**405.6**

1 Kim Fausing and Ilonka Nußbaumer waived their entitlements from the company.
2 The union representatives on the Supervisory Board pay their remuneration to the union.

FISCAL YEAR 2020

General economic conditions and economic conditions in the sector

General economic conditions

In 2020, the drastic global impacts of the coronavirus pandemic led to one of the deepest recessions in history. According to the International Monetary Fund (IMF), the global economic output decreased by 3.5% (2019: growth of 2.8%). The economy contracted in both industrialized countries and developing and newly industrialized countries. Weak demand, the collapse in international tourism and disruptions in supply chains as a result of lockdowns and shutdowns in many countries around the world already led to a decline in global trade in the first quarter. Governments and central banks countered with some unconventional measures. Accordingly, in the second half of the year, there was a higher dynamic across all regions than at first expected by the IMF experts, and the recession over the year as a whole was ultimately less pronounced than forecast by the IMF in October.

IMF experts estimate that economic output in industrialized countries contracted by 4.9% in 2020, following growth of 1.6% in the previous year. The eurozone suffered a loss of economic power of 7.2% (2019: growth of 1.3%). In the U.S., gross domestic product declined by 3.4% (2019: growth of 2.2%).

As stated by the IMF, the economic output of developing and newly industrialized countries declined by 2.4% in the reporting period (2019: growth of 3.6%). China was the only major national economy to record growth in 2020. According to IMF economists, the Chinese economy grew by 2.3% (2019: 6.0%). The spread of the pandemic was brought under control faster here than in other regions.

Economic conditions in the sector [1]

Photovoltaics have proven to be increasingly competitive in recent years. In a growing number of regions around the world, solar power is now more cost-efficient than conventionally generated electricity. For example, large-scale solar projects in the Middle East are already generating solar power at less than $0.02 per kWh. This points the way to an environment in which the industry will grow in the medium and long term even without subsidization. In the wake of the transformation of global energy supply structures, current and future objectives include offering complete solutions, intelligently interlinking different technologies, providing intermediate storage and management solutions for generated energy, and integrating users into the energy market. This is the basis for ensuring a reliable and cost-effective electricity supply from renewable energies.

GLOBAL PV MARKET: NEW INSTALLATIONS ABOVE PREVIOUS YEAR'S LEVEL DESPITE THE CORONAVIRUS CRISIS

Based on newly installed PV power of around 137 GW (2019: approximately 112 GW), according to SMA's estimates, the global photovoltaic market was clearly above the previous year's level in 2020. (These installation figures do not include retrofitting of existing PV systems with new inverters or battery inverter technology). SMA estimates that global PV inverter technology sales, including inverter retrofitting and battery inverter technology, increased to €6.2 billion in the reporting period (2019: €5.8 billion).

In the photovoltaic markets in Europe, the Middle East and Africa (EMEA), inverter technology sales were down on the previous year at around €1.6 billion (2019: €1.7 billion). The share of the EMEA region in global sales fell to around 26% (2019: 30%). System technology for storage applications and the retrofitting of existing PV systems accounted for a significant portion of sales in the EMEA region at about 15%. Investments in North and South America (Americas) grew slightly to €1.3 billion (2019: €1.2 billion). The region thus accounted for around 21% of global inverter technology sales. The Chinese PV market recorded a significant increase. With an investment volume of approximately €1.3 billion, China as well accounted for about 21% of global sales in the reporting period (2019: €900 million; 15%). With sales of approximately €2.0 billion, the Asia-Pacific photovoltaic markets

[1] The estimated values in the following section are not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

(excluding China) remained on a par with the previous year and thus accounted for around 32% of the global market (2019: €2.0 billion; 34%).

EMEA: GERMANY IS MOST IMPORTANT MARKET AGAIN

In the EMEA (Europe, Middle East and Africa) region, newly installed PV power remained slightly below previous year's level with approximately 25 GW in the 2020 reporting period (2019: 26 GW). Germany grew significantly in 2020 and, as in the previous year, was the most significant market in Europe with 4.9 GW of newly registered PV power (2019: 4.0 GW). Development in other European countries was mixed. The main reason for this is the uncertain situation arising from the coronavirus pandemic and the impact of the varying stringency of lockdown measures on installation activity.

AMERICAS: U.S. MARKET RISES SHARPLY

The U.S. market was again dominated by large-scale solar projects in 2020. The SMA Managing Board estimates that new PV installations rose to a total of about 19 GW in the reporting year (2019: 13 GW). The U.S. market thus recorded growth of over 40%, despite the coronavirus pandemic. Newly installed PV power in the North and South American (Americas) region came to a total of 27 GW in the reporting period (2019: 21 GW).

APAC: REGION SLIGHTLY ABOVE PREVIOUS YEAR'S LEVEL

According to SMA estimates, new PV installations in the Asia-Pacific region (APAC), excluding China, were slightly up on the previous year with 37 GW (2019: 35 GW). In China, new installations grew considerably by 60% to around 48 GW (2019: 30 GW). Among the PV markets in the APAC region (excluding China), Vietnam recorded particularly strong growth. Here, new PV installations nearly doubled to about 11 GW in 2020 (2019: 5.5 GW). This was due to the strong growth in PV rooftop system installations in the residential and commercial sectors, which amounted to 9.5 GW. In Japan, PV systems with an estimated capacity of around 8 GW were newly installed in 2020 (2019: 7.7 GW). The driving segments here were commercial systems and large-scale PV power plants as well as retrofitting of existing PV systems. According to SMA estimates, new PV installations in Australia amounted to around 4.6 GW in 2020 (2019: 5.1 GW).

Results of operations

Sales and earnings

SMA SELLS INVERTER OUTPUT OF MORE THAN 14 GW AND SIGNIFICANTLY IMPROVES EARNINGS

The SMA group successfully overcame the considerable challenges associated with the global coronavirus pandemic in the 2020 fiscal year and increased its sales and earnings. In the reporting period, SMA sold PV inverters with accumulated power of 14,416 MW, putting output sold 26% higher than in the previous year (2019: 11,409 MW). The SMA group's sales increased by 12.2% to €1,026.6 million (2019: €915.1 million). The growth is attributable in particular to the extremely good business performance in the Large Scale & Project Solutions and Home Solutions segments. In the Large Scale & Project Solutions segment, SMA succeeded in regaining market shares in the U.S. In the Home Solutions segment, there was a sharp rise in sales year on year in the EMEA region.

SMA is well positioned internationally and generates contributions to sales in all relevant regions. In the reporting period, 48.4% of external sales calculated before sales deductions were generated in Europe, the Middle East and Africa (EMEA), 30.6% in the North and South America (Americas) region and 21.0% in the Asia-Pacific (APAC) region (2019: 50.5% EMEA, 26.1% APAC, 23.4% Americas). The main markets for SMA in the reporting period were again the U.S., Germany and Australia.

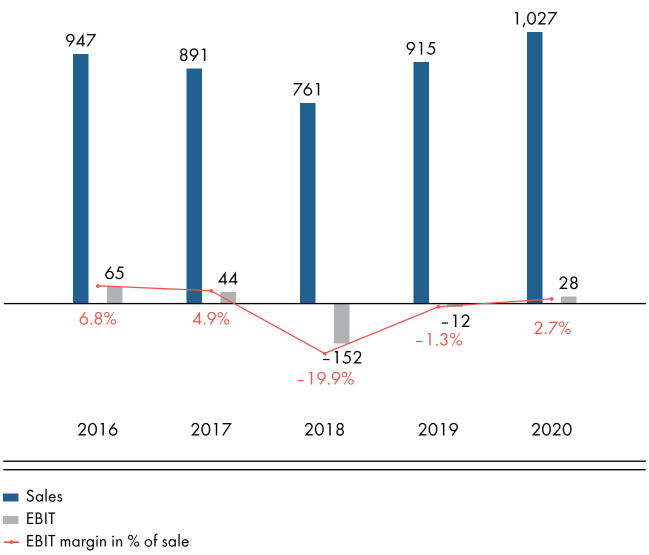
The Large Scale & Project Solutions segment again made the largest contribution to sales in 2020, accounting for 45.8% (2019: 41.4%). The Business Solutions segment generated 28.5% of the SMA group's sales, while the Home Solutions segment contributed 25.7% (2019: 32.4% Business Solutions, 26.2% Home Solutions).

As of December 31, 2020, SMA continued to have a very large order backlog of €855.4 million (December 31, 2019: €766.2 million). Of this amount, €386.3 million was attributable to product business. The product-related order backlog was thus only slightly below the high level reported at the end of the previous year (December 31, 2019: €395.0 million). €469.1 million of the order backlog was attributable to service business. The order backlog for services was therefore considerably above the level at the end of the previous year (December 31, 2019: €371.2 million). Most of it will be implemented over the next five to ten years.

In the 2020 fiscal year, earnings before interest, taxes, depreciation and amortization (EBITDA) doubled to €71.5 million (EBITDA margin: 7.0%; 2019: €34.2 million; 3.7%). Earnings before interest and taxes (EBIT) came to €27.9 million (2019: –€11.8 million). This development was primarily influenced by a positive one-time item from a compensation claim with a supplier for quality defects and resulted in an EBIT margin of 2.7% (2019: –1.3%). Net income was €28.1 million (2019: –€8.6 million); earnings per share amounted to €0.81 (2019: –€0.25).

SALES AND EBIT

in € million



Sales and earnings per segment

HOME SOLUTIONS SEGMENT SIGNIFICANTLY INCREASES SALES AND OPERATING PROFIT

In the Home Solutions segment, SMA caters to global markets for small PV systems with and without connection to a smart home solution. The portfolio comprises single- and three-phase string inverters of the Sunny Boy and Sunny Tripower product families in the lower output range of up to 12 kW, integrated services, energy management solutions, storage systems of the Sunny Island and Sunny Boy Storage product families, charging solutions for electric vehicles, communication products and accessories. SMA's Home Solutions segment also offers services, such as extended warranties, spare parts and modernization of PV systems (Repowering), to enhance performance as well as digital energy services.

In 2020, external sales in the Home Solutions segment increased by 10.0% year on year to €263.7 million (2019: €239.8 million). The main reason for this increase lies in the excellent level of demand in European markets and the Asia-Pacific region. Its share of the SMA group's total sales was 25.7% (2019: 26.2%). The EMEA region accounted for 75.9% (2019: 72.7%) of the Home Solutions segment's gross sales, the APAC region for 12.8% (2019: 11.2%) and the Americas region for 11.3% (2019: 16.1%).

As a result of the significant growth in sales, the Home Solutions segment's EBIT increased to €12.8 million (2019: €1.6 million). In relation to external sales, the EBIT margin was 4.9% (2019: 0.7%).

BUSINESS SOLUTIONS SEGMENT AFFECTED BY PRICE DECLINE AND CORONAVIRUS CRISIS

In the Business Solutions segment, the focus is on global markets for medium-sized PV systems with and without an energy management solution. The product portfolio comprises the three-phase inverters of the product families Sunny Tripower with outputs of more than 12 kW and Sunny Highpower. Storage solutions and holistic energy management solutions for medium-sized PV systems and electric vehicle fleet charging solutions based on the ennexOS platform, medium-voltage technology and other accessories complement the range of products in this segment. In addition, SMA offers services up to and including system modernization and operational management of commercial PV systems (O&M business) as well as digital services.

External sales in the Business Solutions segment were slightly lower in 2020 at €292.6 million (2019: €296.5 million). The sales performance of this segment was impacted by restrained corporate investment as a result of the coronavirus pandemic and declining prices. Its share of the SMA group's total sales was 28.5% in the reporting period (2019: 32.4%). 57.2% of gross sales were attributable to the EMEA region, 28.7% to the APAC region and 14.1% to the Americas region (2019: 58.8% EMEA, 28.1% APAC, 13.2% Americas).

Earnings before interest and taxes (EBIT) amounted to –€29.9 million (2019: –€7.2 million). The negative earnings were chiefly due to price decreases, a relatively high share of sales for expiring products with low margins and negative one-time items resulting from warranty issues. In relation to external sales, the EBIT margin was –10.2% (2019: –2.4%).

LARGE SCALE & PROJECT SOLUTIONS SEGMENT IMPROVES SALES AND EARNINGS SIGNIFICANTLY

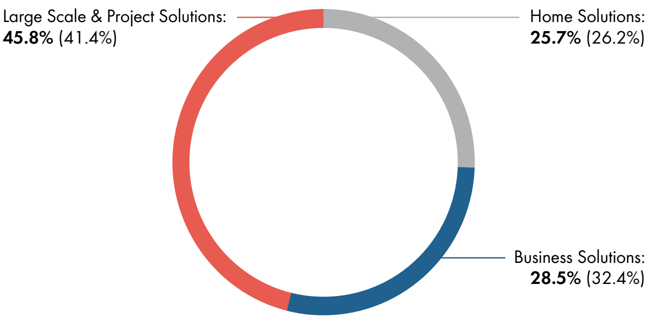
The Large Scale & Project Solutions segment focuses on international PV and battery storage power plant markets with its powerful string inverters in the Sunny Highpower product family, the central inverters in the Sunny Central product family as well as the battery inverters in the Sunny Central Storage product family. The outputs of inverters in this segment range from 150 kW to the megawatts. In addition, the SMA portfolio of this segment includes complete solutions comprising central inverters with their grid service and monitoring functions as well as all medium- and high-voltage technology and accessories. The portfolio is supplemented by services, such as for the modernization and functional enhancement of PV power plants (Repowering), and operation and maintenance services (O&M business).

In the reporting period, external sales in the Large Scale & Project Solutions segment significantly increased by 24.2% to €470.3 million (2019: €378.6 million), with growth driven in particular by the regained market shares in the U.S. Its share of the SMA group's total sales was 45.8% (2019: 41.4%). The Large Scale & Project Solutions segment thus accounted for the largest share of the SMA's total sales. The Americas region accounted for 52.1% (2019: 35.9%) of the segment's gross sales, the APAC region for 20.8% (2019: 33.8%) and the EMEA region for 27.1% (2019: 30.3%).

Earnings before interest and taxes (EBIT) in the Large Scale & Project Solutions segment amounted to €48.5 million (2019: –€4.8 million). This figure includes a positive one-time item from a compensation claim amounting to €80 million against a supplier for quality defects. This compensation claim compensates for expenses incurred both in previous years and in the 2020 fiscal year. In the 2020 fiscal year, this and other one-time items accounted for expenses totaling €30 million, including expenses associated with inverter bridge components of €25 million incurred in the fiscal year and another €5 million for one-time items such as customer compensation claims and other impairment losses. Excluding these effects, the segment managed to break even. In relation to external sales, the EBIT margin was 10.3% (2019: –1.3%).

Sales by segments [1]

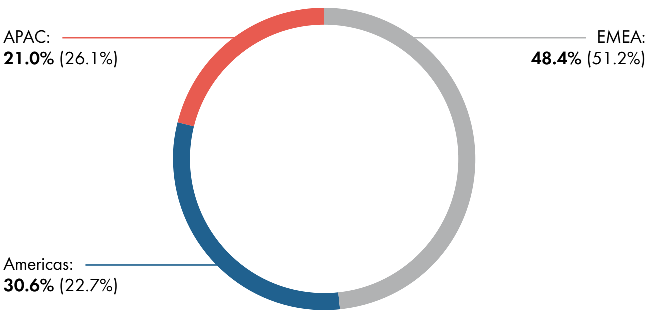
in %



[1] Gross sales before sales deductions (previous year's figures in parentheses)

Sales by regions [1]

in %



[1] Gross sales before sales deductions (previous year's figures in parentheses)

Development of significant income statement items

HIGH SERVICE AND WARRANTY COSTS AND IMPAIRMENT ON INVENTORIES NEGATIVELY IMPACT GROSS MARGIN

The cost of sales amounted to €859.8 million in the reporting period (2019: €749.3 million). The gross margin was lower than in the previous year at 16.2% (2019: 18.1%). It was impacted by negative one-time items due to provisions for warranty issues, particularly in the Business Solutions segment. Without accounting for these one-time items, the gross margin was higher than in the previous year.

Personnel expenses included in cost of sales increased year on year to €118.1 million (2019: €106.4 million) because of the considerably higher sales volume and personnel cost provisions for earnings-based wage and salary payments. Due to increased output sold, material expenses also rose to €632.6 million (2019: €555.4 million). SMA is continuously working on the product portfolio in all segments to tackle price pressure by optimizing the cost of existing products and introducing new and less expensive products.

Depreciation and amortization included in the cost of sales amounted to €38.3 million in 2020 (2019: €41.3 million). This includes scheduled depreciation on capitalized development costs of €9.1 million (2019: €9.0 million). Other costs increased by 52.8% year on year to €70.8 million (2019: €46.3 million), mainly due to the higher sales volume and negative one-time items related to warranty issues (€20.6 million addition of individual warranty provisions).

Selling expenses increased to €86.3 million in 2020 (2019: €79.8 million). This includes €11.0 million for the continued expansion of the digital business units. Personnel costs went up as a result of earnings-based personnel cost provisions and personnel increases in strategically important fields for the future. The increase was partly offset by savings in operating expenses. The cost of sales ratio was 8.4% in the reporting period (2019: 8.7%).

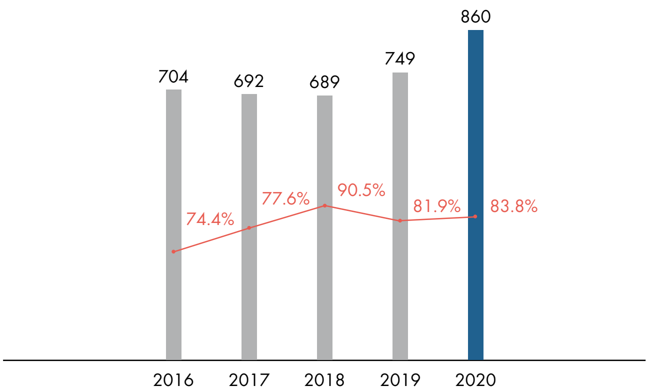
Research and development expenses after deducting capitalized development costs amounted to €56.0 million in the 2020 fiscal year (2019: €52.2 million). This figure also includes increased personnel costs due to earnings-based personnel cost provisions. The research and development cost ratio amounted to 6.9% in the 2020 fiscal year (2019: 6.9%). Total research and development expenses, including capitalized development projects, amounted to €71.2 million (2019: €63.1 million). Development costs were capitalized in the amount of €15.2 million in the reporting period (2019: €10.9 million).

General administrative expenses slightly increased to €50.6 million in 2020 (2019: €49.0 million). The increase is due to earnings-based personnel cost provisions. The successful cost-saving measures meant that operating expenses were lower than in the previous year. The ratio of administrative expenses amounted to 4.9% in the reporting period (2019: 5.4%).

The balance of other operating income and expenses resulted in a positive effect on earnings of €54.0 million in the reporting period (2019: €3.5 million). This includes the positive one-time item relating to the conclusion of a multi-year settlement with a supplier due to quality defects amounting to €55.0 million. This compensation claim compensates for expenses incurred from previous years. Net foreign currency valuation effects, income from renting the group's own buildings and expenses and income for assets measured at fair value through profit or loss are also included.

Cost of sales

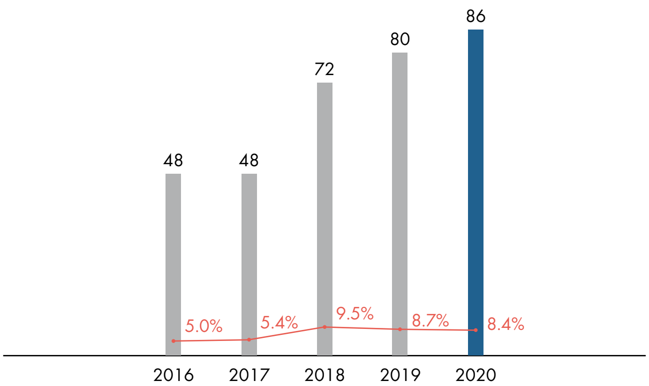
in € million



Ratio in % of sales

Selling expenses

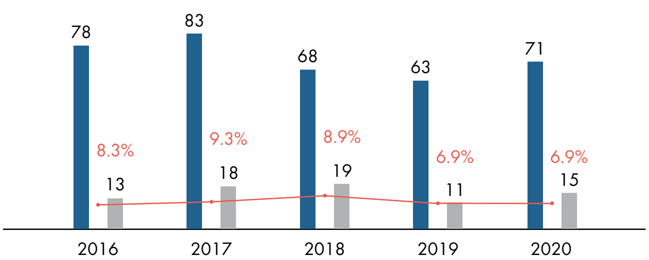
in € million



Ratio in % of sales

Research and development expenses

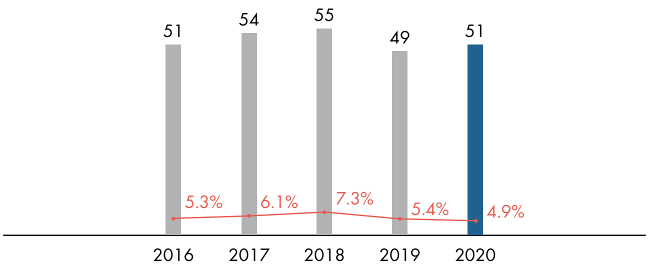
in € million



Research and development expenses
of which capitalized development projects
Ratio in % of sales

Administrative expenses

in € million



Ratio in % of sales

FINANCIAL AND TAX RESULT

The financial result reduced to –€0.7 million in 2020 (2019: €1.0 million).

Earnings before interest, taxes, depreciation and amortization (EBITDA) of €71.5 million, which is a significant improvement year on year, equates to an EBITDA margin of 7.0% (2019: €34.2 million; 3.7%).

The return on equity after taxes (net income in relation to average equity in the reporting period) came to 6.6% in the reporting year (2019: –2.1%), the return on assets after taxes, excluding interest on debt capital, was 2.6% (2019: –0.8%).

Multi-period overview of results of operations

in %	2020	2019	2018	2017	2016
EBIT margin	2.7	–1.3	–19.9	4.9	6.8
EBITDA margin	7.0	3.7	–9.1	10.9	14.9
EBT margin (return on sales)	2.6	–1.2	–21.9	4.9	6.2
Return on equity after taxes	6.6	–2.1	–33.9	5.0	5.1
Return on assets (after taxes)	2.6	–0.8	–15.9	2.5	2.5

Financial position

Principles and objectives of financial management

Cash holdings are managed and invested centrally by Global Treasury. The decision is based not only on returns but also on the credit rating of the bank partner. In the case of supplier credits granted, counterparty risk is monitored continuously. The decision is primarily based on the customer's payment practices and financial circumstances. To cover potential payment defaults, SMA has also taken out commercial credit insurance.

We systematically recognize market risks – above all currency risks – that might jeopardize the operating results and preclude such risks through hedging operations, provided this is economically expedient.

Financing analysis

In 2016, SMA agreed upon a long-term financing of €100 million with three domestic banks. At the end of 2020, only a small portion of the credit line was utilized in the form of guarantee credits. At the beginning of the 2021 fiscal year, negotiations were held with lenders to maintain the credit line.

In total, financial liabilities increased by €6.6 million from €34.5 million as of the end of 2019 to €41.1 million as of the end of 2020. This change is due first to the scheduled repayment of financial liabilities to banks of €3.4 million and second to additions to IFRS 16 lease liabilities amounting to €18.3 million.

Liquidity analysis

LIQUIDITY STILL AT GOOD LEVEL

Gross cash flow reflects operating income prior to commitment of funds. It amounted to €76.3 million in the 2020 fiscal year (2019: €30.7 million), influenced mainly by the significant improvement in net income.

In the reporting year, net cash flow from operating activities was –€31.4 million (2019: –€1.2 million). It was influenced primarily by a significant rise in net working capital, the increase in cash taken as rental collateral and a compensation claim from a supplier of €35 million, which affected cash.

Inventories remained at a high level in order to support delivery capacity during the coronavirus crisis. However, they fell by 8.7% year on year to €255.5 million (December 31, 2019: €279.9 million). Nevertheless, the reduction in trade payables and a decrease in liabilities from prepayments received generated a significant increase in net working capital by €51.1 million to €210.6 million (December 31, 2019: €159.5 million). The net working capital ratio in relation to sales over the past 12 months increased to 20.5% (December 31, 2019: 17.4%) and was thus within the range of 18% to 22% targeted by the management.

Net cash flow from investing activities amounted to –€36.5 million in the reporting period after €83.1 million in the previous year. The outflow of funds for investments in fixed assets and intangible assets amounted to €38.8 million in the reporting period (December 31, 2019: €27.6 million). At €15.2 million (December 31, 2019: €10.9 million), capitalized development costs accounted for a large part of these investments.

Net cash flow from financing activities amounted to –€12.4 million (2019: –€10.7 million) and included repayments of financial liabilities to banks of €3.8 million and lease liabilities amounting to €8.6 million.

As of December 31, 2020, cash and cash equivalents totaling €123.7 million (December 31, 2019: €214.8 million) included cash on hand, bank balances and short-term deposits with an original term to maturity of less than three months. Together with time deposits that have a term to maturity of more than three months, fixed-interest-bearing securities, liquid assets pledged as collateral, and after deducting interest-bearing financial liabilities, this resulted in net cash of €226.0 million (December 31, 2019: €303.0 million).

Multi-period overview of SMA group financial position

in € million	2020	2019	2018	2017	2016
Equity	439.1	416.9	424.5	611.5	585.1
Equity ratio in %	41.8	37.6	42.9	50.3	48.3
Non-current liabilities	270.5	259.3	244.5	285.2	292.9
Current liabilities	341.6	431.1	320.3	319.5	332.8
Share of non-current provisions in total assets in %	8.0	6.8	6.6	7.5	7.4
Financial liabilities	41.1	34.5	20.4	20.8	40.4
Net cash	226.0	303.0	305.5	449.7	362.0
Net working capital	210.6	159.5	177.4	167.9	203.2
Net cash flow from operating activities	–31.4	–1.2	–54.3	116.8	147.5
Net cash flow from investing activities	–36.5	83.1	7.4	–81.2	–107.9
Net cash flow from financing activities	–12.4	–10.7	–14.5	–11.5	–24.6

Investment analysis

In the 2020 fiscal year, investments in fixed assets and intangible assets that affected the statement of cash flows amounted to €38.8 million and were thus clearly above the previous year's figure of €27.6 million. This equates to an investment ratio in relation to sales of 3.8% compared with 3.0% in the previous year. Including additions of rights of use under leases, investments amounted to €57.1 million (2019: €54.4 million).

In total, €20.2 million was invested in fixed assets (2019: €15.5 million), predominantly for conversions and new buildings and extensions of buildings and for machinery and equipment. The investment ratio for fixed assets was 2.0% in relation to sales in the fiscal year (2019: 1.7%). Depreciation of fixed assets, including depreciation of rights of use under leases, increased to €31.1 million year on year (2019: €33.6 million). Investment obligations of €4.6 million exist for fixed assets and €8.8 million for intangible assets.

Investments in intangible assets amounted to €18.5 million (2019: €12.1 million). These largely related to capitalized development costs. Amortization of intangible assets amounted to €11.6 million and was thus on a par with the previous year's figure of €11.2 million.

Investments compared to depreciation and net cash flow from operating activities

in € million	2020	2019	2018	2017	2016
Net cash flow from operating activities	–31.4	–1.2	–54.3	116.8	147.5
Capital expenditure [1]	38.8	27.6	40.3	33.2	29.0
Depreciation and amortization	43.6	46.0	82.6	53.2	76.7

1 See Notes, sections 9 and 10, page 104 et seq.

Net assets

SMA improves equity ratio

Total assets decreased by –5.1% to €1,051.2 million as of December 31, 2020 (December 31, 2019: €1,107.3 million). Non-current assets were higher than in the previous year at €328.5 million (December 31, 2019: €298.8 million), influenced by an increase in cash taken as rental collateral and a compensation claim with a supplier.

Net working capital increased to €210.6 million (December 31, 2019: €159.5 million), corresponding to 20.5% of sales over the past 12 months. As of the end of the fiscal year, trade receivables decreased by 16.3% compared to December 31, 2019, to €121.9 million (December 31, 2019: €145.5 million). Days sales outstanding came to 47.6 days and were lower than in the previous year (December 31, 2019: 50.8 days). Inventory remained at a high level but declined by 8.7% year on year to €255.5 million (December 31, 2019: €279.9 million). Other financial assets increased significantly to a total of €61.9 million due to a compensation claim from a supplier amounting to €45.0 million. Trade payables decreased by 17.5% to €144.2 million (December 31, 2019: €174.7 million). The share of trade credit in total assets was lower than the previous year's figure at 13.7% (December 31, 2019: 15.8%). Days payable outstanding was lower than in the previous year at 51.3 days (December 31, 2019: 69.7 days).

Most of the provisions set aside by the SMA Group are for warranty obligations from our various product families.

As a result of the development of earnings, the group's equity capital base increased to €439.1 million (December 31, 2019: €416.9 million). With an equity ratio of 41.8% (December 31, 2019: 37.6%), SMA has a stronger equity capital base than last year.

Importance of off-balance sheet financing instruments

SMA is not involved in any other off-balance sheet transactions that might have a significant impact on its financial position, net assets or results of operations.

Multi-period overview of net assets

in € million	2020	2019	2018	2017	2016
Goodwill, intangible assets and fixed assets	251.4	245.4	235.2	283.5	300.7
Financial assets and long-term securities (incl. deposits with a total term to maturity of more than three months)	72.1	72.1	177.5	225.4	159.4
Cash and cash equivalents (incl. deposits with a total term to maturity of less than three months)	123.7	214.8	142.6	234.9	216.1

SMA Solar Technology AG (notes based on the German Commercial Code HGB)

In addition to reporting on the SMA group, business development of SMA Solar Technology AG (SMA AG) is outlined below.

SMA AG is the parent company of the SMA group and has its headquarters in Niestetal near Kassel, Germany. Its primary business operations include the development, production and sale of PV and battery inverters as well as monitoring and energy management systems for PV systems. Another area of business is providing operation and maintenance service (O&M business) as well as other services. In addition to its own operative business, SMA AG functions as a holding company for the SMA group. All key management mechanisms of SMA AG are oriented toward the SMA group.

The SMA AG Annual Financial Statement is prepared according to German Commercial Code (HGB). The Consolidated Financial Statements follow International Financial Reporting Standards (IFRS). This leads to differences between accounting and valuation methods. These mainly relate to intangible assets, inventory measurement, provisions, financial instruments, accrual items and deferred taxes.

Results of operations

SMA Solar Technology AG income statements in accordance with HGB for the period from January 1 to December 31, 2020

in €'000	2020	2019
Sales	**941,999**	**827,924**
Increase or decrease in finished goods and work in progress	5,612	8,699
	947,611	**836,623**
Other own work capitalized	1,497	5,096
Other operating income	161,695	67,795
Material expenses	681,341	581,471
Personnel expenses	154,032	136,365
Depreciation and amortization of intangible and fixed assets	25,031	27,867
Other operating expenses	231,900	195,993
Financial result	60	5,656
Taxes on income	3,254	265
Income after taxes	**15,305**	**–26,791**
Other taxes	238	283
Annual net come (previous year: net loss)	**15,067**	**–27,074**
Accumulated income/losses brought forward	156,651	183,725
Profit available for distribution	**171,718**	**156,651**

SMA AG generated sales of €942.0 million in the 2020 fiscal year (2019: €827.9 million). This equates to an increase in sales of 13.8% compared with the previous year. Sold PV inverter output rose by 22.5% in the same period to 14.7 GW (2019: 12.0 GW). Of this amount, 8.5 GW (2019: 5.9 GW) were attributable to associated companies. The weaker growth in sales in relation to inverter output sold can be explained by lower selling prices.

Other operating income amounted to €161.7 million (2019: €67.8 million). This figure includes a positive one-time item from a compensation claim amounting to €80 million with a supplier for quality defects. This compensation claim compensates for expenses incurred both in previous years and in the 2020 fiscal year. Also included is income from the reversal and utilization of provisions amounting to €47.2 million (2019: €36.8 million) and income from foreign currency valuation, which totaled €13.0 million in the fiscal year (2019: €9.0 million).

Material expenses rose by €99.8 million year on year to €681.3 million (2019: €581.5 million) and correlate with increased sales. Furthermore, the increase can be attributed to higher expenses for purchased services.

Personnel expenses increased by 13.0% to €154.0 million (2019: €136.4 million). The increase resulted from pay rises and personnel cost provisions for earnings-based wage and salary payments. In addition, the average number of SMA AG employees (excluding temporary employees, trainees or interns) went up by 73 to 2,059 employees.

Depreciation and amortization of intangible and fixed assets declined by €2.9 million to €25.0 million (2019: €27.9 million).

Other operating expenses rose by 18.3% to €231.9 million (2019: €196.0 million). This can be attributed in particular to the recognitions of provisions amounting to €67.7 million (2019: €52.3 million). It also takes into account operating and administrative expenses of €83.3 million (2019: €79.3 million), sales expenses of €37.3 million (2019: €30.3 million) and expenses relating to foreign currency valuation of €22.5 million (2019: €7.0 million). This item also includes the remeasurement of trade receivables amounting to €2.6 million (2019: €1.3 million) and prior-period expenses of €2.9 million (2019: €0.5 million).

The **financial result** amounted to €0.1 million (2019: €5.7 million). The change is mainly due to lower income from investments.

Taxes on income increased by €3.0 million. The change is due to the positive result for the fiscal year.

After tax, the company reported an **annual net income** of €15.1 million in 2020 compared with an annual net loss of €27.1 million in the previous year.

Net assets and financial position

SMA Solar Technology AG balance sheet in accordance with HGB as of December 31, 2020

in €'000	2020	2019
ASSETS		
A. Non-current assets		
I. Intangible assets	9,136	13,251
II. Fixed assets	162,024	169,851
III. Financial assets	65,663	58,743
	236,823	**241,845**
B. Current assets		
I. Inventories	156,292	166,108
II. Receivables and other assets	339,048	281,338
III. Securities	65,965	20,736
IV. Cash and cash equivalents	72,299	98,278
	633,604	**566,460**
C. Prepaid expenses and deferred charges	**3,029**	**2,012**
	873,456	**810,317**
LIABILITIES		
A. Shareholders' equity		
I. Share capital	34,700	34,700
II. Capital reserves	124,200	124,200
III. Retained earnings		
1. Statutory reserve	400	400
2. Retained earnings	3,136	3,136
IV. Profit available for distribution	171,718	156,651
	334,154	**319,087**
B. Special account with reserve characteristics	**11**	**23**
C. Provisions	**203,498**	**174,570**
D. Trade payables	**201,801**	**179,222**
E. Accrued liabilities	**133,992**	**137,416**
	873,456	**810,317**

As of December 31, 2020, **total assets** of SMA AG rose by €63.2 million to €873.5 million (2019: €810.3 million).

Non-current assets decreased by €5.0 million to €236.8 million (2019: €241.8 million).

As of December 31, 2020, total **inventories** of €156.3 million were below the previous year's level (2019: €166.1 million). The 5.9% reduction year on year is due primarily to the €21.9 million decrease in advance payments for inventories to €9.7 million.

Trade receivables fell by €14.6 million and totaled €33.6 million on the reporting date (2019: €48.2 million).

Other assets increased significantly due to the recognition of a compensation claim from a supplier of €45.0 million.

Cash and cash equivalents and securities increased by €19.3 million to €138.3 million (2019: €119.0 million).

Equity rose, as a result of earnings, by €15.1 million to €334.2 million compared with December 31, 2019. The equity ratio decreased to 38.3% (2019: 39.4%).

The **provisions** of SMA AG largely comprise provisions for warranty obligations for our various product families and personnel provisions. The €28.9 million increase in provisions to €203.5 million (2019: €174.6 million) is attributable mainly to additions to warranty provisions.

Trade payables went down by €23.1 million year on year to €113.2 million (2019: €136.3 million).

Accrued liabilities of €134.0 million (2019: €137.4 million) were recognized for deferred sales for extended warranties sold and for long-term service and maintenance contracts.

SMA AG's **financial position** essentially corresponds to that of the SMA group.

RISKS AND OPPORTUNITIES

The business performance of SMA AG is largely exposed to the same risks and opportunities as the SMA group. SMA AG also partakes in the risks affecting its investments and subsidiaries proportionate to its respective holding. The risks are presented in the Risks and Opportunities Report. The relationships with our investments can also result in negative effects from statutory or contractual provisions for liabilities (particularly financing).

OUTLOOK

As a result of SMA AG's interdependence with its group companies and its importance within the group, please refer to our statements in the Forecast Report for the SMA group, which also outline the expectations for the parent company specifically.

Managing Board statement on the business trends in 2020

In the reporting year, SMA achieved the sales and earnings growth that had been forecast at the beginning of the year, despite the significant restrictions caused by the worldwide coronavirus pandemic. With 14,416 MW of inverter output sold (2019: 11,409 MW), the SMA group's sales volume in 2020 was 26% above the previous year's level. Sales increased to €1,026.6 million (2019: €915.1 million) and was thus in line with the sales guidance of €1.0 billion to €1.1 billion published on February 7, 2020. The growth is mainly attributable to the good performance in the Large Scale & Project Solutions and Home Solutions segments. The Large Scale & Project Solutions segment again accounted for the largest share of the SMA group's sales in the 2020 fiscal year at 45.8%. The Business Solutions segment contributed 28.5% and the Home Solutions segment 25.7% (2019: 41.4% Large Scale & Project Solutions, 32.4% Business Solutions, 26.2% Home Solutions).

EBITDA of €71.5 million (EBITDA margin: 7.0%) was in line with the guidance of between €50 million and €80 million.

Net cash decreased to €226.0 million (2019: €303.0 million). The comparative figure from the end of 2019 included increased customer prepayments, mainly driven by an order in the Large Scale & Project Solutions segment that was completed in the first quarter of 2020. By the end of 2020, customer prepayments were back to normal levels. This decline was due in particular to significantly lower advance payments received compared with the previous year's figure. The equity ratio rose to 41.8% at the end of the reporting period (2019: 37.6%). In addition, SMA has a long-term credit line from domestic banks of €100 million.

POSITIONING IN THE LARGE-SCALE PV POWER PLANT SEGMENT AND FUTURE FIELDS FURTHER ADVANCED [1]

SMA coped well with the significant challenges posed by the coronavirus pandemic in the reporting year. The excellent IT infrastructure, which enabled a rapid switch to mobile working, and the extensive collaboration with suppliers and service providers to avoid any supply shortages contributed to the successful outcome. In-depth customer support and service were continued using new communication tools and channels, and processes and procedures in production and logistics were adapted in such a way that production capacity was maintained without interruption, while ensuring the highest possible level of occupational health and safety for employees. SMA did not have to claim any state aid.

In addition, we further advanced SMA's strategic positioning in major future fields and consequently supported its continued development into a provider of systems and solutions in the reporting period. With the SMA EV Charger, which enables smart charging of electric vehicles with a high percentage of cost-effective solar power, we have successfully entered the world of e-mobility. We have also launched comprehensive apps for installers and end customers. In the area of operations and maintenance services for PV power plants (O&M business), we have strengthened our position as one of the leading providers through several major orders. In the past fiscal year, SMA also again expanded its business in battery inverters for large-scale storage and continues to be one of the global market leaders in this area.

[1] The following section is not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

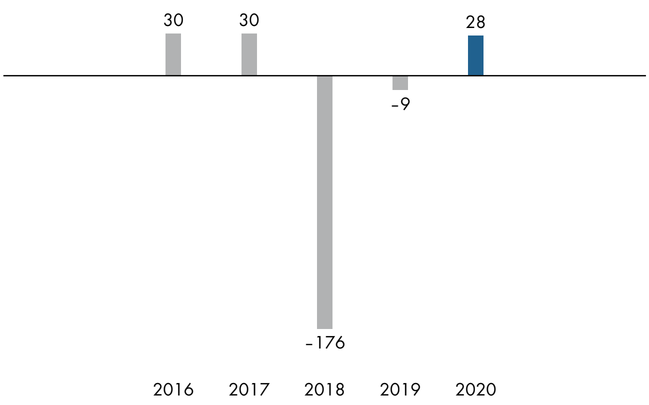
Among our greatest accomplishments in the core business were successes in securing contracts to supply large-scale PV power plants in the U.S. and Australia with Sunny Central inverters and turnkey container solutions. For example, SMA inverters will be used at Australia's largest PV farm with an output of 460 MW. In terms of total power installed, SMA has a market share of around 65% in the large-scale PV power plant segment in Australia. SMA also occupies a leading position in the U.S. project business and successfully regained market share in 2020.

Guidance-actual comparison for 2020

	Guidance on 2020/02/07	2020 results
Sales in € million	1,000 to 1,100	1,026.6
Inverter output sold in GW	14 to 15	14.4
EBITDA in € million	50 to 80	71.5
Capital expenditure in € million	approx. 50	57.1
Net working capital in % of sales	18 to 22	20.5
Net cash in € million	>250	226
EBIT in € million	5 to 35	27.9

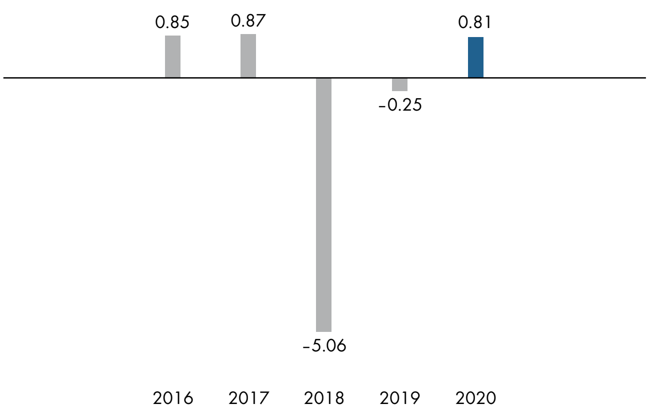
Net income

in € million



Earnings per share

in €



RISKS AND OPPORTUNITIES REPORT

Principles of the risk and opportunity management system

In the context of its business activity worldwide, SMA, as a specialist for photovoltaic system technology, is exposed to a range of risks, which can impair target achievement in implementation of strategies in the business units. By using a group-wide Risk and Opportunity Management System, the company actively manages and influences risks on the basis of the appropriate measures. A risk is defined by SMA as an event that ensues from a decision made by management (strategic), an action (operative) or external circumstances and – if the risk occurs – results in a negative deviation from the planned EBIT. To safeguard potential opportunities, opportunities are systematically identified and assessed by means of opportunity management. For SMA, an opportunity is the possibility of an event occurring that leads to a positive deviation from the planned EBIT. The Risk and Opportunity Management System is based on the conceptual framework of the Enterprise Risk Management – Integrated Framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO), which is an internationally accepted standard for establishing and systematically developing a company-wide risk management system. SMA uses a uniform software application to systematically record and report risks and opportunities and meet documentation requirements.

Risk and opportunity management

Objectives and strategy

The purpose of SMA's risk and opportunity management is to identify risks above a defined threshold as early as possible, present them transparently and comparably and assess and manage them. SMA must responsibly accept risks to a controllable and viable extent in the course of business operations in order to be able to exploit business opportunities. The Managing Board bindingly laid out the objectives, strategies and organization of risk management as well as the principles of risk analysis and risk communication in SMA's risk manual. It contains all methodical and organizational regulations for dealing with risks and opportunities, requirements and value limits as well as uniform regular and ad hoc reporting processes.

Structure of risk and opportunity management

The SMA Managing Board bears overall responsibility for effective risk and opportunity management and ensures that all identified risks and opportunities are considered comprehensively and uniformly. The Supervisory Board is responsible for monitoring the effectiveness of the group-wide Risk and Opportunity Management System. To perform this task, the Audit Committee provides the Supervisory Board with all relevant information on risk and opportunity management. Process and system responsibility for the uniform group-wide Risk and Opportunity Management System lies with the Corporate Audit, Risk & Information Security department. This department reports directly to the Chief Financial Officer and is responsible for implementation of group-wide risk management standards and methods and for coordination and ongoing development of the risk and opportunity management process. As the highest internal body, the Risk and Opportunity Board ensures that all significant risks across all functions and processes are identified, assessed and managed at an early stage. It is also responsible for monitoring the Risk and Opportunity Management System and improving its effectiveness and efficiency. All fully consolidated SMA subsidiaries and business areas are included in the scope of the Risk and Opportunity Management System.

Risk and opportunity management process

Once a quarter, select skilled employees and executives from the first two levels below the Managing Board and select central group functions ("risk owners") assess the SMA risk and opportunity situation in a standardized IT supported "bottom-up process."

The main steps of the risk and opportunity management process are explained hereafter:

RISK AND OPPORTUNITY ANALYSIS

Risk and opportunity analysis entails both the comprehensive identification and assessment of risks and opportunities. SMA risk owners are obliged to check on a regular basis whether the risks and opportunities within their areas of responsibility are complete and up to date and to identify and assess new risks and opportunities. SMA assesses all risks and opportunities based on a uniform set of assessment principles. For each risk and opportunity, the relevant risk owner assesses its probability of occurrence and its impact (potential amount of damage caused or potential benefit generated). The scales for measuring these two measurement parameters (probability of occurrence and impact) and the resulting classification of risks are shown in the following diagram:

Assessment system for risks

Effects in € million	Unlikely (<= 5)	Possible (> 5 to <= 25)	Likely (> 25 to <= 50)	Very likely (> 50)
Very high (> 15)	C	B	A	A
High (> 7.5 to <= 15)	C	B	B	A
Medium (> 2.5 to <= 7.5)	C	C	B	B
Low (> 0.3 to <= 2.5)	C	C	C	C

Probability of occurrence in %

The amount of damage is measured based on the potential effect on the planned EBIT. Risks need to be mentioned in the quarterly risk assessment reports only if the potential amount of damage resulting from the risk exceeds €300,000.

Opportunities are classified as follows:

Assessment system for opportunities

Effects in € million	Unlikely (<= 5)	Possible (> 5 to <= 25)	Likely (> 25 to <= 50)	Very likely (> 50)
High (> 2)	C	B	A	A
Low (> 0.5 to <= 2)	C	C	B	A

Probability of occurrence in %

Opportunities have to be mentioned in the quarterly risk assessment reports as soon as the potential benefit resulting from the opportunity exceeds €500,000.

Both the gross and net risk have to be determined for every risk within a projection period of one year. Gross risk represents the largest expected negative effect anticipated before implemented and effective management and monitoring tools are applied. Net risk considers risk-reduction measures. Opportunity assessment is based exclusively on a net principle.

To assess materiality, the risks and opportunities are classified as category A, B or C risks and opportunities based on a combination of the assessment of probability of occurrence and the impact over the reporting period on which further internal reporting depends. The individual risks and opportunities for SMA are described in the next section “Individual analysis of risks and opportunities.”

RISK CONTROL

While taking into account the corporate strategy, the objective of risk management is to actively influence identified and assessed risks. SMA's risk situation must be positively affected in a targeted way using suitable measures. In order to reduce the overall level of risk, the risk owners have the task of developing and implementing suitable measures, among others. Possible measures include for example forming security reserves or transferring risks to third parties (e. g., through insurance companies). With regard to risk management, these measures and their implementation are subject to regular review and adjustment by the risk owners.

RISK AND OPPORTUNITY REPORTING

The development of all risks and opportunities is regularly monitored and reported. Our Risk and Opportunity Management System is designed to ensure that the risk owners can not only identify risks and changes to them early on but also report them to the decision-makers in the company. These reports are first made to Corporate Audit, Risk & Information Security. In the regular process, the business units ensure that all significant risks and opportunities for their respective business field are fully documented and correctly evaluated in the Risk and Opportunity Management System to increase reporting quality. Once a quarter, all significant risks, opportunities and measures along with adjustments to the Risk and Opportunity Management System are presented to the Risk & Opportunity Board. In addition, every six months the Supervisory Board's Audit Committee is informed of significant risks and opportunities and any newly identified risks that are classified as at least category B. In addition, risk owners are required to report risks to the Managing Board without delay if new risks are classified as A risks or existing risks develop into A risks. The Managing Board decides whether such changes are reported to the Supervisory Board's Audit Committee on an ad hoc basis or during the regular reporting cycle. To ensure integration with the (group) accounting process, the risk and opportunity management process follows the coordinated schedule and thus provides the SMA functions involved in (group) accounting and financial reporting with the relevant information in full.

Key features of the internal control and risk management system in relation to the (group) accounting process

SMA's Internal Control System includes all the principles, procedures and measures available to ensure business activities maintain the proper course. It is made up of systematically created organizational and technical measures and controls within the company aimed at guaranteeing adherence to laws and regulations, as well as guidelines for preventing damage that might be caused by its employees or third parties. The Managing Board is responsible for implementation and adequacy of the Internal Control System. The Audit Committee of the Supervisory Board monitors the accounting process, the effectiveness of the Internal Control System, the Risk Management System and the Internal Auditing System on the basis of Section 107 (3) of the German Stock Corporation Act (AktG).

The Internal Control System pertaining to the accounting process is part of the overall Internal Control System, which is supported by the company-wide Risk and Opportunity Management System. Process-integrated and process-independent monitoring steps are elements of the internal monitoring system. Automated IT process controls are an integral part of the process-integrated measures. Additional controls are the organizational monitoring methods, such as the four-eyes principle, separation of administration, execution, settlement and approval functions and written work instructions. Furthermore, wherever possible, we protect the IT systems deployed against unauthorized access by using appropriate authorization systems and access restrictions. The Supervisory Board's Audit Committee and the Internal Audit department are intimately incorporated into the internal monitoring system with process-independent audit activities.

On the basis of a risk-oriented audit plan, the Internal Audit department regularly examines the effectiveness of the Internal Control System by means of sampling and thus also checks material parts of the Internal Control System as it pertains to the (group's) accounting process. Alongside the Internal Audit department, the auditor of the Annual Financial Statements also carries out an evaluation. Under the terms of his/her audit of the Financial Statements, the auditor is obliged to report any risks found related to accounting and any fundamental weaknesses in the Internal Control and Risk Management System to the Supervisory Board's Audit Committee. Audits of the Annual Financial Statements and Consolidated Financial Statements by the auditor and of the local financial statements submitted by the group companies included in the scope of consolidation, safeguard the basic process-independent monitoring mechanism in the accounting system.

Important risks in the (group) accounting process include the possibility that the consolidated local financial statements of the group companies fail to properly reflect the true net assets, financial position and results of operations due to unintentional or deliberate wrongdoing, or that publication of the Quarterly Statements or of the Annual Financial Statements is late. These risks may permanently impair the reputation of SMA. SMA's Internal Control System as it pertains to (group) accounting is concerned with minimizing the risk of misstatements in the group's bookkeeping as well as in external financial reporting. To ensure systematic early identification of risks throughout the group, SMA has a monitoring system to identify risks at an early stage that threaten the existence of the company in accordance with Section 91 (2) of the AktG (Risk and Opportunity Management System). Existence-threatening and other risks are identified early on, managed and monitored, beyond the limits of statutory regulations.

The Internal Control System measures are aimed at securing proper and reliable (group) accounting and ensure business transactions are fully, correctly and promptly recorded in accordance with legal provisions and the articles of association. They also guarantee that the process of stock taking is properly implemented and that assets and liabilities are appropriately recognized, measured and shown in the Annual Financial Statements and Consolidated Financial Statements. Furthermore, the regulations ensure that accounting records provide reliable and comprehensible information. The main tasks of the departments involved in the (group) accounting process are clearly separated and their areas of responsibility are clearly assigned.

SMA constantly evaluates laws, financial reporting standards and other agreements and considers their relevance and effect on the (group) accounting process. Applicable requirements are promptly communicated to all group companies. The uniform IT platform, group account plan and standardized processes ensure proper and timely recording of all important business transactions. There are binding rules for the recording of manual business transactions. An accounting manual specifies the group-wide implementation of accounting provisions in accordance with the International Financial Reporting Standards (IFRS). In addition to general accounting principles and methods, the regulations, above all, include requirements concerning the balance sheet, income statement, statement of comprehensive income, Notes, Management Report, statement of cash flows, statement of changes in equity, and segment reporting in compliance with EU legislation. By defining clear requirements, the risk of inconsistent practices when recognizing, measuring and reporting assets and liabilities should be reduced. In addition, a check is carried out centrally on the financial statements submitted by the companies included in the scope of consolidation while referring to the audit reports drafted by the local auditors. Each month upon submission of the reporting packages, those responsible at the subsidiaries also confirm the propriety and completeness of each financial statement by way of an internal declaration of completeness.

Business transactions at SMA and at all the larger subsidiaries are primarily recorded using ERP systems from SAP AG. These are protected from misuse by appropriate authorization systems and access restrictions. The authorizations granted are reviewed and amended regularly. The centralized control and monitoring of nearly all IT systems, centralized change management and regular system backups minimize not only the risk of data loss, but also the risk of IT system failures related to (group) accounting. Smaller companies either operate local ERP systems or commission external service providers with their own IT systems.

Use of a uniform, group-wide consolidation program ensures that all data is recorded properly, promptly and completely and that internal business transactions within the group are eliminated. This is from where the various components of the Consolidated Financial Statements and important data for the Notes to the Consolidated Financial Statements are derived.

The Internal Control and Risk Management System enables control of risks that might otherwise prevent the Annual Financial Statements and Consolidated Financial Statements from being properly drawn up and is therefore continuously being improved. However, company-wide application of the regulatory and control measures cannot guarantee absolute reliability with regard to the accurate, complete and timely recording of facts in (group) accounting and in the detection of irregularities.

Individual analysis of risks and opportunities

In this section, SMA describes the risks classified as significant with disadvantageous impact on business and the associated net assets, financial position and results of operations of the group and the company's reputation, as well as opportunities with a beneficial impact that are assessed as significant. The summarized overview and development of significant risk areas show the risks described below according to SMA's assessment after taking appropriate measures (net risks). This assessment relates to all segments. The order in which the risk areas are presented within the six risk categories should not be taken as an order of priority:

Overview and development of significant risk areas

Risk areas	Probability of occurrence	Effect	Risk development as of December 31, 2020 compared to the previous year[1, 2]
Strategic risks			
Political and regulatory risks	Very likely	Low	→
Competition risks	Likely	Low	→
Market risks	Very likely	Medium	→
Portfolio risks	Very likely	Medium	↘
Operating risks			
Procurement and inventory risks	Likely	High	↗
Product risks	Likely	Medium	→
Operational risks	Possible	High	↗
Sales risks	Likely	Low	↗
Service risks	Possible	Medium	↗
Environmental risks	Possible	Low	↘
Financial risks			
Liquidity risks	Possible	Very high	↗
Interest rate and currency risks	Unlikely	Medium	→
Default risks	Possible	Low	→
Compliance risks			
Risks from violations of the law and regulations	Possible	High	↘
Risks from breaching contracts and obligations	Likely	Low	→
IT risks			
IT security risks	Possible	Medium	→
Product cybersecurity risks	Possible	Medium	→
Personnel-related risks			
Personnel recruitment risks	Possible	Medium	↘
Personnel retention risks	Possible	Low	↘

1 The risk development of the respective risk areas compared with the previous year is based on the net risk (probability x impact). The assessment of risk areas depends on the individual risks and may vary each year.
2 ↗ higher than previous year; → unchanged from previous year; ↘ lower than previous year

Strategic risks

POLITICAL AND REGULATORY RISKS

Regulatory changes with regard to government subsidy conditions in individual markets as well as potential new global tariff barriers due to bilateral trade disputes may continue to cause high volatility in the photovoltaics sector. There are regional and cyclical volume fluctuations that also affect SMA and therefore complicate corporate planning.

It is still not yet entirely possible to foresee the effects on SMA's profitability from legislation such as the Act on the Digitalization of the Energy Transition in Germany and EU directives on technical standards and regulations. If new normative regulations are introduced and they are not implemented in the product and service portfolio properly or in a timely manner, or if the use of centralized communication units like the Smart Meter Gateway becomes compulsory, this will have a detrimental impact on SMA's profitability. Currently, the effects of the Renewable Energy Sources Act (EEG) 2021 with the amended tendering and self-consumption regulations are also not yet fully foreseeable for SMA.

SMA regularly performs market research to be able to respond promptly to emerging changes in trade barriers, subsidies and standards in target and existing markets. Short-term fluctuations in demand are considered in the rolling forecast process. Thanks to its high level of flexibility in production, SMA can usually react quickly to market changes. In addition, SMA works to contact the certification authorities and electric utility companies to be able to make any necessary adjustments to its product and service portfolio early on. Our employees actively contribute to new technical guidelines through standards associations and other organizations. SMA regularly reviews the assumptions and associated risks with regard to strategic projects. These procedures allow us to react quickly to regulatory and market-driven changes in what is required of our products.

For more information on development in individual markets, please see the remarks in the "Future general economic conditions in the photovoltaics sector" section of the Forecast Report.

COMPETITION RISKS

The ever-attractive market environment for PV systems continues to encourage fierce competition. Individual competitors are attempting to secure market shares through extremely aggressive policies regarding pricing and terms and conditions, with varying degrees of success depending on the region. Furthermore, price is crucially important across all segments as a result of growing commoditization of inverters, and technological differentiating features are becoming increasingly insignificant. This could result in substantial negative effects on SMA's business development and earnings.

In addition, it is conceivable that competitors will further improve the quality, functionality or performance of their products and adapt better than SMA to the prevailing market requirements in certain markets. Shift in demand within individual target markets also ramps up fierce competition. In some markets, increased price pressure in individual segments, particularly from Chinese competitors due to overcapacities, may have a negative impact on SMA's future business development. In the future, such competition can lead to additional declines in prices for products and services produced by SMA and to a loss in market shares. The decline in prices is to be especially countered by market-driven and cost-optimized products and, in particular, innovative solutions. With expenditure for research and development of €71.2 million (including capitalization) in the 2020 fiscal year, SMA is well positioned to set important trends with new products, systems and solutions and thus maintain its market shares. The numerous awards we have received for our high capacity for innovation underscore market orientation of development performance.

As a result of inverter commoditization, the service portfolio is becoming an increasingly important distinguishing feature for customers. However, there is a risk that SMA's service quality could deteriorate and thus no longer be perceived by market participants as a differentiating feature in comparison to its competitors. To maintain and further increase existing customer satisfaction, SMA is countering this risk with appropriate IT systems and improved service processes.

Cost-out measures and various projects to increase efficiency are also delivering continuous results and will be pursued systematically. The restructuring of global locations, cost structures and business models, which took place in 2019, laid the groundwork for SMA's long-term success.

MARKET RISKS

Photovoltaics is becoming increasingly competitive as an energy source. In a growing number of regions worldwide, solar power is now more cost-effective than conventional energy, but it is also competing with other forms of renewable energy sources, such as wind energy.

The risk of declining market shares in conjunction with the risk of aggressive competition or changes in market development is regularly monitored by the business units based on the forecast process with Sales. These risks are countered with adjustments to the product and solution portfolio that are appropriate to market changes and the consistent positioning of the SMA brand.

Nonetheless, there is a certain dependence on individual regions or markets (e. g., U.S. business). Inverter technology business for large-scale storage systems in Europe is characterized by considerable volatility and tremendous pressure on margins. As a result of the coronavirus pandemic and the associated customers' reluctance to invest, the development of the Business Solutions and Large Scale & Project Solutions segments in particular could be substantially weaker on a regional level. Furthermore, a downward trend was observed in the APAC region across all segments. However, the Managing Board continues to see medium-term prospects as positive. In addition, SMA is striving to reduce its dependence on individual photovoltaic markets by positioning in all major global markets.

Formation of buying syndicates can increase the dependency of SMA on a few wholesalers or specialist wholesalers and other customers generating large sales. This dependency harbors a risk because of these large customers gaining more negotiating power coupled with increased price pressure. By means of its targeted sales strategy, SMA avoids dependency on individual customers. Nevertheless, the share of total sales of the ten largest customers worldwide rose to approximately 32% in the 2020 fiscal year.

For more information on development in individual markets, please see the remarks in the "Future general economic conditions in the photovoltaics sector" section of the Forecast Report.

PORTFOLIO RISKS

In addition to optimizing existing products and developing future product generations, SMA's goal is to develop complete system solutions and digital business models in line with changing customer requirements and make them market-ready within a short time. However, this gives rise to the risk that vital technological trends are identified too late or that market launch is delayed due to development stages that are too long. Products and solutions can be developed quickly and effectively by means of our product development process. SMA is consciously seeking collaboration with research facilities to advance strategic development projects. However, we cannot rule out that individual development projects will fail to deliver expected positive economic results or do so in the expected time frame. The plan to streamline product platforms entails the risk of temporary delays in individual power classes or product generations within a segment reaching the series production stage.

To leverage economies of scale and complement or expand its product portfolio, SMA continues to enter into select strategic alliances on a targeted basis.

For additional details, please refer to the information on research and development in the Combined Management Report.

Operating risks

PROCUREMENT AND INVENTORY RISKS

On the procurement side, the company is still exposed to a high dependence on certain suppliers. We work to minimize these risks through market analyses, evaluation of suppliers, flexible supplier agreements, clearly defined quality standards and reducing dependence on individual key suppliers. In its future innovations, SMA will therefore significantly reduce the number of product platforms, make greater use of standard components and qualify alternative suppliers to increase flexibility.

Demand for certain electronic components and individual raw materials is still extremely high worldwide. Here, the situation is expected to worsen, especially in view of the effects of the coronavirus pandemic. This resulted in more shortages in the procurement market than in the previous year. For certain components, this trend could continue into 2021. SMA is counteracting this situation by implementing a closely monitored, proactive stockpiling strategy, bringing on board more suppliers and stockpiling more critical material groups. For SMA, there is an increased risk that certain raw and production materials may not be available due to a shortage of certain primary materials, the dependence on certain suppliers or loss of individual strategic suppliers and this will lead to delays, in particular, in the production and delivery of SMA products. If an unexpected drastic reduction in sales volumes were to occur in the short term, long lead times may result in purchase commitments for raw materials that are surplus to actual requirements.

Regular inventory analyses are carried out in connection with increasingly shorter innovation cycles and resulting potential inventory write-down requirements. Inventories are continuously monitored and adjusted to the corresponding requirement with active controlling tools and early warning systems. By monitoring changes in important raw material prices, trends should be identified in a timely manner and compensatory mechanisms developed with suppliers before they affect purchase prices and negatively influence SMA's earnings. The ongoing optimization of our purchasing structures is leading to lower purchase prices and logistics costs and diminished dependence on local suppliers. In addition, we are therefore improving the specific negotiation situation and our competitive position. As part of our global purchasing and commodity strategy, these activities are being pursued and further expanded in a sustainable manner.

If any inventory risks due to surplus inventories or obsolescence are identified, these are taken into account in corresponding impairment losses.

For more information on development in individual markets, please see the remarks in the "Overall statement from the Managing Board on expected development of the SMA group" section of the Forecast Report.

PRODUCT RISKS

We are always striving to develop new products, solutions and systems according to customer demands and to optimize existing ones. For this reason, we use new materials and technologies in development to make innovations possible. This can result in SMA products being defective. Large delivery lots bear the risk of errors or defects affecting a product series or several product batches. Production shortcomings may derive from SMA development errors or production faults or from defects in primary products provided by our suppliers. Unidentified incompatibilities can also emerge after products are launched, which require improvement to the customer system on-site after installation to prevent the product from posing a danger to the customer, in the worst-case scenario. A lapse of reliability of our products could bring about a long-term loss of trust and reputation. In addition, any necessary repairs or replacements would have a negative impact on earnings.

If responsibility for the error lies with the supplier, then the supplier must bear the direct costs. If responsibility for the error lies with SMA, then product liability insurance covers third-party losses incurred. Newly developed products may be subject to more failures than established products. We are able to minimize this risk through comprehensive testing within the development phases, accompanying quality inspections during production and field testing prior to scheduled serial production. As soon as device failures occur that stand to cause considerable losses, an analysis is performed without delay, and measures are immediately taken to rectify them. There is also the risk that the planned implementation of measures to reduce quality costs will have to be stalled due to an unexpected rise in device failures. This risk is being mitigated by continuously monitoring quality costs.

To continuously increase the quality of our products in addition to general process improvements covering the entire value chain, new developments are backed by specific stress and qualification tests, and tests are carried out on the entire series. In the event of technical faults in the products in the field, Service assesses the nature and scope of the fault and the need for repair or replacement of the devices and carries out appropriate measures. If the sources of the fault are identified and corrective actions are established, these are taken into account via corresponding provisions for individual warranties in the balance sheet. We make provisions for legal disputes related to product risks if we consider it likely that such claims can be asserted against us.

OPERATIONAL RISKS

Numerous facilities, equipment and systems are required to operate the production and administrative infrastructure, and their smooth operation is exposed to risks due to a number of factors, including natural disasters, accidents, wear and force majeure. SMA is well aware of this and employs a preventive maintenance and servicing management strategy to mitigate the risk of infrastructure downtime or other system impairment. In addition, appropriate property and business interruption insurance has been taken out against any potential damage. Appropriate insurance policies are also in place to cover the risk of loss or damage to movable goods and products.

Fulfillment of the various operating performance tasks in the individual function areas is still exposed to a cost and performance risk. Function operations can be impaired by staff shortages, unexpected cost increases or technical malfunctions in a way that function targets may not be met on time, to the fullest extent or only at an increased cost. Extensive cost and performance indicators are regularly assessed and monitored to minimize these risks.

When introducing new operational processes and IT systems or changing existing ones, delays, outdated systems, inadequate master data quality or design flaws may impair efficient business organization and processing. SMA counters this by means of systematic project management and a suitable structure and process organization.

As a result of the coronavirus pandemic, there are risks to operations from a possible delay in the supply and performance of raw materials, supplies, intermediate products, materials and services required for operations and production on the part of suppliers, which could lead to unforeseeable business interruptions, particularly in the area of production and logistics. For this reason, SMA is in constant contact with all important suppliers in order to identify any bottlenecks at an early stage and to be able to implement any necessary measures. Furthermore, there is a risk that larger numbers of employees will need to self-isolate in case of contact with someone infected with COVID-19. If this were to occur in the area of production and logistics, it could have a negative impact on SMA's physical service provision. SMA responded to these risks relating to the coronavirus as early as February 2020 by establishing a task force to ensure safe working conditions through a variety of preventive measures. The extensive hygiene and social distancing rules as well as organizational and procedural adjustments deserve special mention. Thanks to these measures, we were able to keep the number of people infected with the coronavirus at SMA very low in the past fiscal year and thus avoid production losses.

SALES RISKS

SMA uses a worldwide distribution network to sell its products and is largely dependent on the high reputation of its products. Quality problems or performance weaknesses perceived in the market can have a detrimental effect on the image and thus on sales success. Likewise, misinformation in the media and social networks may damage the reputation of SMA's products and lead to a loss of sales. If SMA experiences delivery problems or the market readiness of new products or product generations is delayed, there is also the possibility that sales volumes or profit margins are affected.

SMA takes particular measures to counteract these challenges, including consistent quality management, pilot projects to develop digital energy services and online sales channels for select markets. The aim here is to gradually establish and expand new business areas.

Risks also arise if warranty conditions do not meet market requirements in certain regions. This would make it more difficult to sell services in these regions.

Due to the effects of the coronavirus pandemic, there are also risks on the sales side, which may result from further, unforeseeable restrictions on public life, travel opportunities for SMA sales employees and service technicians, for example, the general economic conditions in individual target markets and the duration of the respective restrictions. To reduce the impact of the coronavirus pandemic on sales success, SMA moved sales activities, such as customer meetings, training sessions and product launches, to online format on very short notice.

SERVICE RISKS

Although our products are distinguished by their considerable longevity and reliability, SMA devices sometimes need repairing, reconditioning or replacing. The SMA Service department and its certified partners are responsible for the global alignment and execution of operational service business across all markets.

In the period under review, risks related primarily to operation and maintenance services for PV power plants (O&M business). Due to long-term service and maintenance contracts, SMA is obligated to carry out various services, ranging from PV system monitoring to end-to-end operational management. These O&M contracts aim to maximize the service life of systems and ensure smooth and efficient operation of PV power plants. In some cases, because of highly extensive and complex contract clauses, there is a risk of legal disputes with customers or service partners with respect to the performance and invoicing of services and a risk of compensation payments due to PV system unavailability.

In the area of repair services for inverters within and outside of warranty obligations, there are risks relating to the availability of spare parts. If sufficient quantities of spare parts are not available at the required time in the relevant regions, delayed or incomplete services can harm our reputation or result in claims for compensation from customers.

ENVIRONMENTAL RISKS

SMA employs a small amount of hazardous substances during production that might pose a risk to the environment. The comprehensive measures we take in production and in quality management ensure that SMA products are manufactured in a way that is environmentally friendly and guarantees compliance with all environmental regulations. Furthermore, SMA has safeguarded itself against certain environmental risks, including by means of insurance solutions.

For additional details, please refer to the information in the "Non-Financial Statement" section of the Combined Management Report.

Financial risks

LIQUIDITY RISKS

If there is an unexpected decline in SMA's cash holdings in the short term, there is a risk that external market participants, such as commercial credit insurance companies or banks, might downgrade SMA's credit rating which might impair its financing options. Furthermore, there is an increased risk that suppliers could adjust payment terms to the detriment of SMA, thereby burdening cash and cash equivalents. In particular, increased demand for products from the Large Scale & Project Solutions segment may continue to place a heavy strain on liquidity as a result of naturally long project durations. The increased stockpiling of primary materials required due to procurement risks may also have a continuing detrimental effect on the cash flow situation. The liquidity situation is constantly monitored and actively managed by means of effective financial planning systems.

INTEREST RATE AND CURRENCY RISKS

For SMA, currency risks arise in particular from the purchase and sale of products in foreign currencies (transaction risk) and from the measurement and settlement of items denominated in foreign currencies that are recognized in the balance sheet on the balance sheet date (translation risk). The main sources of transaction risks were business transactions in USD in the U.S. and the sales activities of subsidiaries.

SMA's Treasury department manages interest rate risks, currency risks and group financing on a centralized basis. The permissible hedging instruments were laid out by the Managing Board in group-wide guidelines that also regulate the entire process-oriented organization, including hedging strategies, responsibilities and control mechanisms. As an example, currency hedges were concluded to the required extent.

For additional details, please refer to the information under Financial Position in the "Principles and objectives of financial management" section of the Combined Management Report.

DEFAULT RISKS

The volatile and sometimes difficult conditions of the financial markets are conducive to potential payment difficulties for some customers, particularly in newly industrialized countries. Furthermore, the competitive situation and internationalization require extension of payment periods, accompanied by the reduction of collateral (e. g., in the form of bank guarantees). If customers can no longer keep up with their payment obligations, there is a higher default risk for receivables with negative effects on SMA's results of operations, financial position and net assets.

As part of our accounts receivable management, we minimize the risk of non-payment in accordance with the company's credit guidelines by obtaining beforehand references and credit reports for the purposes of a credit check of customers, allocating appropriate credit limits and continuously monitoring general payment practices. If it is expected that a credit limit is not sufficient for our future business relationship, then we examine whether we should ask the customer to furnish collateral or whether we can accept the residual risk. To cover potential payment defaults, SMA has also taken out commercial credit insurance. If non-payment risks materialize, these will be taken into account by means of corresponding impairment losses.

The central Commercial Project Management at the locations in Germany and the U.S. represents another effective measure to avoid or minimize risk to project business, which is an important aspect of SMA's portfolio. All project and service contracts entailing risks are systematically subjected to a legal and commercial risk assessment. Based on this, risky agreements are secured for SMA through additional financial securities or contractual adjustments made with both Sales and the customer. Remaining project risks are assessed and approved separately by the heads of the business units and the Managing Board, provided these risks are proportionate to earnings.

Compliance risks

RISKS FROM VIOLATIONS OF THE LAW AND REGULATIONS

There is a risk that SMA could be involved in unlawful business conduct or that individual employees could violate laws, SMA's business principles or directives. In particular, this includes the risk of corruption and fraud.

The Group Compliance department thus issued business principles and directives globally. Basic work sequences and processes were derived from these and implemented worldwide. In the context of their work for SMA, all employees are obligated to act ethically and in accordance with the laws and regulations of the legal system of their country. These regulations and obligations are consolidated worldwide by mandatory, extensive training sessions on business principles.

Our goal is to minimize antitrust risks from the outset. To this end, Group Compliance's antitrust policy sets out clear rules of conduct for all material business situations. In addition, all employees in the areas affected must regularly receive antitrust law training.

With our patents and through constant monitoring of technologies and competitors relevant to SMA, we work to maintain and expand our technological edge. Because competitors and research institutes also file a large number of patent applications, we cannot rule out that, in spite of regular, extensive and international research, we will not infringe on third-party patent rights or other industrial property rights or that, vice versa, our rights will be violated by third parties. If the former occurs, SMA may incur considerable costs related to claims for compensation, in its defense against such claims or in relation to royalty payments to third parties. It is therefore important to us that each product be checked for third-party rights in a timely manner before approval and market launch. Corresponding milestones are included in the guidelines and process descriptions on product development and market launch. The Corporate IP Management department actively protects proprietary technologies and monitors patent applications. We make provisions for disputes related to intellectual property when necessary, if we consider it likely that such claims might be asserted against us.

Due to its global business operations, SMA is subject to various tax laws and regulations. Tax changes in Germany and abroad could negatively affect the tax positions of SMA. In addition to legal changes, assessment and interpretation of complex tax regulations, such as those regarding transfer prices, may also affect our net assets, financial position and results of operations. SMA therefore collaborates closely with tax consultants in individual countries.

For additional details, please refer to the information in the "Non-Financial Statement" section of the Combined Management Report and on our website www.SMA.de/en/company/group-compliance.

As a result of internationalization and the high international share of sales, there are increased risks for SMA from handling the import and export of materials and services as well as finished products. SMA must meet the legal requirements for imports from and exports to many countries to stay competitive and meet the needs of its international customers.

Violations of trade restrictions and customs laws are subject to significant penalties and could also damage SMA's reputation. Therefore, SMA purposefully monitors its obligations under commercial and customs law using an IT system, which significantly reduces the risk of potential non-compliance.

The EU's General Data Protection Regulation gives rise to considerable organizational and technical requirements for data protection. The substantial fines for breaches of the data protection law represent a latent risk for SMA.

SMA counters data protection risks through systematic data protection management. In addition to standardized processes, this includes regular training for those employees who process personal data and monitoring of all projects where PV system operator's personal data is processed by the company's data protection officer.

Despite meticulously implementing requirements for processes and systems, violations of data protection law cannot be ruled out completely. SMA's digitalization strategy, in particular, extends the use of personal data, including for the company's business models. There are also risks in the increasingly widespread storage and processing of personal data using cloud solutions, where permissibility regarding data protection law is disputed. Against the backdrop of the changing business environment and the necessary development of new sales channels, this risk continues to become increasingly significant.

RISKS FROM BREACHING CONTRACTS AND OBLIGATIONS

SMA is exposed to risks from legal disputes that may arise from its business activities. Legal disputes with suppliers, customers, employees and distributors can materialize, which can lead to contractual and legal claims for compensation or other such obligations. A sufficient level of provisions is set aside for potential financial charges resulting from legal disputes. SMA has also implemented preventive measures, such as taking out a professional indemnity insurance policy to cover liability claims from third parties. However, this does not rule out a situation in which the level of insurance cover is not sufficient for compensation claims that may arise in the future.

Risks can also arise from contractual performance commitments. In the event of an agreement on lump-sum compensation payments, SMA may be obliged to pay corresponding amounts in the event of non-performance or poor performance.

IT risks

IT SECURITY RISKS

As an innovative technology company and publicly traded stock corporation, SMA is in the public eye and therefore heavily under threat of industrial espionage and cybercrime. Growing connectivity is placing ever-greater demands on our IT systems, which need to be high-performance, highly available and stable to support global business processes. We reduce the risks of IT breakdowns by continually reviewing and improving IT security and employing advanced hardware and software solutions. We use protective measures at all levels of the company to avert this. To minimize the risk of data losses, SMA implements appropriate measures, including regularly building employee awareness, distributed data centers, mirrored databases and the use of cloud solutions. All major IT systems are also continuously monitored and patched. Networks are protected, in particular, through the use of up-to-date, highly effective firewalls and e-mail systems through cutting-edge filters. Besides securing network and server availability, it is most important to avoid potential loss or manipulation of data by employees or service providers and external attacks.

PRODUCT CYBERSECURITY RISKS

In an increasingly networked world in which SMA's products, solutions and services are also being connected, the cybersecurity of our products and the digital services we supply is a top priority. To ensure a high level of cybersecurity for SMA products and services, there are specific guidelines for the product development process, and extensive tests are carried out before and after market launch. Despite these state-of-the-art security measures, a situation cannot be ruled out in which SMA's products and services are compromised by a massive targeted hacker attack. The impact of an incident like this on SMA's reputation could be significant.

Personnel-related risks

PERSONNEL RECRUITMENT RISKS

Qualified and motivated employees are key to the global evolution of our enterprise and SMA's business success. Due to natural staff turnover and reorganization measures, there is a frequent need to recruit new skilled employees and managers and to fill positions with suitable candidates. Flexible personnel deployment models and temporary employees are used to cover peaks in demand. Despite there being a structured personnel recruitment strategy in place, there is a risk that positions cannot be filled quickly enough or at all by suitable permanent or temporary employees. This can lead to key projects being delayed or to products and services being supplied in reduced capacity. Current legislation on temporary work in Germany and Europe is also limiting flexibility during peak times.

SMA is continuously working on its image as an attractive employer, which enables it to bring on board highly qualified employees. It particularly achieves this by setting relevant strategic goals, implementing contemporary leadership approaches and enhancing its employer branding.

PERSONNEL RETENTION RISKS

To ensure SMA's viability, it is important to retain highly qualified employees, such as skilled employees and managers, at the company for the long term.

However, there is a risk that talented individuals could leave the company and that strategic positions (key positions) may not be able to be filled on short notice, either at all or by someone with the necessary qualifications. To minimize this risk, we are continuously optimizing our offerings, including performance-based remuneration systems and participation in the company's success, flexible working hours and options for continuing education and training as well as for balancing family and career. In addition, the Managing Board continuously monitors personnel structures and, if necessary, adapts them to the sales level expected in the future.

For additional details, please refer to the information in the "Non-Financial Statement" section of the Combined Management Report.

Significant opportunities

SMA sees digitalization, system and solution business, storage applications and integration of storage solutions as providing distinct opportunities to strengthen core business. SMA is continuously developing digital business models and system solutions, which will be launched gradually. In addition, SMA collaborates with globally leading manufacturers of stationary battery-storage systems. However, the market success of storage solutions depends on storage system prices. Declines in prices for electric battery-storage systems in recent years have improved sales prospects.

Furthermore, there are opportunities for development of additional international markets in both product and service business. SMA will continue to use and expand its international presence in order to benefit from foreign markets in particular.

Based on the current market situation and the associated beginnings of market consolidation that has already begun, SMA also sees opportunities coming from additional demand stimulus and gains in market share from competitors who have gone out of business. This consolidation is also expected to mitigate the decline in prices.

The rapidly advancing digitalization of internal business processes and workflows due to the coronavirus pandemic creates the opportunity to achieve productivity increases with a positive contribution to earnings.

Overall statement on the group's risk and opportunity situation

Using our Risk and Opportunity Management System, we continue to rate the overall situation regarding risks to SMA's future development as to be manageable and controllable. However, based on the present assessment, individual risks still have been identified that, particularly if they all occurred at once, could significantly impair business development. According to the current assessment of the Managing Board though, there is no indication that the reported risks individually or in their entirety, could endanger the continued existence of the group.

SMA's overall risk profile – especially with regard to uncertainty surrounding the duration and degree of economic consequences of the coronavirus pandemic and the associated risks – has increased slightly compared with the previous year. The increasing digitalization of our business areas, the system and solution business and ongoing internationalization of sales activities are expected to make a significant contribution to raising the sales level and to strengthening profitability. This is encouraged by the market consolidation currently taking place.

It is our objective to continue optimizing the Risk and Opportunity Management System to identify potential risks early on, counteract them and take advantage of any opportunities that arise.

FORECAST REPORT

Preamble

The Managing Board's forecasts include all factors with a likelihood of impacting business performance that were known at the time this report was prepared. Not only general market indicators, but also industry- and company-specific circumstances are factored into the forecasts. All assessments cover a period of one year.

The general economic situation

Widespread coronavirus vaccinations are key to global economic recovery

The coronavirus pandemic had a tight grip over the global economy last year. Experts at the International Monetary Fund (IMF) estimate that global economic output contracted by 3.5%. Now that several vaccines to combat the virus have been approved, the economists expect the economy to grow again in 2021. The latest World Economic Outlook update published in January forecasts a 5.5% increase in global economic growth for the current year, but also emphasizes that new waves of the pandemic and virus variants are jeopardizing the positive outlook and that there continues to be exceptional uncertainty regarding future developments. The economic recovery experts expect later in the year is contingent upon widespread global vaccination and further political support in some of the major economies.

For industrialized countries, the IMF economists anticipate a slow recovery with growth of 4.3% in 2021 (2020: −4.9%) due to effective fiscal policy measures and assume that sufficient vaccines will be available by the summer. The recovery will vary in strength from country to country. For developing and newly industrialized countries, the IMF forecasts growth of 6.3% (2020: −2.4%). This is being driven by China in particular, where the recovery started early thanks to the fast-acting and powerful countermeasures taken. By contrast, oil-exporting countries and national economies focused on tourism are likely to continue facing difficulties.

The experts estimate that U.S. economic output will increase by 5.1% in 2021 (2020: −3.4%). For the eurozone, they expect the sharp decline of 7.2% last year to be followed by a rise of 4.2% in 2021. According to the IMF, the Chinese economy grew by 2.3% in 2020, and the expected growth for 2021 is 8.1%.

In 2022, at 4.2% the IMF expects global economic growth to be lower than in 2021.

Future general economic conditions in the photovoltaics sector

Photovoltaics to become "new king of the world's electricity markets" [1]

The fight against climate change is now one of the most central issues in the public, politics and economics. The international Fridays for Future movement and, more notably, unusual weather phenomena, such as severe storms, droughts and flooding in various regions of the world, not to mention the unprecedented bushfires in Australia and the Western part of the U.S., have helped raise the profile of this issue.

Greater efforts to expand renewable energies are widely regarded as the central pillar in the response to climate change. Politicians are taking account of this with action plans such as the "European Green Deal" to achieve climate neutrality within the EU and by appointing top-class teams of experts to tackle climate change, like the new U.S. government is doing. These attitudes will drive forward expansion of renewable energies over the coming years and decades at an ever-greater pace. In its study "Growth Opportunities from Decarbonization in the Global Power Market, 2019–2030", the analysis company Frost & Sullivan expects that by 2030, global investments in renewable energies will amount to $3.4 trillion, of which $2.7 trillion will be invested in photovoltaics and wind energy. According to the study "Global Energy Perspective 2021", the analysis company McKinsey is forecasting that by as early as 2036, half the world's electricity demand will be covered by renewable energy sources.

[1] Source: IEA World Energy Outlook 2020

Other factors driving the projected rapid growth of solar and wind energy include a disproportionally increasing demand for electricity in connection with the electrification of additional sectors and the growing demand for green hydrogen as well as further decreases in the cost of solar and wind energy, which are already considered some of the most cost-effective energy sources in most countries of the world. The analysis company Wood Mackenzie estimates that the costs of PV power generation have gone down by 90% in the past 20 years and will fall by a further 15% to 25% by 2030. According to the experts at the International Energy Agency (IEA), some solar projects can already provide the lowest electricity costs that there have ever been.

In the IEA's World Energy Outlook 2020, Executive Director Fatih Birol describes photovoltaics as the "new king of the world's electricity markets." The experts forecast that renewable energy will cover 80% of growth in global demand for electricity by 2030, with photovoltaics representing the largest growth driver. The IEA anticipates new installation records for photovoltaics each year after 2022. By 2030, annual global PV installations are expected to have almost tripled. Wood Mackenzie describes the solar industry as "highly investable" because it is increasingly able to meet both economic and political targets.

In addition to the ever-decreasing consumer cost of electricity from PV systems thanks to technological advancements, the generation of solar power in the vicinity of the consumer makes photovoltaics particularly appealing. The increasingly affordable storage systems and modern communication technologies combined with services for cross-sector energy management will harmonize energy production and demand. The SMA Managing Board is therefore convinced of the market appeal and has thus positioned SMA to ensure it benefits from future developments in the field of photovoltaics, storage technologies and digital energy services.

Global new PV installations increase to 150 GW

The SMA Managing Board anticipates growth in newly installed PV power worldwide of around 10% to approximately 150 GW in 2021. The growth is being driven by all regions, apart from Asia-Pacific (excluding China). Global investments in system technology for traditional photovoltaic applications will decrease by around 1% due to a decline in price development. By contrast, investments in system technology for storage applications (excluding investments in batteries) will rise by approximately €190 million compared to the previous year. Overall, the SMA Managing Board therefore expects investments in PV system technology (including system technology for storage systems) of around €6.3 billion in 2021 (2020: €6.2 billion). The Managing Board rates the medium-term prospects for the PV industry as positive. This is due to the continuously increasing competitiveness of photovoltaics and the accelerating transformation of the energy sector toward decentralized, digital and connected energy generation.

Considerable increase in demand in the EMEA region

The SMA Managing Board anticipates a significant increase in newly installed PV power of approximately 18% to around 30 GW in the Europe, Middle East and Africa (EMEA) region in 2021 (2020: 25 GW). In addition to growth in the countries in the Middle East and Africa, this is also due to the positive development in European markets, such as France and Italy, as well as East European markets. According to SMA estimates, investments in PV and storage system technology will slightly grow to approximately €1.7 billion (2020: €1.6 billion). Battery-storage systems are gaining importance in European countries, especially in Germany, the UK and Italy. In addition to business involving new systems for consumption of self-generated energy, retrofitting of existing systems with new inverters and storage systems will yield high potential in the medium term. For more and more PV systems, government subsidization will end in the years to come. Self-consumption of solar power is a particularly attractive option for the operators of these systems.

Americas region continues to grow

For the Americas region, the SMA Managing Board anticipates growth in newly installed PV power of around 12% to 30 GW (2020: 27 GW). Roughly 23 GW of this amount is attributable to the North American markets. The extension of the Investment Tax Credit (ITC) for PV systems by a further two years, which was adopted by the U.S. Congress in December, and the Climate Change Agenda of the new U.S. government are providing positive impetus here. Inverter technology investments are expected to increase to almost €1.5 billion in the Americas region (2020: €1.3 billion).

Investments in the Asia-Pacific region below previous year's level

The most important markets in the APAC region include China, India, Japan and Australia. In Japan and Australia, the installation of PV systems combined with battery-storage systems to supply energy independently of fossil energy carriers offers additional growth potential. The SMA Managing Board estimates that new PV installations in China will increase by around 14% and reach 55 GW in 2021 (2020: 48 GW). At €1.3 billion, investments in inverter technology are expected to be on a par with last year. For the APAC region, excluding China, the SMA Managing Board expects newly installed PV power to decrease slightly by approximately 4% to around 35 GW in 2021 (2020: 37 GW). While the Indian and Australian markets are expected to grow, the Vietnamese market is likely to decline again following the sharp growth in 2020. The SMA Managing Board expects declining investments of approximately €1.8 billion in inverter technology for the region as a whole (2020: €2.0 billion).

Growth markets: energy management, digital energy services and operational management

The trend to regionalize power supplies is progressing. More and more households, cities and companies are becoming less dependent on energy fuel imports and rising energy costs by having their own PV systems. This will lead to a rise in demand for energy storage solutions in the residential, commercial and industrial sectors. In addition, energy will be increasingly distributed via smart grids to manage electricity demand, avoid consumption peaks and take the strain off utility grids. E-mobility is also expected to become an essential pillar of these new energy supply structures a few years from now. Integration of electric vehicles will help increase self-consumption of renewable energies and offset fluctuations in the utility grid. Using artificial intelligence, the behavior of decentralized energy consumers and storage systems can be adapted to the fluctuating production of electricity from renewable energies, thus enabling the overall system to be optimized.

In this context, the SMA Managing Board holds that innovative system technologies that temporarily store solar power and provide energy management to private households and commercial enterprises offer worthwhile business opportunities. Rising prices for conventional domestic power and many private households and companies wanting to drive forward the energy transition by making their contribution to a sustainable and decentralized energy supply are the basis for new business models. Demand for solutions that increase self-consumption of solar power is likely to rise, particularly in European markets, the U.S., Australia and Japan. In these markets, renewable energies are already taking on a greater share in the electricity supply. In addition, electric utility companies are increasingly using battery-storage systems to avoid expensive grid expansions, stabilize grid frequency and balance fluctuations in the power feed-in from renewable energy sources. The SMA Managing Board expects the still fairly new storage market to grow to approximately €950 million in 2021 (excluding investments in batteries). Estimated demand is already included in the specified development projections for the entire inverter technology market.

In addition to storage technology, digital energy services aimed at optimizing household and commercial enterprises' energy costs and their connection to the energy market are becoming increasingly significant. The SMA Managing Board expects this area to represent an addressable market of approximately €1.9 billion in 2021. The market will grow exponentially in the medium and long term.

Technical management of commercial PV systems and large-scale PV power plants is another growth segment. This includes a range of services, such as repairs and device replacements as well as visual inspections and maintenance of entire systems. The market in these segments had an accumulated installed capacity of over 650 GW at the end of 2020 and will have an expected 780 GW by the end of 2021. The SMA Managing Board estimates the addressable market share, which is not yet or no longer under contract, at 150 GW in 2021, which corresponds to a potential of approximately €900 million. Prices are calculated yearly per MW and vary significantly depending on the regions and services included.

Overall statement from the Managing Board on expected development of the SMA group

Managing Board anticipates sales and earnings growth

On February 5, 2021, the SMA Managing Board published its sales and earnings guidance for the current fiscal year for the first time. It predicts a sales increase to between €1,075 million and €1,175 million (ACTUAL 2020: €1,026.6 million). Significant impulses are anticipated from the ongoing positive market performance expected in Europe and America and from the continued growth of the storage market. SMA is in a good position to benefit from this market growth and consolidate its market position. In addition, the Managing Board is driving the ongoing development of its product portfolio toward creating a system landscape for decentralized energy supply as part of Strategy 2025. The Managing Board is confident that lower production costs and the leveraging of economies of scale accompanied by a leveling off of price declines will bolster both SMA's profitability and the continued portfolio streamlining to focus on higher-margin products. Against this backdrop, the SMA Managing Board is also expecting an increase in earnings. The Managing Board estimates that operating earnings before interest, taxes, depreciation and amortization (EBITDA) will amount to between €75 million and €95 million in 2021 (ACTUAL 2020: €71.5 million). Depreciation and amortization are expected to come to approximately €45 million. On this basis, the Managing Board expects an EBIT of approximately €35 million. The SMA Managing Board currently sees no threat to the forecast due to the continued dominance of the coronavirus pandemic. However, fundamental uncertainties do not permit a conclusive assessment at this time.

In 2021, capital expenditure of approximately €60 million (including capitalized development costs and lease investments) will be slightly up year on year (ACTUAL 2020: €57.1 million).

For details regarding risks, please refer to the Risks and Opportunities Report on pages 62 et seq.

SMA group guidance for 2021 at a glance

Key figure	Guidance 2021	Actual 2020
Sales in € million	1,075 to 1,175	1,026.6
Inverter output sold in GW	17 to 18	14.4
EBITDA in € million	75 to 95	71.5
Capital expenditure in € million	approx. 60	57.1
Net working capital in % of sales	20 to 22	20.5
Net cash in € million	>250	226
EBIT in € million	30 to 50	27.9

SMA's sales and earnings depend on global market growth, market share and price dynamics. Our global presence and our comprehensive portfolio of products and solutions for all segments (Home Solutions, Business Solutions and Large Scale & Project Solutions) enable us to respond quickly to changing market conditions, offset fluctuations in demand and take advantage of developments in global photovoltaic markets. Its broad product and solution portfolio in all market segments is a major distinguishing feature for SMA. The SMA Managing Board forecasts the following performance for individual SMA segments in the 2021 fiscal year:

Segment guidance for 2021 at a glance

Segment	Sales	EBIT
Home Solutions	Up	Up
Business Solutions	Up	Up
Large Scale & Project Solutions	Up	Up

SMA has set course for the future with Strategy 2025

By further developing and refining its corporate strategy during the past fiscal year, SMA's management has laid the foundations for future business success. The company's further transformation into a systems and solutions provider remains key to the Strategy 2025. The SMA Strategy 2025 aims to leverage the company's exceptional systems expertise to develop complete, future-proof solutions offering significant customer benefit in close collaboration with its strong partners and to tap into new business areas.

The focal points of the corporate goals set out in SMA's Strategy 2025 include achieving closer proximity to customers, stability through profitability, integrated sustainability, leveraging of innovation capacity to position the company for the future in existing and new business areas and development and expansion of a strong partner network. All the goals are accompanied by tangible initiatives and measures as well as measurable key figures.

SMA will reap the benefits of megatrends

The urgency of the fight against climate change and the keen awareness of sustainability issues across large parts of the public, economics and politics will accelerate the expansion of renewable energies and storage systems worldwide, thereby advancing the decentralization and digitalization of the energy supply. At the same time, there will be a continuation of the global PV market consolidation, which has already started. This is releasing market shares and is also expected to slow down the decline in prices of PV inverters over the coming years.

SMA is well positioned to benefit from these trends in all market segments and regions. No other competitor has similar international presence combined with similar extensive technical expertise that encompasses all PV applications. In addition, our total installed inverter output of more than 100 GW worldwide is a particularly good foundation for data-based business models, as inverters are the most suitable sensors for compiling valuable energy data. Our extensive knowledge of managing complex battery-storage systems and linking solar power systems to other energy sectors, such as heating, ventilation and cooling technology, and e-mobility, is an excellent basis for developing future growth potential for digital energy solutions.

Our subsidiary coneva develops white label solutions for public utility companies, which integrate both prosumers and traditional energy customers of utility companies into the world of digital energy and enable them to use energy easily and cost-effectively. The individual solutions for commercial customers range from monitoring energy flows and optimizing energy costs across all sectors to matching supply and demand on the energy management platform ennexOS developed by SMA. In both segments, coneva has already established successful partnerships and projects with leading electric utility companies and supermarket chains.

Through the elexon joint venture founded in the 2019 fiscal year, SMA is also strengthening its positioning in the future field of e-mobility. elexon is a single-source supplier of turnkey solutions for planning, installing and servicing efficient e-vehicle charging parks. Based on their production capacities and experience, the joint venture partners are also focusing on industrial solutions for charging parks and large fleets. In the past fiscal year, SMA also successfully gained a foothold in the charging station for private electric vehicles segment with the market launch of the SMA EV Charger. The broader market launch of a charging solution for the growing market for commercial applications is now imminent.

While a market environment dominated by the ever-faster pace of technological development is causing some competitors to shy away from R&D investments, SMA has firmly embedded the continued development of its innovative prowess in its Strategy 2025 and, with investments, including a new test center for large-scale central inverters, which goes into operation in the first quarter of 2021 and meets stringent international standards, has laid the groundwork to ensure that it can continue to meet even future compatibility and reliability requirements for systems in all regions.

SMA will take advantage of the opportunities posed by digitalization [1]

Thanks to its extensive knowledge and experience in PV system technology, the ability to quickly implement changes, alignment of the subsidiaries toward future business areas and its numerous strategic partnerships, SMA is well prepared for the digitalization of the energy industry and will take advantage of the opportunities that it yields. As a specialist in complete solutions in the energy sector, we will help shape the energy supply of the future, launch a number of innovations and establish new strategic partnerships. In the process, we will build on our unique strengths to design additional system solutions for the conversion to a cost-effective, reliable and sustainable energy supply that is based on decentralized renewable energy. We will be helped in this endeavor by SMA's extraordinary corporate culture and our motivated employees who make a decisive contribution to the company's long-term success and are therefore also given a share in SMA's financial success.

Niestetal, March 9, 2021

SMA Solar Technology AG
The Managing Board

[1] The following section is not a mandatory component of the management report as defined in Section 315 HGB in conjunction with GAS 20, and therefore not a subject of the financial audit.

CONSOLIDATED FINANCIAL STATEMENTS

Income Statement SMA group

in €'000	Note	2020	2019
Sales	3	**1,026,583**	**915,069**
Cost of sales		859,815	749,303
Gross profit		**166,768**	**165,766**
Selling expenses		86,256	79,844
Research and development expenses		55,988	52,179
General administrative expenses		50,606	49,030
Other operating income	4	93,336	42,286
Other operating expenses		39,348	38,770
thereof impairments according to IFRS 9		706	1,538
Operating profit (EBIT)		**27,906**	**–11,771**
Financial income		984	2,194
Financial expenses		1,660	1,199
Financial result	6	**–676**	**995**
Profit before income taxes		**27,230**	**–10,776**
Income taxes	7	–861	–2,150
Net income		**28,091**	**–8,626**
of which attributable to shareholders of SMA AG		28,091	–8,626
Earnings per share, basic (in €)	8	0.81	–0.25
Earnings per share, diluted (in €)		0.81	–0.25
Number of ordinary shares (in thousands)		34,700	34,700

Statement of Comprehensive Income SMA group

in €'000	Note	2020	2019
Net income		**28,091**	**–8,626**
Unrealized gains (+)/losses (–) from currency translation of foreign subsidiaries		–5,838	1,038
Changes recognized outside profit or loss (currency translation differences) [1]		**–5,838**	**1,038**
Overall result		**22,253**	**–7,588**
of which attributable to shareholders of SMA AG		22,253	–7,588

[1] All items of other comprehensive income may be reclassified to profit or loss in subsequent periods.

Balance Sheet SMA group

in €'000	Note	2020/12/31	2019/12/31
ASSETS			
Intangible assets and goodwill	9	44,263	37,227
Property, plant and equipment	10	207,180	208,172
Investment property	12	17,988	14,274
Other financial assets, non-current [1]	15	19,428	11
Deferred tax assets	7	39,674	39,091
Non-current assets		**328,533**	**298,775**
Inventories	13	255,469	279,883
Trade receivables	14	121,872	145,530
Other financial assets, current (total)	15	156,145	112,292
Cash equivalents with a duration of more than 3 months and asset management		72,113	72,059
Rent deposits and cash on hand pledged as collaterals		41,556	30,995
Remaining other financial assets, current		42,476	9,239
Income tax assets	7	28,032	23,567
Value added tax receivables	15	28,808	22,001
Other non-financial assets, current	14	8,629	9,977
Cash and cash equivalents	16	123,707	214,793
		722,662	**808,043**
Assets classified as held for sale	17	0	500
Current assets		**722,662**	**808,543**
Total assets		**1,051,195**	**1,107,318**
LIABILITIES			
Share capital		34,700	34,700
Capital reserves		119,200	119,200
Retained earnings		285,246	262,993
SMA Solar Technology AG shareholders' equity	18	**439,146**	**416,893**
Provisions, non-current	19	84,524	75,287
Financial liabilities, non-current	20	29,658	23,462
Contract liabilities, non-current	23	152,249	157,468
Other non-financial liabilities, non-current	23	3,769	3,089
Deferred tax liabilities	7	278	9
Non-current liabilities		**270,478**	**259,315**
Provisions, current	19	83,053	77,946
Financial liabilities, current	20	11,475	11,051
Trade payables	21	144,210	174,742
Income tax liabilities	7	6,648	3,135
Contract liabilities (advances)	23	22,560	91,143
Other contract liabilities, current	23	44,617	49,403
Other financial liabilities, current	22	538	1,241
Other non-financial liabilities, current [1]	23	28,470	22,449
Current liabilities		**341,571**	**431,110**
Total equity and liabilities		**1,051,195**	**1,107,318**
Total cash (in € million) Cash and cash equivalents + cash equivalents with a duration of more than 3 months and asset management + rent deposits and cash on hand pledged as collaterals		237	318
Net cash (in € million) Total cash minus interest-bearing financial liabilities to banks		226	303

[1] The comparative figures presented in the previous year were adjusted. Further information on this can be found in text item 2.4 of the Notes.

Statement of Cash Flows SMA group

in €'000	Note	2020	2019
Net income		28,091	–8,626
Income taxes		–861	–2,150
Financial result		676	–995
Depreciation and amortization of property, plant and equipment and intangible assets		43,578	45,963
Change in provisions		14,344	–3,792
Result from the disposal of assets		2,957	1,267
Change in non-cash expenses/revenue		–14,780	8,388
Interest received		984	354
Interest paid		–998	–821
Income tax paid		2,260	–8,918
Gross cash flow		**76,251**	**30,670**
Change in inventories		892	–90,977
Change in trade receivables		23,022	–38,705
Change in trade payables		–30,532	63,894
Change in other net assets/other non-cash transaction		–101,017	33,934
Net cash flow from operating activities		**–31,384**	**–1,184**
Payments for investments in property, plant and equipment		–20,225	–15,481
Proceeds from the disposal of property, plant and equipment		195	122
Payments for investments in intangible assets		–18,546	–12,101
Payments for the acquisition of shares in associated companies		0	–8
Proceeds from the sale of shares in associates and available-for-sale assets less cash given up		2,273	127
Proceeds from the disposal of securities and other financial assets		45,000	155,443
Payments for the acquisition of securities and other financial assets		–45,229	–45,049
Net cash flow from investing activities		**–36,532**	**83,053**
Payments for lease liabilities		–8,562	–7,610
Redemption of financial liabilities		–3,810	–3,063
Net cash flow from financing activities		**–12,372**	**–10,673**
Net increase/decrease in cash and cash equivalents		–80,288	71,196
Changes due to exchange rate effects		–10,798	960
Cash and cash equivalents as of January 1		214,793	142,637
Cash and cash equivalents as of December 31	27	**123,707**	**214,793**

Statement of Changes in Equity SMA group

in €'000	Note	Share capital	Capital reserves	Difference from currency translation	Other retained earnings	Consolidated shareholders' equity
Shareholders' equity as of January 1, 2019		**34,700**	**119,200**	**4,277**	**266,304**	**424,481**
Net income					–8,626	–8,626
Other comprehensive income after tax				1,038		1,038
Overall result						–7,588
Dividend payments of SMA Solar Technology AG						0
Shareholders' equity as of December 31, 2019		**34,700**	**119,200**	**5,315**	**257,678**	**416,893**
Shareholders' equity as of January 1, 2020		**34,700**	**119,200**	**5,315**	**257,678**	**416,893**
Net income					28,091	28,091
Other comprehensive income after tax				–5,838		–5,838
Overall result						22,253
Dividend payments of SMA Solar Technology AG						0
Shareholders' equity as of December 31, 2020		**34,700**	**119,200**	**–523**	**285,769**	**439,146**

NOTES SMA GROUP

General Information

1. Basics

The Consolidated Financial Statements of SMA Solar Technology AG as of December 31, 2020, were prepared in compliance with the International Financial Reporting Standards (IFRS) as adopted by the EU, as well as in compliance with the regulations of Section 315e of the German Commercial Code (HGB). The requirements of the standards applied were met completely and provide a fair view of the net assets, financial position and results of operations of SMA Solar Technology AG and its subsidiary companies included in the scope of consolidation (hereinafter: SMA group or the group).

The registered office of the company is Sonnenallee 1, 34266 Niestetal, Germany. The company is registered at the commercial court of Kassel under the trade register number HRB 3972. Shares of SMA Solar Technology AG have been traded publicly since June 27, 2008. They are listed in the Prime Standard of the Frankfurt Stock Exchange. The company has been listed in the SDAX since September 24, 2018.

The Consolidated Financial Statements are prepared using the amortized acquisition cost principle. Exceptions to this are provisions, deferred taxes, derivative financial instruments and available-for-sale securities as well as institutional mutual funds.

The income statement is classified according to the cost of sales method. The Consolidated Financial Statements were prepared in euro. Unless indicated otherwise, all amounts stated are in euro rounded to whole thousands (€'000) or millions (€ million), rounding differences may arise as a result.

The Managing Board of SMA Solar Technology AG authorized the Consolidated Financial Statements on March 9, 2021, for submission to the Supervisory Board. The Supervisory Board has the duty of reviewing the Consolidated Financial Statements and declaring whether it approves the Consolidated Financial Statements.

SMA Solar Technology AG (SMA AG) and its subsidiaries (SMA group) develop, produce and sell solar inverters, transformers, chokes and monitoring systems for solar power systems. In addition, the company offers intelligent energy management solutions and services, including operation and maintenance services for photovoltaic power plants (O&M business). Another business segment is digital services for the future energy supply.

More detailed information on the segments is provided in section 3.

1.1. CONSOLIDATION PRINCIPLES

All domestic and foreign subsidiaries in which SMA Solar Technology AG, directly or indirectly, has the option of controlling the financial and operating policies are included in the Consolidated Financial Statements of the SMA group. The included statements are prepared based on uniform principles.

An associate is a company over which the group exercises significant influence. Significant influence means the option to participate in the financial and operating policy decisions of the company, in which the investment is held, but not to exercise control or joint control over the decision-making processes.

Non-controlling interests are recognized at the proportionate value of the assets acquired and liabilities assumed. They are not accounted for at fair value.

1.2. SCOPE OF CONSOLIDATION

With the exception of elexon GmbH, all companies within the scope of consolidation are fully consolidated. The UNIKIMS GmbH entitled to investments in the list of shareholdings is not consolidated due to its subordinate importance. Investment holdings within the scope of consolidation as of December 31, 2020, changed in comparison with December 31, 2019, as follows. Tigo Energy, Inc. was sold on July 30, 2020, and left the scope of consolidation. On February 19, 2020, Zeversolar GmbH merged into emerce GmbH.

The scope of consolidation of the SMA group is presented in the complete list of shareholdings shown below pursuant to Section 313 of the German Commercial Code:

Name of parent company	Registered office	Share in capital	Consolidation
SMA Solar Technology AG	Niestetal, Germany		F
Shares in affiliated companies			
Australia Zeversolar New Energy (Pty.) Ltd.	Sydney, Australia	100%	F
coneva GmbH	Munich, Germany	100%	F
emerce Africa (Pty) Ltd	Cape Town, South Africa	100%	F
emerce GmbH	Fritzlar, Germany	100%	F
SMA America Holdings LLC	Denver, U.S.	100%	F
SMA Solar Technology America LLC	Rocklin, U.S.	100% [3]	F
SMA Australia Pty. Ltd.	North Sydney, Australia	100%	F
SMA Benelux BVBA	Mechelen, Belgium	100% [1]	F
SMA France S.A.S.	Saint Priest, France	100%	F
SMA Ibérica Tecnología Solar, S.L.	Sant Cugat del Vallès (Barcelona), Spain	100%	F
SMA Immo Beteiligungs GmbH	Niestetal, Germany	100%	F
SMA Immo GmbH & Co. KG	Niestetal, Germany	100%	F
SMA Italia S.r.l.	Milan, Italy	100%	F
SMA Japan Kabushiki Kaisha	Tokyo, Japan	100%	F
SMA Magnetics Sp. z o.o.	Modlniczka, Poland	100%	F
SMA Middle East Limited	Abu Dhabi, United Arab Emirates	100%	F
SMA Solar Beteiligungs GmbH	Niestetal, Germany	100%	F
SMA Solar India Private Limited	Mumbai, India	100% [1]	F
SMA Solar Technology Beteiligungs GmbH	Niestetal, Germany	100%	F
SMA Solar Technology Canada Inc.	Vancouver, Canada	100%	F
SMA Solar Technology de México S. de R.L. de C.V.	Santiago de Querétaro, Mexico	100%	F
SMA Solar Technology (Shanghai) Co., Ltd.	Shanghai, China	100%	F
SMA Solar Technology South Africa (Pty.) Ltd.	Cape Town, South Africa	100%	F
SMA Solar (Thailand) Co., Ltd.	Bangkok, Thailand	100% [2]	F
SMA Solar UK Ltd.	Banbury, Great Britain	100%	F
SMA South America SpA	Santiago, Chile	100%	F
SMA Brasil Tecnologia Ferroviária e Solar Ltda.	Campinas, Brazil	100% [3]	F
SMA Sunbelt Energy GmbH	Niestetal, Germany	100%	F
Investments			
elexon GmbH	Aachen, Germany	33.34%	R
UNIKIMS GmbH	Kassel, Germany	9.6%	N

F = fully consolidated; N = not consolidated; R = recognized at equity
1 0.1% are held by SMA Solar Technology Beteiligungs GmbH.
2 0.001% are held by SMA Solar Technology Beteiligungs GmbH and 0.001% are held by SMA Solar UK Ltd.
3 Indirect investment

SMA Solar Technology AG and SMA Magnetics Sp. z o.o. are manufacturing companies. The others are sales and service companies.

All SMA group companies prepare their Annual Financial Statements as of December 31, with the exception of our Indian subsidiary SMA Solar India Private Limited, which prepares its Financial Statements as of March 31 due to statutory regulations.

The companies SMA Immo GmbH & Co. KG (Section 264b German Commercial Code – HGB) and SMA Solar UK Ltd. (Section 479A Companies Act 2006) exercised exemption clauses regarding the preparation and publication of Financial Statements.

1.3. TRANSLATION OF FINANCIAL STATEMENTS INTO FOREIGN CURRENCIES

The Consolidated Financial Statements are prepared in euro, which is the reporting currency of the group. Each company within the group defines its own functional currency, which is normally the local currency. The items contained in the Financial Statements of each company are valued using this functional currency.

Transactions denominated in foreign currencies are translated initially into the functional currency by applying the spot rate valid at the time of the transaction. On each subsequent due date, monetary assets and liabilities denominated in foreign currencies are translated into the functional currency by applying the spot rate valid on that day. All translation differences are recognized through profit or loss.

Assets and liabilities of subsidiaries preparing their balance sheets in a currency other than the euro are translated using the current exchange rate on the balance sheet date. Items on the income statement are translated periodically using the average rate of the relevant month. The equity components of subsidiaries are translated at the corresponding historical exchange rate applicable upon accrual. Any resulting translation differences are recorded under other income within equity as adjustment items for foreign currency translation or in shares of other shareholders. The accumulated amount recorded in equity is recognized through profit or loss upon the disposal of the foreign subsidiary concerned.

2. Accounting principles and amendments to accounting standards

2.1. NEW IASB ACCOUNTING STANDARDS AND INTERPRETATIONS TO BE APPLIED FOR THE FIRST TIME IN THE FISCAL YEAR

New standards and interpretations that are not explained in detail here do not result in any significant changes in the group at present. If changes have a material effect on the group’s accounting, this is explained separately. If no explanation is given, the changes have no material effect on the group’s accounting.

Amendments to the conceptual framework

The new framework concept contains revised definitions of assets and debts as well as new guidelines regarding measurement, derecognition, disclosure and statements. The new framework concept does not constitute a fundamental overhaul of the document; rather, the IASB focused specifically on those areas that were thus far unregulated or that exhibited noticeable shortcomings that needed to be rectified.

Amendments to the references in the conceptual framework

The amendments apply to IFRS 2, IFRS 3, IFRS 6, IFRS 14, IAS 1, IAS 8, IAS 34, IAS 37, IAS 38, IFRIC 12, IFRIC 19, IFRIC 20, IFRIC 22 and SIC–32.

Amendments to IAS 1 and IAS 8 Definition of Material

On October 31, 2018, the Board published amendments to the definition of materiality in IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. The amendment is aimed at avoiding duplication of the definition of materiality in IAS 1 and IAS 8.

Amendments to IFRS 3 Business Combinations

The IASB has published "Definition of a Business Operation." This definition is intended to solve the problems that arise in connection with assessing whether a company has acquired a business operation or a group of assets. The amendments are applicable to business combinations for which the acquisition date is on or after the start of the first annual reporting period that began on or after January 1, 2020.

Amendments to IFRS 9, IAS 39 and IFRS 7 Interest Rate Benchmark Reform

On May 3, 2019, the IASB published proposed amendments to IAS 39 and IFRS 9 to mitigate the effects of the IBOR reform on financial reporting. The amendments aim to ensure that hedge accounting continues to exist or can be designated despite the expected replacement of various reference interest rates.

Covid-19-Related Rent Concessions (Amendments to IFRS 16)

The amendments mean that lessees are exempt from assessing whether rent concessions (e. g., rent-free periods, temporary rent reductions, etc.) granted due to the coronavirus pandemic constitute a rent modification. If advantage is taken of the exemption, the rent concessions shall be entered in the balance sheet as if they did not constitute a modification to the rental contract. The amendments apply to rent concessions that reduce rent payments due on or before July 30, 2021.

STANDARDS AND INTERPRETATIONS PUBLISHED BUT NOT YET MANDATORY

In its 2020 Consolidated Financial Statements, SMA did not apply the following accounting standards, which had already been adopted by the IASB but were not yet mandatory for this fiscal year.

They will be implemented in the year of compulsory first-time application if they are implemented and applied in the EU. Earlier application is not permitted. If a significant impact on the group's accounting is expected, a separate description is provided for the relevant issue.

Interest Rate Benchmark Reform (Phase 2) – Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16

To assess the potential impact of the benchmark interest rate reform ("IBOR reform") on financial reporting, the IASB included the IBOR project in its standard-setting program in December 2018, and divided it into the following two phases:

Phase 1: Questions concerning financial reporting in the period before the replacement of an existing benchmark interest rate with an alternative interest rate.

Phase 2: Questions concerning financial reporting at the time a benchmark interest rate is replaced with an alternative interest rate. The standard amendments reflect the outcome of the second phase and address aspects that could impact financial reporting following reform of a benchmark interest rate, including its replacement with alternative benchmark interest rates.

Extension of the exemption regarding the application of IFRS 9 (amendments to IFRS 4 Insurance Contracts)

The amendments mean that the specified expiry of the temporary exemption from the application of IFRS 9 in IFRS 4 is postponed to fiscal years commencing on or after January 1, 2023.

IFRS 17 Insurance Contracts

The new IFRS 17 standard was published in May 2017. It has yet to be endorsed for use in the EU. The standard will not be applied by the group.

Amendments to IFRS 10 Consolidated Financial Statements and IAS 28 Investments in Associates

These amendments clarify that in transactions involving associates or joint ventures, the extent of gain or loss recognition depends on whether the assets sold or contributed constitute a business. Mandatory application of these amendments has been postponed indefinitely.

Annual Improvements to IFRS (2018 to 2020 cycle)

The improvements dealt with translation differences arising in subsidiaries as first-time adopters in the context of IFRS 9, dealing with fees within the 10 percent test for derecognition.

Amendments to IAS 1 Classification of liabilities as current or non-current

The amendments to IAS 1 only affect the classification as current or non-current and have no impact on the amount or timing of the recognition of assets, liabilities, income or expenses, or the disclosure requirements. The amendments clarify that the disclosure is to be based exclusively on existing substantial rights at the reporting date to defer settlement for 12 months. The amendments are applicable for the first time for financial years beginning on or after January 1, 2023.

Amendments to IAS 16 Income before the operational status

Income from the sale of products produced during test runs of not yet completed plants and the costs for the production of these items shall be recorded in the operating result. It is not permissible to deduct the income from the cost of the assets. In the event that they are endorsed, the amendments shall apply from June 1, 2022.

Amendments to IAS 37 Scope of compliance costs for onerous contracts

The amendments specify the scope of the compliance costs, meaning that all directly attributable costs shall be taken into account. This encompasses not only all costs that would not be incurred without the contract, but also other costs that shall be directly attributable to fulfillment of the contract.

The amendments have to be applied for the first time for annual periods beginning on or after January 1, 2022. In case of onerous contracts, they will have an impact on group accounting because only unavoidable costs have been applied to date.

2.2. DISCLOSURES TO THE ACCOUNTING AND VALUATION POLICIES

Intangible assets acquired with a finite useful life are valued at acquisition costs. They decline via straight-line amortization over their useful lives and accumulated impairments.

The costs for internally generated intangible assets are recognized in the period in which they accrue, with the exception of development expenses that can be capitalized.

Research and development expenses include all expenses that can be attributed directly to research or development activities. Research expenses are recognized as expenditure in the period in which it is incurred. Development expenses of a project are capitalized as an intangible asset, only after SMA can demonstrate both the technical and economic feasibility of the intangible asset so that it will be available for internal use or sale and has the intention to complete the intangible asset and either use or sell it. Development expenses are recognized at cost pursuant to IAS 36.66, less accumulated amortization and impairment. Amortization commences at the end of the development phase and from the moment the asset can be used. Amortization is effected over the period during which future benefit will be expected. No borrowing costs are capitalized in connection with the activation of development expenses. In addition, there are currently no qualifying assets for which borrowing costs are capitalized.

Company acquisitions in previous years resulted in low **goodwill**. See also Section 9. Intangible assets. There were no other intangible assets with an indefinite useful life in the periods under review.

Intangible assets with finite useful lives are amortized on a straight-line basis over a period of three to five years, including development projects, software and licenses. Patents are written off over ten years. In the case of intangible assets with a finite useful life, the period of amortization and the amortization method are reviewed at least at the end of each fiscal year. Any adjustments to the amortization period that become necessary because of changes in the expected useful life are accounted for as changes to estimates. Amortization is recorded under the expense category that corresponds to the function of the intangible asset in the enterprise.

Any gains or losses from derecognition of intangible assets are determined as the difference between the net disposal proceeds and the book value of the asset. They are recognized in profit or loss in the period in which the asset is derecognized.

Property, plant and equipment is valued at cost of acquisition or sales less straight-line depreciation and accumulated impairment losses. Borrowing costs are added to cost of acquisition and sales in the event of qualifying assets. The cost of replacement of a part of a fixed asset is included in the book value of this asset when incurred if the criteria for recognition are fulfilled. When major inspections are carried out, the costs are capitalized according to the book value of the relevant assets if the criteria for recognition are met. All other maintenance and repair costs are expensed immediately.

The depreciation period is based on the expected useful life. Depreciation is recognized under the expense category that corresponds to the function of assets in the enterprise. Scheduled straight-line depreciation is based on the following useful life of assets:

	Useful life
Leasehold improvements	10 years
Buildings	25 to 35 years
Technical equipment and machinery	6 to 8 years
Business and office equipment	5 to 10 years

A fixed asset is derecognized either upon its disposal or when no further economic benefit is expected from the further use or sale of the asset. Gains or losses from derecognition of the asset are determined as the difference between the net disposal proceeds and the book value of the asset. This difference is recognized through profit or loss in the income statement as other operating income or other operating expenses when the asset is sold.

The residual values, useful lives and depreciation methods are reviewed at the end of each fiscal year and adjusted if necessary.

Property, plant and equipment that is held to generate rental income are recognized as "Investment Property" in accordance with IAS 40. Investment properties must be capitalized at cost on acquisition. SMA recognizes investment properties at amortized cost. An external opinion on the determination of the market value is regularly drawn up. The market value of the property was determined on the basis of a tax valuation method. The main input parameters are the discount rate, estimated vacancy and the development of market rents, and the method reflects a level 3 rating in the sense of IFRS 13. The market value corresponds to the highest and best benefit of the property. The market value thus measured is €27.4 million (2019: €15.8 million). Further property was rented out in the current year, which means that the market value in 2020 is a cumulated figure. Please refer to the explanations in Section 12. Investment property.

Property, plant and equipment that constitute non-current assets held for sale and discontinued operations are classified as held for sale according to IFRS 5. The condition is that the associated book value is realized largely through disposal and not through continued use. On the date of classification, these assets are measured at the lower value of book value and fair value less costs to sell, and no longer depreciated or amortized.

Impairment of intangible assets and property, plant and equipment: On each balance sheet date, the group reviews whether there are any indicators that the value of an asset might be impaired. If such indicators exist or if an annual impairment test of an asset is required, the group determines the recoverable amount of the relevant asset. The recoverable amount of an asset is its fair value less costs to sell or its value in use, whichever is higher. As a rule, the recoverable amount will be determined for each individual asset. If it proves impossible to determine the recoverable amount for individual assets because the cash flows depend on those of other assets, the cash flows are determined for the next higher group of assets (cash-generating unit). In assessing the value in use, the estimated future cash flows are discounted to their present value using a pretax discount rate that reflects current market assessments regarding the interest effect and the risks specific to the asset. To determine the fair value less costs to sell, an adequate valuation model is used. This is based on valuation multipliers, market prices of quoted shares or other available indicators.

If the book value of an asset or a cash-generating unit exceeds the recoverable amount, impairment is recognized for the asset or the cash-generating unit in question, and it is written down to the recoverable amount. Impairment costs are recognized under the expense category that corresponds to the function of the impaired asset in the enterprise.

For assets, a test is carried out on each balance sheet date to determine whether a previously recognized impairment loss has ceased to exist or has diminished. Additions are made if the recoverable amount has increased in subsequent periods. An impairment loss recognized in prior periods is reversed only if there have been significant changes to the measurement parameters used to originally determine the asset's recoverable amount since the last impairment loss was recognized. If this is the case, the book value of the asset is increased to as much as its recoverable amount. However, an addition is limited to the amount that would have resulted based on scheduled depreciation without recognizing an impairment. The addition is recognized in the income statement. Impairment on goodwill is not reversed. This was not the case in the year under review or in the previous year.

Inventories are measured at the lower value of the cost of acquisition or sales and net realizable value. The costs of acquisition or production include all costs incurred during acquisition and production as well as other costs incurred in bringing the inventories to their present location and condition. Borrowing costs are not taken into account here. In general, when determining the acquisition costs of raw materials, consumables and supplies, moving average prices are used. The cost of sales of work in progress and finished goods is determined using detailed cost accounting. The net realizable value consists of the estimated sales proceeds that can be achieved through the ordinary course of business, less the estimated costs incurred up to completion and the estimated necessary selling expenses. Value adjustments are particularly made in the case of a lack of standardization, discontinued products and surplus stocks of non-product-specific materials. A time horizon of 36 months is used to carry out range analyses. In the case of inventory items that are exclusively included in a discontinued product and for which there is also no use in the service, a value adjustment is made at 100%. If the reasons that have resulted in an impairment of inventories no longer exist, a corresponding addition is made.

As a rule, **financial instruments** are reported as soon as an entity of the SMA group becomes a contracting party to a financial instrument. A financial instrument is a contract that gives rise to both a financial asset held by one entity and a financial liability or an equity instrument held by another entity. If the trading date and the settlement date of financial assets are different, then the settlement date is decisive for initial recognition. The date of contract conclusion is only decisive in the case of financial derivatives.

Financial assets and financial liabilities are measured at fair value upon their initial recognition. Financial instruments are also designated to measurement categories in accordance with IFRS 9. Further explanations are provided in Section 24. Additional disclosures relating to financial instruments. If permitted and necessary, redesignations are made at the end of the fiscal year. In the case of financial instruments for which there is no measurement at fair value through profit or loss, the transaction costs that are directly attributable to the purchase of the financial asset or to the issue or assumption of the financial liability are also included. These are those directly attributable to the acquisition of the financial asset or the issue of financial liabilities.

Financial instruments are generally stated separately. They are netted only if there is a right of offsetting them on the relevant date and also if the intention is to perform the settlement on a net basis.

Their subsequent measurement is based on the previous categories pursuant to IFRS 9. For the SMA group, the measurement categories "Amortized Cost" and "Fair Value Through Profit or Loss" are particularly relevant. Any loans and receivables granted and other financial liabilities are measured at amortized cost of acquisition using the effective interest method.

Assets measured "At Fair Value Through Profit or Loss" are measured at fair value. These primarily include derivative financial instruments that are not part of an effective hedging relationship. Derivative financial instruments are reported as assets or liabilities if their fair values are positive or negative. Gains and losses resulting from changes in the fair value of derivative financial instruments are recognized directly through profit or loss, as long as no hedging relationship was created for them. Gains or losses resulting from subsequent measurement are recognized through profit or loss in the income statement.

At each reporting date, the accounting values of the financial assets, which are not measured at fair value through profit or loss, are then examined to see whether objective evidence indicates an impairment. Any impairment loss, which is based on a lower value than the carrying amount, is recognized in the income statement.

A financial asset is removed from the books if the enterprise has relinquished control of the contractual rights related to the financial asset. A financial liability is removed from the books if the obligation underlying the liability is discharged, cancelled or has expired.

For the majority of the financial instruments that come under the impairment regulations at SMA, trade receivables without a significant financing component, the standard mandatorily stipulates a simplified two-level model. Under this model, a risk provision in the amount of the expected losses over the remaining term is recognized for all instruments, irrespective of their credit quality. The amount of the risk provision at level 2 is calculated based on a flat rate. This rate is applied to the entire SMA group, as there are no different default rates for different regions or business units. The application of IFRS 9 resulted in a rate of 0.40% (2019: 0.45%). When determining the default rate, a looking-forward component is taken into account, in the sense that SMA is in a very volatile environment and, despite all market fluctuations and changes, there were no significant influences on the default rates of the receivables. Due to the management assessment, no change is expected in the future.

As described, trade receivables are all allocated to level 2 on acquisition and are transferred to level 3 if there are objective indications of impairment. Despite the general focus on internal risk management, it is assumed that a default event occurs at the latest when a receivable is 90 days past due. However, this assumption can be disproved based on suitable information. Because high-risk receivables are collateralized and high-risk customers receive services only if they pay in advance, the level of bad debt losses in the group is not significant (less than 1% of receivables). For this reason, a default event is not assumed until the receivable is 180 days past due. Receivables are impaired after being overdue.

For all other financial instruments (cash and cash equivalents, debt securities [non-market-traded], rent collateral and pledges, time deposits and other short-term deposits [> 3 months], non-current assets) that fall under the impairment requirements of IFRS 9, the general model applied. Additional information on default risk and expected credit losses of the relevant balance sheet items (cash and cash equivalents, bonds [non-market-traded], rental collateral and pledges, time deposits and other short-term deposits [> 3 months], contractual assets) is waived for materiality reasons.

Government grants are not recognized until there is reasonable assurance that SMA will meet all the conditions for receiving the grants. Government grants are initially recognized directly in equity. They are to be recognized through profit or loss in line with planning along with the corresponding expenses to be offset by the grants. Government grants that are paid to compensate for expenses or losses already incurred or to provide immediate financial support without directly associated expense are recognized in the income statement in the period in which the corresponding claim arises.

Provisions account for all recognizable present (legal and constructive) obligations of the group to third parties as a result of past events that are expected to lead to an outflow of resources with an economic benefit to settle the obligation and the amount of which can be estimated reliably. Provisions are recognized in line with IAS 37 at the estimated amount required to settle them. Insofar as the group expects to receive a repayment, at least in part, for a reported provision (e. g., for an insurance contract), the repayment is recorded as a separate asset if the inflow of the payment is highly probable. The expense arising from the formation of the provision is recognized in the income statement. Non-current provisions are carried in the balance sheet at their settlement amount discounted to the balance sheet date using corresponding term-dependent market interest rates. If the amount is discounted, the increase of provisions caused by expiration is recorded under finance costs. Additions to the provisions for guarantees outlined under Section 19. Provisions are recognized in cost of sales. It is not carried out by a delimitation of revenue. In addition to individual circumstances, provisions for general warranty risks are also taken into account when setting aside provisions for warranty obligations. In the case of warranty risks, an obligation of five to ten years is generally adopted as a base. The change in estimates made in the previous year was systematically continued this year.

At the beginning of the contract, the group as a lessee assesses whether the contract contains a **lease**. For all leases where the group is the lessee, the group recognizes a right-of-use asset and a corresponding lease liability. Exceptions to this include short-term leases (term up to 12 months) and leases for low-value assets (printers et al.). For these leases, the group recognizes lease payments on a straight-line basis over the lease term under "Other expenses," unless another systematic basis is more representative.

Upon initial recognition, the lease liability is measured at the present value of the lease payments not yet paid at the beginning of the lease, discounted at the interest rate underlying the lease. If this interest rate cannot be determined easily, the group uses the incremental borrowing rate. Upon initial recognition, it is also taken into account whether the contracts have an extension option. If such options exist, an assessment must be made at the outset, or when new evidence becomes available, as to whether the extension options will be exercised. The group has building contracts with extension options. In general, contracts have an annual option to extend by one year or an option to extend for another five years.

The discount rate is calculated using the following method in each case: First, the risk-free interest rate with matching maturities is calculated within a region (as an EU state, Poland initially has an identical interest rate to Germany, but this is adjusted by a country-specific risk premium). A rating result for SMA has to be calculated based on credit quality.

The following lease payments are included in the assessment of the lease liability:

→ Fixed lease payments

→ Variable lease payments

→ Expected lease payments due to residual value guarantees

→ Exercise prices of call options

→ Penalties for the early termination of leases

Variable lease payments that do not depend on an index or exchange rate are not included in the assessment of the lease liability and the right-of-use asset.

The lease liability is subsequently measured by increasing the carrying amount by the interest on the lease liability and reducing the carrying amount by the lease payments made.

In the following cases, the group modifies the lease liability and adjusts the right-of-use asset accordingly:

→ The term of the lease has been amended

→ Amendments to lease payments

If one of these cases occurs, the existing lease is modified in accordance with these changes. A separate lease is not recognized.

The rights of use are initially measured at the amount of the corresponding lease liability less lease payments made at or before the beginning of the lease, lease incentives received and initial direct costs. Subsequent measurement is at original cost less accumulated amortization and impairment.

If the group is obliged to dismantle or reduce a leased asset, to restore the site on which the asset is located or to restore the asset underlying the lease to the condition required by the terms of the lease, a provision is recognized and measured in accordance with IAS 37. If the costs relate to a right-of-use asset, the costs are recognized in the corresponding right-of-use asset, unless these costs are incurred for the production of inventories.

The examination as to whether a value adjustment of a right-of-use asset is necessary is carried out in accordance with IAS 36.

Due to the relief provisions, a separation between non-leasing components and leasing components was waived and leasing agreements with associated non-leasing components were accounted for accordingly as a single agreement in accordance with IFRS 16.

The group makes use of the relief provision provided that the leasing component and the non-leasing components are not reported separately.

If the group – in its capacity as lessor – has concluded a sublease, the main lease and sublease are accounted for as two separate contracts. Classification as a finance or operating lease of the sublease is based on the right-of-use asset and not the asset underlying the lease from the main lease.

Rental income from operating leases is recognized on a straight-line basis over the term of the respective lease. Initial direct costs incurred in negotiating and agreeing a lease are added to the carrying amount of the leased asset and allocated on a straight-line basis over the lease term.

Amounts payable from lessees under finance leases are reported as receivables in the amount of the group's net investment in the leases. Income from finance leases is distributed over the respective reporting periods to ensure a constant periodic rate of return on the group's net investment outstanding in respect of the leases.

Employee benefits are usually reported as a liability if an employee has provided work in exchange for benefits payable in the future and are recognized as an expense if the entity has received the economic benefit resulting from the work provided by an employee in exchange for future benefits.

Long-service rewards and death benefits are granted on the basis of a company agreement. Measurement of obligations to pay benefits is carried out by applying the projected unit credit method. This method takes into account both the claims for payment of long-service rewards and death benefits and the acquired pension rights known as of the balance sheet date, and payments of long-service rewards and death benefits expected in the future.

In 2009, SMA Solar Technology AG introduced value-based life-long working-time accounts. Under certain conditions, employees may have time credits or special benefits reposted to these value accounts. They may take paid leave of absence at a later date using the credit balances extrapolated. The employees' value claims are protected against insolvency and are reinsured. Personnel expenses of €0.5 million were added in the current year (2019: €0.3 million).

Income from goods deliveries is recognized at the time of transfer of control. Prepayments for part deliveries are recognized as contract liabilities (prepayments received) within other liabilities. For transportation services, which constitute a performance obligation in their own right, revenue is recognized on a time proportion basis. Sales revenue from services, provided these services are not rendered over time, is recognized at the point in time at which the obligation to the customer is satisfied in accordance with IFRS 15.38. Sales from services recognized at a point in time are generated by SMA when commissioning large-scale projects and carrying out repair orders. Revenue from services rendered over time, including extended warranty or service/maintenance contracts, is recognized over the contractual periods to which these services relate according to the output-based customer perspective. The output-based method leads to an accurate presentation as it best represents the value of the goods and services transferred in the context of the constant commitment to the customer. Cash inflows received in advance do not contain any material finance components. They are the result of a number of end-customer contracts each with small individual contract volumes. With regard to the delivery of goods, in the Home and Business Solutions segments full payment is made on delivery depending on the transfer of control, while in the Large Scale & Project Solutions segment advance payments on deliveries are often made in addition to this. These are recognized in revenue upon full delivery depending on the transfer of control. Services provided over time, such as extended warranties in the Home and Business Solutions segments, are paid mainly in full in advance. They are reported as non-current contractual obligations and recognized in revenue over the contractual term. Service and maintenance contracts in the Large Scale & Project Solutions segment are paid beforehand over shorter periods, generally for a period of 12 months. Over this period, they are recognized in revenue in line with the passage of time. There were no significant changes in the balances of assets and contractual obligations as defined in IFRS 15.118 in 2020. Depending on the region and product group, SMA products are sold with a factory warranty of 2, 5, 10 or 25 years. The factory warranty includes the statutory warranty and grants the right to an exchange or replacement in the case of defects that are not caused by external factors.

There are no general rights of return for purchased products. Transaction prices are not adjusted retroactively.

Customer bonuses in the Home Solutions segment are reported as contract liabilities. The reported sales revenue and impairment on receivables relate exclusively to items from contracts with customers as defined in IFRS 15.

Expected contractual penalties (malus payments) are recognized as contractual obligations.

Contract assets arising from contracts with customers are reported under the balance sheet item "Other financial assets."

In the case of customer contracts under which multiple performance obligations recognized at different points in time are sold for a single transaction price or a discount has to be assigned, there is an allocation of the transaction price. This allocation is based on the ratio between the individual sale prices, which are determined based on historical prices for comparable customers in comparable circumstances. If different options are available, the probability of their being exercised is assessed based on comparable cases. As of December 31, 2020, the total amount of outstanding performance obligations came to €855.4 million (December 31, 2019: €766.2 million). Of this amount, €386.3 million was attributable to product business. In the product business, revenue will mainly be realized in 2021. €469.1 million of the order backlog was attributable to service business. Revenue in the service business will be largely recognized in the next five to ten years.

Interest income is recognized when an interest claim has accrued (using the effective interest rate, i. e., the internal rate used to discount estimated future cash inflows over the expected term of the financial instrument to the net book value of the financial asset). Dividend income is recognized when the right to receive payment is established.

Current **tax receivables and tax liabilities** for the ongoing and for previous periods are measured at the amount which is expected to be reimbursed by the tax authority or to be paid to the tax authority. Tax rates and tax laws applicable on the balance sheet date are used to calculate this amount. Income taxes include current and deferred taxes. Current taxes that relate to items stated directly in equity are not recognized in the income statement but in equity.

Deferred taxes are calculated according to IAS 12 based on the standard international balance-sheet-related liability method. This requires deferred tax items to be recognized for all temporary differences between the tax base of an asset or liability and the carrying amount in the consolidated balance sheet as well as for tax loss carryforwards. However, deferred tax assets are recognized only if there will be sufficient taxable income available in the future.

Deferred taxes are measured using the tax rates that, under current legislation, would apply in the future on the probable date of reversal of the temporary differences. The effects of amendments to tax legislation on deferred tax assets and liabilities are recognized in profit or loss in the period in which the material conditions for such amendments to come into force arise. Deferred tax assets and liabilities are not discounted according to the regulations of IAS 12. Deferred tax assets and deferred tax liabilities are offset at the same maturity, provided that they relate to the same entity.

2.3 SIGNIFICANT JUDGEMENTS, ESTIMATES AND ASSUMPTIONS

Preparation of the Consolidated Financial Statements requires the company management to make judgements, estimates and assumptions that affect the amounts of revenues and expenses, assets and liabilities reported on the reporting date as well as the disclosure of contingent liabilities. Uncertainty related to these assumptions and estimates may lead to results that require material adjustments to the book values of the relevant assets or liabilities in the future. When applying the accounting and valuation policies, the company management made the judgements outlined below, which had a significant effect on the amounts recognized in the Consolidated Financial Statements.

The key assumptions concerning the future and other key sources of estimation uncertainty on the reporting date associated with a significant risk of causing a material adjustment to the book values of assets and liabilities during the next fiscal year are explained below:

Development expenses are capitalized when all required conditions are given. Initial capitalization of expenses is based on an estimate by the company management that a project's technical and economic feasibility has been proven. This is normally the case when a development project has reached a specific milestone or a specific quality gate in the development process. When determining the amounts to be capitalized, the company management makes further valuation assumptions regarding the amount of expected future cash flows from assets, the discounting rates to be applied and the period of inflow of expected future cash flows generated by assets. With this in mind, development expenses of €15.2 million (2019: €10.9 million) were capitalized in the 2020 fiscal year. Research and development expenses of €56.0 million (2019: €52.2 million) were incurred.

In addition to individual circumstances, **provisions** for general warranty risks are also taken into account when setting aside provisions for warranty obligations. In the case of warranty risks, an obligation of five or ten years is generally adopted as a base. The expected warranty expenditure is based on historical values in previous fiscal years. Depending on the amount, expenses are forecasted based on historical values and then allocated to forecasted undesirable developments. The undesirable developments are based on historical values of the different product groups. This provides a forecast for the future development of group-wide warranty costs. Individual facts are recognized separately if they are not part of the general warranty provisions. This may be the case if they are to be assessed separately on the basis of their significance, or if they represent a special circumstance that has not yet been reflected in historical values. The value of the provision for individual cases and general warranty risks amounted to €152.1 million as of December 31, 2020 (December 31, 2019: €138.9 million). More information is provided in Section 19. Provisions.

Sales from long-standing service and maintenance contracts and extended warranties are collected over the contract term as sales because a linear progression of warranty costs is adopted as the best possible estimation method. Whether bonus or malus payments can be expected is based on the available information and historical values.

On each balance sheet date, the group examines whether there are indicators for an impairment of non-financial assets. Estimating the value in use requires the company management to make an estimate of the expected future cash flows from the asset or the cash-generating unit and to choose a suitable discount rate. The discounted cash flows are then used to determine the present value of the asset or cash-generating unit. No discretionary impairments were recognized on non-financial assets in 2020.

Further estimates arise from the valuation of the earn-out-provision – see further explanations under Section 24. Additional disclosures relating to financial instruments.

Deferred tax assets are recognized for all unused tax loss carryforwards to the extent that it is probable that there will be sufficient taxable profit to enable the loss carryforwards to actually be used. Determining the amount of deferred tax assets requires the company management to use significant discretion regarding the expected time of accrual and the amount of taxable income in the future as well as regarding future tax planning strategies. In contrast to the previous year, deferred tax assets on loss carryforwards amounting to €10.3 million were recognized in the fiscal year on the basis of the current tax planning (2019: €14 million).

A significant portion of the reported assets is based on planning assumptions in the detailed three-year plan developed by the Managing Board and approved by the Supervisory Board. Significant assumptions regarding the sales performance and cost reduction and the development of different markets are therefore of considerable significance to the amount of assets.

2.4 OTHER CHANGES IN DISCLOSURES

In order to increase transparency and informative value, the designation of some balance sheet items was adjusted. This is done for reporting in the European Single Electronic Format (ESEF).

The changes in reporting described above have affected the following items on the balance sheet:

Old name	New name
Intangible assets	Intangible assets and goodwill
Fixed assets	Property, plant and equipment
Deferred taxes	Deferred tax assets
Other financial assets (total)	Other current financial assets, current (total)
Remaining other financial assets	Remaining other financial assets, current
Income taxes	Income tax assets
Claims for VAT refunds	Value added tax receivables
Other receivables	Other non-financial assets, current
Provisions	Provisions, current/ Provisions, non-current
Financial liabilities	Financial liabilities, current/ Financial liabilities, non-current
Contract liabilities (prepayments received)	Contract liabilities (advances)
Contract liabilities (other)	Other contract liabilities, current
Other financial liabilities (current)	Other financial liabilities, current
Remaining other liabilities (current)	Other non-financial liabilities, current
Deferred taxes	Deferred tax liabilities

Furthermore, the following intermediate totals no longer appear on the balance sheet (will not be replaced): “Receivables from tax authorities (total),” “Other liabilities (total), non-current” and “Other liabilities (total), current.”

The old balance sheet items “Other financial investments” and “Investments in associates” will be shown in the total under “Other financial assets, non-current,” while the old balance sheet item “Human resources” will be shown in the total under “Other non-financial liabilities, current.”

The changes in reporting described above have affected the following items on the income statement:

Old name	New name
Research and development costs	Research and development expenses
General administrative costs	General administrative expenses

3. Segment reporting

The segments of the SMA group are described in the organizational and reporting structure on page 16 as well as individually explained in Results of Operations in the Management Report on page 50 et seq. SMA’s segment structure has not changed in comparison with the previous year.

Segment	Activities
Home Solutions	In the **Home Solutions segment**, SMA caters to global markets for small PV systems with and without connection to a smart home solution. The portfolio comprises single- and three-phase string inverters of the Sunny Boy and Sunny Tripower product families in the lower output range of up to 12 kW, integrated services, energy management solutions, storage systems of the Sunny Island and Sunny Boy Storage product families, communication products and accessories. SMA’s Home Solutions segment also offers services, such as extended warranties, spare parts and modernization of PV systems (Repowering), to enhance performance as well as digital energy services.
Business Solutions	In the **Business Solutions segment**, the focus is on global markets for medium-sized PV systems with and without an energy management solution. The product portfolio comprises the three-phase inverters of the product families Sunny Tripower with outputs of more than 12 kW and Sunny Highpower and Solid-Q. Storage solutions and holistic energy management solutions for medium-sized PV systems based on the ennexOS platform, medium-voltage technology and other accessories round off the offering in this segment. In addition, SMA offers services up to and including system modernization and operational management of commercial PV systems (O&M business) as well as digital services.
Large Scale & Project Solutions	The **Large Scale & Project Solutions segment** focuses on international PV power plant markets with its powerful string inverters in the Sunny Highpower product family, the central inverters in the Sunny Central product family as well as the battery inverters in the Sunny Central Storage product family. The outputs of inverters in this segment range from 150 kW to the megawatts. In addition, the SMA portfolio of this segment includes complete solutions comprising central inverters with their grid service and monitoring functions as well as all medium- and high-voltage technology and accessories. The portfolio is supplemented by services, such as for the modernization and functional enhancement of PV power plants (Repowering), and operation and maintenance services (O&M business).

The operating result of the segments is monitored separately by the Managing Board to make decisions on the allocation of resources and to determine the profitability of the segments. Group financing, currency and interest rate hedging and the income tax burden are controlled at the group level and are therefore not allocated to the individual operating segments.

Regarding information on geographical segments, sales are assigned to countries using the destination principle. The company refrains from presenting non-current assets or other items such as the breakdown of sales deductions per segment, as these are not included in monthly reports and the costs of producing this information would be excessively high.

The group measures the performance of its segments through a measurement of segment profit or loss, which is referred to as EBIT in the internal management and reporting system. This measurement comprises gross profit, selling expenses, general administrative expenses, research and non-capitalized development expenses as well as other operating income (balance of other operating income and expenses).

Segment assets comprise the intangible assets attributed to each segment and its property, plant and equipment, inventories and trade receivables. Segment liabilities include trade payables that are directly attributable to the relevant segments. Internal management reporting is in line with the accounting policies of external reporting.

The transfer prices between the business segments are determined using management prices based on usual arm's length market conditions. Income from external third parties is reported using the same valuation parameters as shown in the income statement.

No asymmetrical allocations are made to individual segments.

Financial ratios by segments and regions

	External product sales		External services sales		Total sales		Operating profit (EBIT)	
in € million	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Segments								
Home Solutions	250.4	227.2	13.3	12.6	263.7	239.8	12.8	1.6
Business Solutions	290.3	293.0	2.3	3.5	292.6	296.5	−29.9	−7.2
Large Scale & Project Solutions	415.4	328.6	54.9	50.0	470.3	378.6	48.5	−4.8
Total segments	956.1	848.8	70.5	66.1	1,026.6	914.9	31.4	−10.4
Reconciliation	0.0	0.1	0.0	0.1	0.0	0.2	−3.5	−1.4
Continuing operations	**956.1**	**848.9**	**70.5**	**66.2**	**1,026.6**	**915.1**	**27.9**	**−11.8**

	Segment assets		Segment liabilities		Capital expenditure		Depreciation and amortization	
in € million	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Segments								
Home Solutions	56.2	66.3	1.9	15.0	6.6	2.9	3.6	3.5
Business Solutions	78.2	87.8	20.0	12.1	8.8	5.2	4.1	3.6
Large Scale & Project Solutions	304.7	248.8	24.6	21.5	1.3	7.4	5.0	5.4
Total segments	439.1	402.9	46.5	48.6	16.7	15.5	12.7	12.5
Reconciliation	612.1	703.9	565.6	641.8	40.4	12.1	30.9	33.5
Continuing operations	**1,051.2**	**1,106.8**	**612.1**	**690.4**	**57.1**	**27.6**	**43.6**	**46.0**

Sales by regions (target market of the product)

in € million	2020	2019
EMEA	511.4	474.0
Americas	323.2	219.4
APAC	221.5	244.4
Sales deductions	–29.5	–22.7
External sales	**1,026.6**	**915.1**
thereof Germany	215.4	223.9

Reconciliation of the segment figures to the correlating figures in the Financial Statements is as follows:

in € million	2020	2019
Total segment earnings (EBIT)	31.4	–10.4
Elimination	–3.5	–1.4
Consolidated EBIT	27.9	–11.8
Financial result	–0.7	1.0
Earnings before income taxes	**27.2**	**–10.8**
Total segment assets	439.1	402.9
Other central items and eliminations	41.4	117.5
Centrally administered land and buildings	166.3	164.6
Cash and long-term time deposits	195.8	286.8
Financial instruments not designated and other assets	140.9	72.3
Deferred tax assets and income tax receivables	67.7	62.7
Group assets	**1,051.2**	**1,106.8**
Total segment liabilities	46.5	48.6
Other central items and eliminations	120.3	217.3
Financial instruments not designated, liabilities and provisions	438.4	421.5
Income tax liabilities and deferred tax assets	6.9	3.0
Group liabilities	**612.1**	**690.4**

Circumstances are shown in the reconciliation, which by definition are not part of the segments. In particular, this comprises unallocated parts of group head offices, including centrally managed cash and cash equivalents, financial instruments, financial liabilities and buildings, the expenses of which are allocated to the segments. Business relationships between the segments are eliminated in the reconciliation.

In 2020, as in the previous year, no customer accounted for a share of more than 10% of group sales.

Notes to the SMA Group income statement

4. Other operating income and expenses

Other operating income includes a positive one-time item from a compensation claim amounting to €55 million with a supplier for quality defects. This compensation claim compensates for expenses incurred both in previous years and in the 2020 fiscal year. The difference with respect to the total compensation claim can be found in the cost of sales to compensate the expenses incurred in the reporting year. This item also includes government grants of €2.2 million (2019: €1.7 million) and income from foreign currency translation of €19.5 million (2019: €16.7 million).

Other operating expenses include expenses from foreign currency translation in the amount of €27.0 million (2019: €22.8 million).

5. Employee and temporary employee benefits

in €'000	2020	2019
Wages and salaries	190,309	169,976
Expenses for temporary employees	18,229	13,497
Social security contribution and welfare payments	29,628	27,532
	238,166	**211,005**

As in the previous year, wages and salaries include expenses of €0.2 million in connection with bike leasing contracts, attributable to employee benefits.

Voluntary contributions to private pensions amounted to €1.2 million in 2020 (2019: €1.1 million).

The average number of employees in the group amounted to:

	2020	2019
Research and Development	452	569
Production and Service	1,615	1,601
Distribution and Administration	983	766
	3,050	2,936
Apprentices and interns	82	96
Temporary employees	448	364
	3,580	**3,396**

6. Financial result

in €'000	2020	2019
Interest income	289	1,418
Other financial income	650	702
Income from interest derivatives	45	74
Financial income	**984**	**2,194**
Interest expenses	1,523	1,174
Other financial expenses	126	0
Interest portion from valuation of provisions	11	25
Financial expenses	**1,660**	**1,199**
Financial result	**–676**	**995**

The decrease in liquid assets and expiry of fixed-term deposits have resulted in a significant decrease in interest income in the fiscal year.

Interest expenses from leases amounted to €0.5 million as of December 31, 2020 (2019: €0.3 million).

7. Income taxes

Actual income taxes (paid or payable) and deferred taxes are recognized as income taxes. They break down as follows:

in €'000	2020	2019
Actual income taxes		
for current fiscal year	8,337	3,776
for previous years	–6,819	393
Deferred taxes		
from temporary differences	–6,062	7,655
from tax loss carryforwards	3,683	–13,974
Income taxes	**–861**	**–2,150**

Income taxes comprise trade tax, corporation tax and the solidarity surcharge in Germany as well as comparable income taxes abroad. The expected income tax expense that would result from applying the tax rate of the parent company SMA Solar Technology AG to the IFRS net income before taxes can be reconciled to income taxes shown in the income statement as follows:

in €'000	2020	2019
Net income before income taxes	**27,230**	**–10,776**
Tax rate of the parent company	33.1%	33.0%
Expected income tax expenses	**9,003**	**–3,559**
Differences related to differing tax rates domestic and abroad	5,961	–982
Effects due to changes in tax rates	7	–228
Tax-free income	3	0
Non-deductible expenses	595	96
Tax effects from loss carryforwards	–10,233	1,435
Taxes relating to previous years	–6,819	393
Other tax effects	622	695
Actual income taxes (according to income statement)	**–861**	**–2,150**
Effective group tax rate	–3.2%	20.0%

The corporation tax rate of 15% and the solidarity surcharge rate of 5.5% are to be applied to corporations based in Germany. In addition, domestic companies and partnerships are subject to trade tax, which is influenced by assessment rates specific to the particular municipality. The average effective group tax rate was affected in particular by the decrease in deferred taxes on loss carryforwards associated with corporate planning, temporary differences and the use of loss carryforwards for current taxes. The average trade tax rate to be applied at the level of the parent company was 17.2% (2019: 17.2%). The overall tax rate of the group's parent company was thus 33.1% (2019: 33.0%).

The effects of deviations between the relevant tax rates at the level of the domestic and foreign group companies and the overall tax rate at the level of the group's parent company are shown in the reconciliation statement under deviations related to tax rate in Germany and abroad.

No deferred taxes were formed for the undistributed profits of foreign subsidiaries, including accrued currency translation differences because this income and these translation differences are either not subject to corresponding taxation or will not be distributed in the foreseeable future.

As of December 31, 2020, there were current income tax receivables amounting to €28.0 million (2019: €23.6 million) and current income tax liabilities of €6.6 million (2019: €3.1 million). Tax liabilities are the result of global business activity and a share of foreign sales of 79.6%. As a result, SMA is subject to various tax laws and regulations in other countries. Tax changes in Germany and abroad could affect the tax positions of SMA. In addition to changes of legal regulations, the assessment and interpretation of complex tax regulations, for example the transfer prices, can influence our earnings, financial and asset position. We work closely with tax consulting companies in the individual countries to identify risks, perform regular audits and take appropriate precautions.

In 2020, translation differences of €2.0 million (2019: €0.8 million) resulted from the currency translation of deferred foreign tax assets and liabilities. Deferred tax assets and liabilities were distributed across the following items:

	2020/12/31		2019/12/31	
in €'000	**Deferred tax assets**	**Deferred tax liability**	**Deferred tax assets**	**Deferred tax liability**
Intangible assets and goodwill	178	–1,996	233	–7,124
Property, plant and equipment	5,068	–2,538	5,679	–1,900
Inventories	12,733	–878	5,619	–625
Other assets	2,833	–1,170	2,276	–744
Other provisions	3,514	–8,369	4,270	–2,110
Other liabilities	20,250	–520	20,062	–528
Gross amount	44,576	–15,471	38,139	–13,031
Loss carryforwards	10,291	0	13,974	0
Balancing	–15,193	15,193	–13,022	13,022
	39,674	**–278**	**39,091**	**–9**

The company has examined the right to a possible offsetting of temporary differences by increasing the validity of the financial statements and the better comparability with the financial statements of other companies.

The deferred tax assets are considered realizable as far as sufficiently high future taxable income is to be expected. This was based on a planning horizon of three years. Based on the current corporate planning in the current fiscal year, deferred tax assets for loss carryforwards of €10.3 million (2019: €14.0 million) were recognized in the current fiscal year. At SMA Solar Technology AG, deferred tax liabilities on temporary differences of €10.3 million (2019: €3.2 million) were netted against deferred tax assets from loss carryforwards of €17.0 million (2019: €10.4 million).

Of the deferred taxes for loss carryforwards, €8.7 million (2019: €7.7 million) is attributable to domestic loss carryforwards and €1.6 million (2019: €6.3 million) to foreign loss carryforwards.

With €281.0 million (2019: €288.0 million), no deferred taxes were recognized in the current fiscal year on tax loss carryforwards of the group as a whole of €343.3 million.

The majority of the non-usable loss carryforwards are attributable to SMA Solar Technology AG. As of December 31, 2020, corporation tax loss carryforwards of €304.4 million (2019: €319.4 million after adjustment of €1.9 million due to correction by auditors) existed, of which no deferred taxes were recognized on €250.6 million (2019: €285.2 million), and trade tax loss carryforwards of €333.4 million (2019: €348.8 million after adjustment of €0.6 million due to correction by auditors), of which no deferred taxes were recognized on €279.5 million (2019: €313.2 million). These loss carryforwards have no time limit. In the case of foreign companies, the main loss carryforwards do not expire before 2031.

8. Earnings per share

Earnings per share are calculated by dividing the net income attributable to the shareholders by the weighted average of ordinary shares in circulation during the period. The number of shares in the 2020 fiscal year amounted to 34.7 million, as in the previous year.

The net income attributable to the shareholders is the net income after tax. As there were no shares held by the company on the reporting date or any other special cases, the number of ordinary shares issued equated to the number of shares in circulation.

The calculation of earnings in relation to the weighted average number of shares in accordance with IAS 33 resulted in earnings of €0.81 per share for the period from January 1, 2020 to December 31, 2020, with an average weighted number of shares of 34.7 million and earnings of –€0.25 per share for the period from January 1, 2019 to December 31, 2019, with an average weighted number of shares of 34.7 million.

There were no options or conversion options as of the reporting date. Therefore, there were no diluting effects and the diluted and basic earnings per share were the same.

Notes to the Balance Sheet SMA Group

9. Intangible assets and goodwill

Intangible assets and goodwill evolved in the fiscal years under review as follows:

in €'000	Goodwill	Development projects	Patents/ licenses/ rights	Software	Intangible assets in progress	Total
Acquisition costs						
2020/01/01	482	211,924	6,090	50,593	8,596	277,685
Changes in currency	0	–543	0	–44	0	–587
Additions	0	2,130	52	2,075	14,289	18,546
Disposals (–)	0	1,497	0	51	0	1,548
Transfers	0	3,239	29	1,588	–4,672	184
2020/12/31	482	215,253	6,171	54,161	18,213	294,280
Depreciation and amortization						
2020/01/01	0	186,737	2,693	48,335	2,693	240,458
Changes in currency	0	–543	0	–25	0	–568
Additions	0	9,144	417	1,998	0	11,559
Disposals (–)	0	1,381	0	51	0	1,432
2020/12/31	0	193,957	3,110	50,257	2,693	250,017
Net value 2019/12/31	**482**	**25,187**	**3,397**	**2,258**	**5,903**	**37,227**
Net value 2020/12/31	**482**	**21,296**	**3,061**	**3,904**	**15,520**	**44,263**
Acquisition costs						
2019/01/01	13,660	192,328	5,961	48,799	17,997	278,745
Changes in currency	0	74	1	6	–2	79
Additions	0	5,626	10	385	6,080	12,101
Disposals (–)	13,178	0	0	62	0	13,240
Transfers	0	13,896	118	1,465	–15,479	0
2019/12/31	482	211,924	6,090	50,593	8,596	277,685
Depreciation and amortization						
2019/01/01	13,178	175,450	2,288	46,601	4,877	242,394
Changes in currency	0	74	0	4	0	78
Additions	0	9,029	405	1,793	0	11,227
Disposals (–)	13,178	0	0	63	0	13,241
Transfers	0	2,184	0	0	–2,184	0
2019/12/31	0	186,737	2,693	48,335	2,693	240,458
Net value 2018/12/31	**482**	**16,878**	**3,673**	**2,198**	**13,120**	**36,351**
Net value 2019/12/31	**482**	**25,187**	**3,397**	**2,258**	**5,903**	**37,227**

€13.0 million (2019: €5.3 million) of the additions of intangible assets in progress included development projects.

In relation to development projects, amortization of intangible assets is posted in the income statement under cost of sales. Amortization of software is allocated to the functional areas dependent on use.

The goodwill is assigned to cash-generating units depending on the organizational structure. The goodwill resulting from the asset deal with Phönix is assigned to the Large Scale & Project Solutions segment (€0.2 million), while that of SMA Magnetics (€0.3 million) is assigned to the Home Solutions segment. In the previous year's table, in contrast to the presentation in the Annual Report 2019, the disposal of the goodwill from the participation of SMA New Energy Technology (Jiangsu) Co. is listed because it was already disposed through the sale.

10. Property, plant and equipment

Property, plant and equipment evolved as follows in the 2020 fiscal year:

in €'000	Land and buildings, incl. buildings on third party property	Rights of use for buildings	Technical equipment/ machinery	Rights of use for technical equipment/ machinery	Other equipment, plant and office equipment	Rights of use for vehicle fleet	Prepayments and assets under construction	Total
Acquisition costs								
2020/01/01	229,076	23,602	70,229	0	182,017	3,258	5,718	513,900
Changes in currency	–303	–457	–632	0	–589	–155	–13	–2,149
Additions	34	13,731	210	1,053	724	3,522	19,257	38,531
Disposals (–)	1,813	457	3,901	0	11,199	896	5	18,271
Transfers	4,404	1	3,884	0	9,370	0	–17,843	–184
Reclassified to "investment property"	–7,651	0	0	0	0	0	0	–7,651
2020/12/31	223,747	36,420	69,790	1,053	180,323	5,729	7,114	524,176
Depreciation and amortization								
2020/01/01	96,215	6,115	46,023	0	155,992	1,383	0	305,728
Changes in currency	–190	–255	–434	0	-453	–54	0	–1,386
Additions	8,636	6,386	3,907	324	10,126	1,733	0	31,112
Disposals (–)	1,619	433	2,347	0	10,153	878	0	15,430
Reclassified to "investment property"	–3,028	0	0	0	0	0	0	–3,028
2020/12/31	100,014	11,813	47,149	324	155,512	2,184	0	316,996
Net value 2019/12/31	**132,861**	**17,487**	**24,206**	**0**	**26,025**	**1,875**	**5,718**	**208,172**
Net value 2020/12/31	**123,733**	**24,607**	**22,641**	**729**	**24,811**	**3,545**	**7,114**	**207,180**

Property, plant and equipment of €10.6 million (2019: €13.7 million) were negatively affected by mortgage liens used to secure financial liabilities.

The additions to rights of use to buildings resulted from the extension of a lease at the Kassel site and the move to a new building at our subsidiary in Poland.

Amounts recognized in the income statement as part of accounting in accordance with IFRS 16:

in €'000	2020	2019
Expenses from short-term leases	32	150
Expenses from leases with low-value assets	264	91

Expenses from short-term leases and from leases with assets of lower value correspond to the cash outflows.

Property plant and equipment evolved as follows in the 2019 fiscal year:

in €'000	Land and buildings, incl. buildings on third party property	Rights of use for buildings	Technical equipment/ machinery	Rights of use for technical equipment/ machinery	Other equipment, plant and office equipment	Rights of use for vehicle fleet	Prepayments and assets under construction	Total
Acquisition costs								
2019/01/01	226,020	0	71,824	0	186,988	0	5,644	490,476
Changes in currency	52	63	117	0	128	11	39	410
Additions resulting from the first-time application of IFRS 16 as of January 1	0	21,576	0	0	0	1,946	0	23,522
Additions	54	2,080	255	0	915	1,227	14,257	18,788
Disposals (–)	92	117	4,027	0	16,126	132	0	20,494
Transfers	1,844	0	2,060	0	10,112	206	–14,222	0
Reclassified from "investment property"	1,198	0	0	0	0	0	0	1,198
2019/12/31	229,076	23,602	70,229	0	182,017	3,258	5,718	513,900
Depreciation and amortization								
2019/01/01	86,288	0	44,821	0	160,520	0	0	291,629
Changes in currency	42	13	79	0	4	4	0	142
Additions	9,977	6,219	4,387	0	11,599	1,432	0	33,614
Disposals (–)	92	117	3,281	0	16,035	132	0	19,657
Transfers	0	0	17	0	–96	79	0	0
2019/12/31	96,215	6,115	46,023	0	155,992	1,383	0	305,728
Net value 2018/12/31	**139,732**	**0**	**27,003**	**0**	**26,467**	**0**	**5,681**	**198,883**
Net value 2019/12/31	**132,861**	**17,487**	**24,206**	**0**	**26,025**	**1,875**	**5,718**	**208,172**

11. Investments in associates

In the 2020 fiscal year, SMA sold the investment held at equity in Tigo Energy, Inc. This resulted in a cash inflow of €1.7 million, which is also equal to the earnings effect disclosed in the statement of cash flows in the net cash flow from investment activities.

in €'000	2020	2019
Current assets	0	6,499
Non-current assets	0	1,433
Current liabilities	0	10,691
Non-current liabilities	0	8,626
Sales	0	22,193
Annual earnings	0	–3,418
Other comprehensive income	0	–744
Overall result	0	–4,161

The reconciliation of the presented financial information to the book value is as follows:

in €'000	2020/12/31	2019/12/31
Net assets Tigo	0	–11,385
Holdings (%)	0.00	28.27
Group share in the net assets	0	–3,219
Goodwill	0	0
Other adjustments	0	0
Book value of the group investment	**0**	**0**

No reporting data for the at-equity shareholding in elexon GmbH was available at the time of reporting, which is why this is not disclosed due to its secondary importance to the group. A loan issued by SMA is reflected in the information on related parties.

12. Investment property

in €'000	2020/12/31	2019/12/31
Level at the beginning of the year	**14,274**	**16,212**
Transfers from property, plant and equipment (net book value)	4,623	–1,199
Depreciation and amortization (–)	909	739
Level at the end of the reporting period	**17,988**	**14,274**

Income and expenses included in the profit and loss account

in €'000	2020	2019
Rental income	1,887	1,648
Attributable expenses	519	474

In the 2016 fiscal year, SMA began to rent two buildings that it had previously been using itself. In the 2020 fiscal year, a further building was rented out and allocated on the balance sheet to the item "Investment property." The investment properties are accounted for using the cost model, whereby the properties are measured according to IAS 16, i. e., at historical cost less depreciation plus impairment and reversals of impairment. The buildings are depreciated on a straight-line basis over their economic useful life. The underlying useful life of the buildings is 33 years. Attributable expenses must be assigned in full to the investment properties responsible for generating the rental income.

The tenancy agreements for the buildings do not contain any conditional rental payments, but they each offer an option to extend, which can be exercised by the tenant. The non-cancelable rental periods are five years and six years. The distribution of rental income is shown in the table below.

in € million	< 1 year	> 1 – 5 years	> 5 years	Total
Rental income	2.7	10.4	2.4	15.5

13. Inventories

SMA group inventories are made up as follows:

in €'000	2020/12/31	2019/12/31
Raw materials, consumables and supplies	93,433	92,951
Unfinished goods, work in progress	8,583	12,241
Finished goods and goods for resale	142,431	152,341
Prepayments	11,022	22,350
	255,469	**279,883**

Inventories are measured at the lower value of the cost of acquisition or sales and net realizable value. The balance of impairment accounts amounted to €40.4 million as of the end of the fiscal year (2019: €29.1 million) and relates entirely to central corporate functions. The addition to impairment on inventories, included under expenses as cost of sales, amounted to €24.1 million (2019: €5.8 million). The carrying amount of inventories written down to net realizable value amounted to €8.9 million as at 31 December 2020.

14. Trade receivables and other receivables

Trade receivables are non-interest-bearing and usually due between 30 and 90 days. No significant extensions to payment terms were granted in the reporting period. It is possible that different payment terms are granted in project business.

The other receivables mainly comprise prepaid expenses and other receivables due from tax authorities, which were not overdue on the reporting date.

The age structure of trade receivables was as follows on the reporting dates:

			Not impaired portion of overdue receivables			
in €'000	Book value	Neither overdue nor impaired	< 30 days	30 to 60 days	60 to 90 days	> 90 days
2020	121,872	105,111	9,560	910	2,716	3,575
2019	145,530	99,833	21,767	18,888	726	4,316

As of December 31, 2020, value adjustments with a nominal value of €22.0 million (2019: €23.7 million) were carried out on aging trade receivables. No value adjustments were made regarding overdue receivables as of December 31, 2020, this amounted to €16.8 million (December 31, 2019: €45.7 million) as there were no significant changes in the credit rating of customers. Settlement of the receivables is expected. The credit rating of customers with whom trade receivables exist, which are neither overdue nor impaired, is considered to be good.

The value adjustment account of trade receivables evolved as follows:

in €'000	Specific valuation allowance	Value correction on portfolio basis	Total
As of 2019/01/01	25,667	382	26,049
Additions with effect on the expenses (net)	2,539	203	2,742
Usage	–3,405	0	–3,405
Release	–1,135	–69	–1,204
Exchange rate difference	7	5	12
As of 2019/12/31	23,673	521	24,194
Additions with effect on the expenses (net)	3,480	78	3,558
Usage	–2,449	0	–2,449
Release	–2,675	–177	–2,852
Exchange rate difference	–61	–11	–72
As of 2020/12/31	21,968	411	22,379

Furthermore, no adjustments had to be made for other receivables. With regard to other financial assets, please refer to the information below under note 15. The receivables are adjusted individually based on individual assessments. The maximum default risk equates to the carrying amount shown in the balance sheet.

15. Other financial assets and value added tax receivables

The other non-current financial assets include loan receivables from associated companies, expected future purchase price payments from the MBO in 2019 and a non-current component for claims to compensation payments of €15.0 million from a supplier. As at 31 December 2020, there was a shift within the item "other financial assets" due to the separate disclosure as current and non-current. In the previous year, the claims from expected future purchase price payments were allocated to other current financial assets due to their minor significance.

The other current financial assets as of December 31, 2020, include in particular financial assets and time deposits with a term to maturity of more than three months, accrued interest totaling €72.1 million (2019: €72.1 million) and a current component for claims to compensation payments of €30.0 million from a supplier. Receivables from tax authorities from sales tax refund claims of €28.8 million were recognized as of December 31, 2020 (2019: €22.0 million). In addition, free derivatives amounting to €2.3 million are included (2019: €0.9 million).

16. Cash and cash equivalents

Cash and cash equivalents comprise cash in hand as well as bank balances, checks, payments in transit and deposits with an original term to maturity of less than three months. Bank balances bear interest at variable interest rates applicable to deposits subject to call. In the current fiscal year, the parent company received claims to compensation payments of €35.0 million from a supplier.

As of December 31, 2020, the group had unused credit lines amounting to €79.4 million (2019: €84.8 million), for which all conditions for use had been met.

17. Assets and asset groups held for sale

In the first quarter of the current fiscal year, SMA concluded the sale of real estate property. No assets are currently classified as held for sale.

18. Equity

The change in equity, including effects not recognized in profit or loss, is shown in the statement of changes in equity. The main effects were the consolidated result and the effects of currency gains/losses.

The capital reserve contains agio amounts from the issuance of SMA Solar Technology AG shares.

The other retained earnings contain mainly the retained profit and the statutory reserve. In addition, retained earnings include other equity components such as the difference between foreign currency translation.

Shares in SMA AG are no-par value bearer shares, which were fully paid in.

The Articles of Incorporation include the provisions on the powers of the Managing Board regarding Authorized Capital II. The Managing Board, after obtaining the consent of the Supervisory Board, is entitled to increase the share capital on one or several occasions by up to a total of €3.4 million by issuing new bearer shares in return for cash contributions and/or contributions in kind in the period up to May 23, 2023. The Managing Board, with the consent of the Supervisory Board, is entitled to cancel the statutory subscription rights of shareholders: (a) in the case of capital increases in return for contributions in kind for the acquisition of or investment in companies, parts of companies or investments in companies, (b) for the purpose of issuing shares to employees of the company and companies affiliated with the company, (c) to exclude fractions, and (d) in the case of capital increases in return for cash contributions if the issue amount of the new shares does not fall significantly below the stock exchange price of shares of the same class and terms that are already listed at the time the Managing Board sets the final issue amount, and the total pro rata amount of the issued capital attributable to the new shares in respect of which the subscription right is excluded may not exceed 10% of the issued capital available at the time the new shares are issued.

Furthermore, following a resolution adopted by the Annual General Meeting on May 31, 2016, the Managing Board, in the period up to May 30, 2021, is entitled on behalf of the company to acquire its own shares up to a value of 10% of the existing capital stock at the time the resolution was adopted by the Annual General Meeting and to dispose of shares acquired in this way with the consent of the Supervisory Board by means other than through the stock exchange or an offer made to all the shareholders, provided the shares are sold in return for cash at a price that does not fall significantly below the stock exchange price of shares in the company issued under the same terms or the shares are sold in return for in-kind contributions, or they are offered in return for shares held by persons that either had or have an employment relationship with the company, or with one of its affiliated companies, or members of bodies in companies that depend on the company. Furthermore, if the Managing Board sells the company's own shares by offering them to all the shareholders with the consent of the Supervisory Board, the Managing Board is entitled to exclude the shareholders' right of subscription for fractions. In addition, the Managing Board is entitled to cancel any own shares acquired after obtaining the consent of the Supervisory Board.

The Annual General Meeting of SMA Solar Technology AG held on June 4, 2020, followed the Managing and Supervisory Boards' proposal to distribute no dividend for the 2019 fiscal year (2018: €0.00 per dividend-bearing share).

The objectives of capital management are to maintain SMA's financial substance and ensure necessary flexibility.

The equity ratio is used to measure the financial security of SMA. This is the ratio of equity shown in the consolidated balance sheet to total assets. Accordingly, the financing structure is characterized by a conservative capital structure dominated by internal financing. As of the reporting date, the equity ratio was 41.8% (2019: 37.6%). External financing occurs almost exclusively through liabilities arising from operative business.

19. Provisions

Provisions accounted for all discernible risks from pending transactions and contingent liabilities on the balance sheet dates and broke down as follows:

in €'000	Warranties	Personnel	Other	Total
As of 2020/01/01	**138,862**	**4,221**	**10,150**	**153,233**
Additions	67,920	1,319	3,906	73,145
Usage	51,671	1,017	1,617	54,305
Release	2,239	38	1,232	3,509
Compounding	0	11	0	11
Changes in currency	–778	–43	–177	–998
As of 2020/12/31	**152,094**	**4,453**	**11,030**	**167,577**
Current in 2020	71,813	714	10,526	83,053
Non-current in 2020	80,281	3,739	504	84,524
	152,094	**4,453**	**11,030**	**167,577**

in €'000	Warranties	Personnel	Other	Total
As of 2019/01/01	**130,433**	**13,032**	**13,560**	**157,025**
Additions	56,621	1,043	3,499	61,163
Usage	34,670	6,280	7,021	47,971
Release	13,878	1,005	2,635	17,518
Compounding	0	25	0	25
Transfers	0	–2,598	2,598	0
Changes in currency	356	4	149	509
As of 2019/12/31	**138,862**	**4,221**	**10,150**	**153,233**
Current in 2019	67,354	1,104	9,488	77,946
Non-current in 2019	71,508	3,117	662	75,287
	138,862	**4,221**	**10,150**	**153,233**

The provisions for statutory warranties are attributable to the segments as follows:

in €'000	2020/12/31	2019/12/31
Home Solutions	52,098	41,873
Business Solutions	48,648	45,798
Large Scale & Project Solutions	51,343	51,186
Other business	5	5
	152,094	**138,862**

Warranty provisions consist of general warranty obligations (periods of between five and ten years) for the various product areas within the group. In addition, provisions are set aside for individual cases that are expected to be used in the following year. Warranty provisions for individual cases amount to €37.1 million and are expected to lead to cash outflows within one year. Lump-sum warranty provisions exist in the amount of €115.0 million. For the short-term portion of €34.7 million, an outflow of funds is expected within one year; for the long-term portion, an outflow of funds is expected within a period of five to ten years.

Personnel provisions mainly include obligations for long-service anniversaries, death benefits and partial retirement benefits. Personnel provisions affect cash in relation to contractual commitments made.

Other provisions include in particular restoration obligations, provisions for tax risks and purchase commitments. An outflow of funds for the major part is expected within one year.

20. Financial liabilities

in €'000	2020/12/31	2019/12/31
Liabilities due to credit institutions	11,422	14,862
Derivative financial liabilities	597	280
of which liabilities from derivatives outside of hedge accounting	597	280
Lease liabilities	29,114	19,371
	41,133	**34,513**

In the 2020 fiscal year, liabilities to credit institutions mainly comprise liabilities for the financing of SMA Immo properties and an SMA AG PV system. They have an average time to maturity of ten years. The changes in liabilities to banks and from leases are reflected in the net cash flow from financing activities.

Derivative financial liabilities predominantly include negative market values for currency futures presented in hedge accounting.

The change in net cash flow from financing activities resulted from repayments of financial liabilities to banks amounting to €3.8 million as well as from other non-cash movements and interest, which are shown in the cash flow statement in the gross cash flow, in an amount of €0.4 million. In addition, liabilities under leasing agreements changed due to additions totaling €18.3 million. Of this amount, €7.4 million related to the extension of a lease agreement for a building in Germany, which was recognized directly in equity, and the first-time inclusion of a framework agreement for machinery in the amount of €1.1 million. A new lease for a building in Poland led to an addition of €6.2 million. In the financial year, repayments of liabilities from leases amounting to €8.6 million (2019: €7.6 million) were made. In addition, other non-cash movements and interest in the amount of €0.2 million and a positive currency effect of €0.2 million were incurred.

21. Trade payables

Trade payables are non-interest bearing and are normally due within 30 to 90 days.

22. Other financial liabilities, current

The other financial liabilities include costs for preparing the financial statements and are due within one year.

23. Other liabilities

Other liabilities [1]

in €'000	2020/12/31	2019/12/31
Contract liabilities	219,426	298,014
Accrual item for extended warranties	165,744	172,831
Liabilities from prepayments received	22,560	91,143
Accruals for service and maintenance contracts	12,339	12,564
Other contract liabilities, non-current	18,783	21,476
Liabilities in the Human Resources department	25,554	14,121
Other non-financial liabilities, current	6,685	11,417
Total	**251,665**	**323,552**
Current	95,647	162,995
Non-current	156,018	160,557
	251,665	**323,552**

1 Other liabilities do not include other financial liabilities.

Contract liabilities (prepayments received) include prepayments and deliveries of goods. The decline is due mainly to the completion of a major project in the U.S. Other contract liabilities entail accrual items for extended warranties, service and maintenance contracts and bonus agreements. Non-current contractual obligations mainly include liabilities from chargeable extended warranties granted for products from the Home Solutions and Business Solutions business units. The fulfillment of the non-current contractual obligations will extend over a period of 5 to 15 years from the start of the extended warranties. Current contractual obligations mainly include prepayments received, accruals for service and maintenance contracts and bonus agreements. The current contractual obligations will mostly be fulfilled within the next 12 months.

In the fiscal year revenues in the amount of €89.7 million (previous year: €13.3 million) were realized, which were included in the balance of contract liabilities at the beginning of the period.

Liabilities in the Human Resources department contain obligations to employees regarding performance-based bonuses and positive vacation and flextime balances, Christmas bonus as well as variable salary components and contributions to the workers' compensation association and to social insurance systems. Other miscellaneous liabilities include liabilities to tax authorities amounting to €2.3 million (2019: €5.7 million), which chiefly consist of tax liabilities from payroll accounting, and liabilities from subsidies received in the amount of €0.6 million (2019: €0.6 million), which include taxable government grants from funds of the common-task program "Improvement of the Regional Economic Structure" (EU GA), granted as investment subsidies. The total amount of retransfer of government grants is stated under other operating income.

Liabilities from bonus agreements with customers are also reported.

24. Additional disclosures relating to financial instruments

in €'000	Assessment category according to IFRS 9	2020/12/31 Book value	2019/12/31 Book value
Cash and cash equivalents	AC	123,707	214,793
Trade receivables	AC	121,872	145,530
Other financial assets		**175,573**	**112,295**
Other financial investments	FVOCI	3	3
of which institutional mutual funds	FVPL	72,113	27,010
of which other (time deposits)	AC	98,867	80,590
of which other securities	FVPL	2,255	3,800
of which derivatives that do not qualify for hedge accounting	FVPL	2,335	892
Trade payables	AC	144,210	174,742
Financial liabilities		**41,133**	**34,513**
of which liabilities due to credit institutions	AC	11,422	14,862
of which lease liabilities	–	29,114	19,371
of which derivatives that do not qualify for hedge accounting	FVPL	597	280
Other financial liabilities (current)	AC	**538**	**1,241**
Of which aggregated according to valuation categories in accordance with IFRS 9			
Financial assets measured at amortized cost	AC	344,446	440,913
Financial liabilities measured at amortized cost	AC	156,170	190,845
Financial assets measured at fair value through profit and loss	FVPL	76,703	31,702
Financial liabilities measured at fair value through profit and loss	FVPL	597	280
Fair value through other comprehensive income	FVOCI	3	3

The book values represent reasonable approximations of the fair values of the assets and liabilities, which is why a separate indication of the fair amounts is omitted. The fair value of liabilities to credit institutions also differs only insignificantly from the book value.

Cash and cash equivalents, trade receivables and time deposits mainly have short terms to maturity. Accordingly, their book values on the reporting date were almost identical to their fair value.

The fair values of other non-current receivables correspond to the present values of the payments related to the assets while taking into account current interest parameters, which reflect market- and partner-related changes in conditions and expectations (level 2).

Other financial investments relate to investments not included in the scope of consolidation.

Trade payables and other current financial liabilities normally have short terms to maturity. The recognized values are almost identical to the fair values.

Fair values of other non-current financial liabilities are determined by referring to the present values of the payments associated with the debts. For discounting, term-related commercially available interest rates are used (level 2).

For most borrowings, the fair values are not materially different from the book values, as interest payments on these borrowings are either close to current market rates or borrowing is short-term.

Derivative financial instruments are used to hedge against currency risks arising from operative business. These include currency futures and options inside and outside of hedge accounting. In principle, these instruments are only used for hedging purposes. As is the case with all financial instruments, they are recognized at fair value upon initial recognition. The fair values are also relevant to subsequent measurements. The fair value of traded derivative financial instruments is identical to the market value. This value may be positive or negative. The measurement of forward transactions is based on forward contract rates. The parameters that were used in the valuation models are in line with market data.

Due to the earn-out provisions granted in connection with the sale of the Chinese SMA New Energy companies and the Zeversolar companies, the item "Other securities" includes the fair value of an additional purchase price in the amount of €2.3 million. The previous year's value of €3.8 million was due to the payment of €1.0 million by the buyer and the adjustment of the fair value in an amount of €0.5 million as part of the revaluation as of the reporting date. A change in the fair value of the purchase price receivable until the earn-out regulations provisions expire in 2029 is generally recognized in the income statement.

The present value of the additional purchase price claim was determined using a discounted cash flow methodology (level 3 of the fair value hierarchy), taking into account the adjusted contractual earn-out provisions. Under this arrangement, the additional purchase price claim is calculated as the sum of the contractually guaranteed profit contributions between the actual sale in 2019 and the 2029 fiscal year. The additional purchase price receivable essentially depends on the operating earnings of the Chinese subsidiaries as unobservable inputs and the underlying interest rate used to calculate the present value. These are derived from the internal planning of the respective companies. A sensitivity analysis shows that a 10% increase in the companies´ earnings before taxes would result in a change in the present value of the additional purchase price claim of around +€200k, and that a 10% reduction in earnings would lead to a change in the present value of around –€200k. A change in the interest rate by +/–100 basis points would also lead to a change in the present value of the purchase price claim in the amount of around +/–€100k.

The following table shows the allocation of our financial assets and liabilities measured at fair values in the balance sheet, using the three levels of the fair value hierarchy:

in €'000

2020	**Level 1**	**Level 2**	**Level 3**	**Total**
Financial assets, measured at fair value				
Institutional mutual funds	72,113	0	0	72,113
Other securities	0	0	2,255	2,255
Derivative financial instruments	0	2,335	0	2,335
Other financial investments	0	0	3	3
Financial liabilities, measured at fair value				
Derivative financial instruments	0	597	0	597
2019				
Financial assets, measured at fair value				
Institutional mutual funds	27,010	0	0	27,010
Other securities	0	0	3,800	3,800
Derivative financial instruments	0	892	0	892
Other financial investments	0	0	3	3
Financial liabilities, measured at fair value				
Derivative financial instruments	0	280	0	280

The levels of the fair value hierarchy and their application to our assets and liabilities are described below.

Level 1: Quoted prices for identical assets or liabilities in active markets.

Level 2: Inputs other than quoted prices that are observable directly (e. g., prices) or indirectly (e. g., derived from prices).

Level 3: Inputs that are not based on observable market data for assets and liabilities.

The 2020 net results for financial instruments are as follows:

	From interest	**From subsequent measurement**		**From disposal**	**Net result**
in €'000		**Currency translation**	**Value correction**		
Financial assets measured at amortized cost (AC)	295	–10,515	706	539	–8,975
Financial liabilities measured at amortized cost (AC)	–38	0	0	0	–38
Financial assets measured at fair value through profit and loss (FVPL)	–907	0	916	1,930	1,939
Financial liabilities measured at fair value through profit and loss (FVPL)	–171	0	45	0	–126
Total	**–821**	**–10,515**	**1,667**	**2,469**	**–7,200**

The 2019 net results for financial instruments are as follows:

	From interest	**From subsequent measurement**		**From disposal**	**Net result**
in €'000		**Currency translation**	**Value correction**		
Financial assets measured at amortized cost (AC)	358	1,656	–1,538	–131	345
Financial liabilities measured at amortized cost (AC)	–1,070	0	0	0	–1,070
Financial assets measured at fair value through profit and loss (FVPL)	767	0	–3,182	–886	–3,301
Financial liabilities measured at fair value through profit and loss (FVPL)	–77	0	74	0	–3
Total	**–22**	**1,656**	**–4,646**	**–1,017**	**–4,029**

Interests from financial instruments are shown in the financial result. The SMA group recognizes other components of the net result in other operating expenses and other operating income.

In detail, the nominal payment obligations of financial liabilities are as follows:

in €'000	Book value	Total cash flows	< 1 year	1 to 3 years	4 to 5 years	> 5 years
2020						
Trade payables	144,210	144,210	144,210	0	0	0
Financial liabilities	41,133	46,376	12,295	14,495	13,585	6,001
of which from liabilities due to credit institutions	11,422	12,333	3,402	4,760	3,850	321
of which from lease liabilities	29,114	33,446	8,296	9,735	9,735	5,680
of which from derivatives outside of hedge accounting	597	597	597 [1]	0	0	0
Other financial liabilities (current)	538	538	538	0	0	0
2019						
Trade payables	174,742	174,742	174,742	0	0	0
Financial liabilities	34,513	35,888	11,554	10,750	8,794	4,790
of which from liabilities due to credit institutions	14,862	16,237	3,904	6,068	4,122	2,143
of which from lease liabilities	19,371	19,371	7,380	4,672	4,672	2,647
of which from derivatives outside of hedge accounting	280	280	270	10	0	0
Other financial liabilities (current)	1,241	1,241	1,241	0	0	0

[1] Contains the net cash flow from forward exchange transactions amounting to €1,749k, providing a gross fulfillment. Payment obligations amount to €74,047k, payment claims amount to €75,796k. The closing rate was used for the conversion of the foreign currency transactions.

An average interest rate of 2.63% was used to calculate future cash flows from liabilities due to credit institutions.

25. Other financial liabilities

At the end of the reporting period, other financial liabilities to third parties under the purchase order commitment for investment orders placed amounted to €4.6 million (2019: €5.6 million). There were financial liabilities for intangible assets amounting to €8.8 million (2019: €5.5 million). Obligations from leasing contracts for short-term and low-value leasing objects exist in the amount of €0.9 million, the other financial obligations are within the normal business practice.

26. Contingencies

As of December 31, 2020, there were no changes compared to the previous year (€0.05 million).

27. Cash and cash equivalents reconciliation

For purposes of the Consolidated Statement of Cash Flows, cash and cash equivalents include cash on hand, bank balances and short-term deposits with an original term to maturity of less than three months. Cash and cash equivalents at the end of the fiscal year, as presented in the Consolidated Statement of Cash Flows, can be reconciled to the corresponding items of the Consolidated Balance Sheet as follows:

in €'000	2020	2019
Cash on hand and bank balances	123,680	207,654
Short-term deposits (maturity < 3 months)	27	7,139
	123,707	**214,793**

The group does not have direct access to the financial resources reported in the balance sheet item "Rent deposits and cash on hand pledged as collaterals."

Other Disclosures

28. Events after the balance sheet date

There were no events after the balance sheet date.

29. Related party disclosures

According to the definition contained in IAS 24, related persons are persons responsible for planning, controlling and monitoring the company's activities. Related persons include the members of the Managing Board and the Supervisory Board of SMA Solar Technology AG as well as their close relatives. Danfoss A/S and Elexon GmbH belong to the group of related entities.

Related persons:

On the SMA Solar Technology AG Managing Board, Chief Executive Officer Dr.-Ing. Jürgen Reinert is responsible for Strategy, Sales and Service, Operations and Technology. Ulrich Hadding is in charge of Finance, Human Resources and Legal.

Dr.-Ing. Jürgen Reinert sits on the supervisory board of Danfoss A/S, Denmark, and in the advisory committee of KraftPowercon, Sweden.

In the year under review, the members of the Supervisory Board of SMA Solar Technology AG were as follows:

Shareholder Representatives:
Uwe Kleinkauf, General Manager WELL development GmbH, Chairman (as of June 4, 2020)
Dr. Erik Ehrentraut, Consultant, Chairman (up to June 4, 2020)
Kim Fausing, General Manager and CEO Danfoss A/S, Deputy Chairman
Roland Bent, General Manager Phoenix Contact
Peter Drews, Chairman of the Foundation Managing Board (up to June 4, 2020)
Jan-Henrik Supady, Managing Partner at Liesner & Co. GmbH (as of June 4, 2020)
Alexa Hergenröther, Tax Consultant
Ilonka Nußbaumer, Senior Vice President, Head of Group HR Danfoss A/S.

Employee Representatives:
Johannes Häde
Yvonne Siebert
Dr. Matthias Victor
Hans-Dieter Werner (up to June 4, 2020)
Martin Breul (as of June 4, 2020)
Oliver Dietzel, Trade Union Secretary
Romy Siegert, Trade Union Secretary (as of June 4, 2020)
Heike Haigis, Trade Union Secretary (up to June 4, 2020)

Remuneration of key management members of the group, which must be disclosed under IAS 24, includes remuneration of the Managing Board and the Supervisory Board.

The total compensation of the members of the Managing Board amounted to €2.8 million in the reporting year (2019: €1.5 million), including variable emoluments of €1.1 million (2019: €0.0 million). The Managing Board members receive no separate remuneration for carrying out tasks at subsidiaries.

The total compensation of the members of the Supervisory Board amounted to €0.4 million in the year under review (2019: €0.4 million). Of this amount, €0.3 million (2019: €0.3 million) was attributable to non-performance-related fixed compensation and €0.1 million (2019: €0.1 million) to compensation for committee activities. As in the previous year, no variable compensation is included. Kim Fausing and Ilonka Nußbaumer renounce their claims against society. The union representatives pay their salaries. The compensation for members of the Managing Board and Supervisory Board is presented individually in a separate remuneration report in accordance with the recommendations of the Corporate Governance Code. The complete remuneration report is part of the Combined Management Report.

Members of the Supervisory Board hold the following positions in statutory supervisory boards and similar controlling bodies of commercial enterprises:

Roland Bent, member on the boards of four international Phoenix Contact companies: Phoenix Contact (China) Holding Co. Ltd.; Phoenix Contact (Nanjing) R&D and Engineering Center Co. Ltd.; Phoenix Contact Holding Inc., U.S.; and Phoenix Contact Development & Manufacturing Inc., U.S.

Kim Fausing, member of the board at Hilti AG, Liechtenstein, member of the board at LafargeHolcim AG, Switzerland.

Related entities:

On May 28, 2014, SMA concluded an agreement regarding a close strategic partnership with Danfoss A/S. As part of this partnership, Danfoss acquired a 20% stake in SMA and therefore belongs to the group of related entities. SMA entered into a strategic partnership with Danfoss in the areas of purchasing, sales, and research and development. SMA also performs services on behalf of Danfoss. All agreements were concluded under fair market conditions. The business relationships between SMA and Danfoss in the fiscal year are presented in the table below. There is no material collateralization nor are there guarantees. No impairment losses were recognized from transactions with Danfoss.

in € million	2020	2019
Goods acquired by SMA	30.1	32.1
Services acquired by SMA	5.8	6.9
Services sold by SMA	0.0	1.0
Outstanding receivables at the end of the year	0.0	1.0
Outstanding liabilities at the end of the year	1.9	6.9

Furthermore, elexon GmbH is recognized as an associate. It is a joint venture in the field of charging infrastructure facilities, in which the group holds a 33.34% stake.

in € million	2020	2019
Goods acquired by SMA	0.1	0.0
Outstanding receivables at the end of the year	2.0	0.0

30. Objectives and methods concerning financial risk management

Financial risk management is integrated into the group-wide hedging policy. Deliberate treatment of potential risks and sound control as well as successful management of such risks when they occur are supported by an accompanying information and communication policy as well as by further education and training of employees. The principle underlying the group's hedging policy in the financial field is to protect against significant price, currency and interest risks by means of contracts and hedging transactions to an economically reasonable extent.

The financial instruments of the group relate primarily to trade receivables and cash resulting directly from operating activities. In addition, there is a particular amount of trade payables that also arise from operating activities. The group also uses derivative financial instruments as part of exchange and interest rate hedging. The group's main risks in relation to financial instruments are interest-based cash flow risks as well as liquidity, currency and credit risks. The strategies and procedures for controlling individual types of risks defined in the context of the group's overall hedging policy are presented below.

INTEREST RATE RISK

Interest rate risks within the SMA group mainly arise in the case of financial liabilities and non-current portions of certain provisions. Interest on liabilities and provisions is not paid by the contracting party and is therefore discounted at the interest rate usual in the market, which means that there is no separate control of the interest rate risk. The variable interest-bearing portion of existing financial liabilities is secured through an interest rate swap. This ensures that interest rates are hedged in the long term and allows financing costs to be reliably calculated over the contract's term. The following sensitivities can be calculated for the financial instruments held on the balance sheet date:

If the market interest rate had increased by 1.0 percentage point, the impact on the period result would have been neutral (2019: neutral). When calculating sensitivities with regard to a decline in interest rates of 1.0 percentage point, the effect on period earnings would have been neutral (2019: neutral), and the effect on equity would have been neutral as well (December 31, 2019: neutral).

FOREIGN CURRENCY RISK

As a globally active company, the SMA group is exposed to both transaction-related and translation-related foreign currency risks.

SMA assesses risks from an economical point of view. Using this point of view, foreign currency risks arise in the form of direct transaction risks that derive from any (current or planned) receivable or payable denominated in a foreign currency and the resulting payment flow. The SMA group's extensive business activity in North America means that foreign currency risks arise to a great extent in USD. In light of the fact that a pro-rata portion of the local added value attributable to the North American companies and supplier contracts based on USD is generated locally and sales in the local currency are balanced by expenditure in the local currency, the operational foreign currency risk in the SMA group is limited.

Currency risks also arise in particular from the sales activity of our Japanese and Australian subsidiaries.

An intra-group guideline ensures that SMA companies report their foreign currency risks to Corporate Treasury, provided there are no country-specific restrictions in this regard. The remaining group-wide risk is hedged by Corporate Treasury through the use of currency derivatives concluded externally with banks. Forward exchange transactions are the most commonly used method in this case. The use of options as part of the hedging strategy is also possible.

Translation risks mainly occur when the assets and liabilities of subsidiaries denominated in a foreign currency are converted to the parent company's domestic currency when preparing the Consolidated Financial Statements. Translation risks are not included within the scope of the active control of foreign currency risks.

Items denominated in foreign currencies and the development of the exchange rate of those currencies are monitored continuously and the risks are hedged, provided this is economically reasonable. The risks from hedging transactions in themselves are limited to the possibility that opportunities arising from a better price performance cannot be realized.

To present market risks, IFRS 7 requires sensitivity analyses which show the effects of hypothetical changes in relevant risk variables on earnings and equity. Currency risks are caused by financial instruments that are denominated in a currency other than the functional currency and which are of a monetary nature; differences related to exchange rates from the translation of financial statements into the group currency are not taken into account. The USD, JPY and AUD are relevant risk variables. The currency sensitivity analysis is based on original financial instruments in the form of receivables. Through the use of hedging transactions (derivatives), which are designed to hedge the underlying transaction, the opposing effects that accompany changes in the exchange rates are evened out. Measurement of the hedging transactions concluded for the 2021 fiscal year results in a positive contribution to earnings of €1.7 million from fair value measurement (2019: €0.7 million). There are no direct effects on equity.

An increase of 5% in the euro with respect to the USD on December 31, 2020, would have led to a positive change in the currency derivatives of €4.4 million (2019: €1.1 million). A decrease of 5% in the euro on December 31, 2020, would have led to a reduction in the value of the currency derivatives of –€0.5 million (2019: –€1.0 million).

An increase of 5% in the euro with respect to the JPY on December 31, 2020, would have led to a positive change in the currency derivatives of €0.4 million (2019: €1.0 million). A decrease of 5% in the euro on December 31, 2020, would have led to a reduction in the value of the currency derivatives of –€0.1 million (2019: –€1.1 million).

An increase of 5% in the euro with respect to the AUD, which was included in the hedging strategy for the first time on December 31, 2020, would have led to a positive change in the currency derivatives of €0.2 million (2019: €0.7 million). A decrease of 5% in the euro on December 31, 2020, would have led to a reduction in the value of the currency derivatives of –€1.7 million (2019: –€0.8 million).

As of December 31, 2020, the currency hedges related to EUR/USD, EUR/JPY and EUR/AUD.

As of December 31, 2020, there were no currency hedgings that were shown in hedge accounting as in the previous year.

Pursuant to IFRS, currency risks affect monetary financial instruments that are denominated in a foreign currency (i. e., in a currency other than the functional currency). This means that the foreign currency is the relevant risk variable. Translation-related risks are not taken into account. Because the individual group companies mainly conduct their operative business in their own functional currency, we rate the risk from exchange rate fluctuations resulting from our ongoing business activity as insignificant.

CREDIT RISK

For all deliveries to customers, collateral is requested depending on the volume of the respective transaction and the specific customer and country risk. Data from the customer's previous business relationship, including payment practices and additional credit reports, are also used to avoid non-payment. In addition, the group performs a customer credit check, which is based on certain financial key ratios. By setting a credit limit in a timely manner or suspending orders, the group avoids being exposed to a significant risk of non-payment. If possible, the default risk is also limited by commercial credit insurance. The maximum non-payment risk is limited to the book value disclosed in Section 14. Trade receivables and other receivables. There are no major concentrations of non-payment risks within the group.

With respect to all of the group's other financial assets, such as cash and cash equivalents, available-for-sale financial investments and derivative financial instruments, the maximum credit risk, should the counterparty fail to pay, corresponds to the book value of these instruments. This counterparty default risk is analyzed on a continuous basis and managed by means of corresponding business allocation – also considering potential opportunities – with regard to cluster risks and credit risks.

LIQUIDITY RISK

One element of liquidity protection is the credit line of €100 million agreed upon with three domestic banks in 2016. At the end of 2020, only a small portion of the credit line was utilized in the form of guarantee credits.

The company uses financial planning tools for early detection of future liquidity requirements. According to current planning, it can be assumed that the financial requirements will be covered in a reliably predictable time frame. Insurance contracts are concluded to hedge against the financial consequences of possible liability risks and damage claims, insofar as this is reasonable and possible. The cover provided by such contracts is reviewed and adapted regularly.

CAPITAL MANAGEMENT

The strategic objective of capital management within the SMA group is to ensure financial flexibility and independence to make rapid use of the opportunities in a photovoltaic market characterized by strong growth. Profitable employment of the capital is measured through regular monitoring of net working capital. Within the SMA group, net working capital is defined as the sum of inventories and trade receivables less trade payables. To be able to usefully measure relative capital consumption even in the event of strong corporate growth, net working capital is expressed in relation to sales. Through debtor management, which ensures that receivables are collected in good time, and linking inventories to sales as well as a constant dividend policy, the company positions itself to achieve its objectives of financial flexibility and independence. In accordance with our intra-group guidelines, the net working capital ratio determined in this way has to be below 25%. In the reporting year, the equity ratio of the SMA group was 41.8% (2019: 37.6%) and the net working capital ratio was 20.5% (2019: 17.4%).

31. Auditor's fees

The fees paid to the auditor and recorded as an expense in the year under review break down as follows:

in €'000	**2020**
Financial statement auditing	513
Other services	12
	525

The cost of financial statement auditing comprises the fees for the audit of the Consolidated Financial Statements as well as for the audit of the Annual Financial Statements of SMA Solar Technology AG and its domestic subsidiaries, provided they are obligated to perform an audit pursuant to Section 316 of the German Commercial Code. The fees for audit-related services and other audit work mainly include expenses for EMIR audits.

32. Declaration on the German Corporate Governance Code in accordance with Section 161 AktG

The declaration required under Section 161 AktG on the recommendations issued by the Government Commission German Corporate Governance Code was given by the Managing Board and the Supervisory Board on December 8, 2020, and made permanently available to shareholders on the SMA website at www.SMA.de/en.

33. Consolidated Financial Statements

As the supreme parent company, SMA Solar Technology AG prepared the Consolidated Financial Statements as of December 31, 2020, which are filed with the operator of the Electronic Federal Gazette and subsequently published in the Electronic Federal Gazette.

Niestetal, March 9, 2021

SMA Solar Technology AG
The Managing Board

Dr.-Ing. Jürgen Reinert Ulrich Hadding

RESPONSIBILITY STATEMENT

We assure to the best of our knowledge that, in accordance with the applicable accounting standards, the Consolidated Financial Statements give a fair view of the net assets, financial position and results of operations of the Group and that the Consolidated Management Report gives a fair view of the course of business including the results of operations and the Group's position and describes the fundamental opportunities and risks of the probable development of the Group.

Niestetal, March 9, 2021

SMA Solar Technology AG
The Managing Board

Dr.-Ing. Jürgen Reinert Ulrich Hadding

INDEPENDENT AUDITOR'S REPORT

To SMA Solar Technology AG, Niestetal

NOTE ABOUT THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND COMBINED MANAGEMENT REPORT

Audit opinion

We audited the Consolidated Financial Statements of SMA Solar Technology AG, Niestetal, Germany, and its subsidiaries (the group) – which consisted of the consolidated balance sheet as of December 31, 2020, consolidated income statement, consolidated statement of cash flows and the consolidated equity change statement for the fiscal year from January 1 to December 31, 2020, as well as the Notes to the Consolidated Financial Statements, including a summary of the relevant accounting methods. In addition, we audited the Consolidated Management Report of SMA Solar Technology AG, Niestetal, including the Management Report of the parent company for the fiscal year from January 1 to December 31, 2020. The contents of the sections of the Combined Management Report mentioned in the annex to the auditor's report have not been audited in accordance with German law.

In our opinion, based on the findings of the audit:

→ The Consolidated Financial Statements attached comply with the IFRS as adopted by the EU in all material respects and the additional requirements of the German statutory provisions pursuant to Section 315e (1) of the HGB, and give a true and fair picture of the assets and financial position of the group as of December 31, 2020, and its results of operations for the fiscal year from January 1 to December 31, 2020, in accordance with these requirements.

→ On the whole, the Combined Management Report attached provides a suitable illustration of the group's position. In all material respects, this Combined Management Report is consistent with the Consolidated Financial Statements, complies with German statutory provisions and suitably presents the opportunities and risks of future developments. Our audit opinion on the Combined Management Report does not include the contents of the sections of the Combined Management Report mentioned in the annex to the auditor's report.

In accordance with Section 322 (3) Sentence 1 of the HGB, we declare that our audit did not raise any objections against the correctness of the Consolidated Financial Statements and the Combined Management Report.

Basis for the audit opinion

We performed our audit of the Consolidated Financial Statements and the Combined Management Report in accordance with Section 317 of the HGB and the EU regulation on statutory audits of public interest entities (no. 537/2014) in consideration of the generally accepted standards for financial audits in Germany as defined by the Institute of Public Auditors (IDW). Our responsibility under these provisions and standards is described in more detail in the "Responsibility of the auditor to check the Consolidated Financial Statements and the Combined Management Report" section of our auditor's report. We are independent of the group companies in compliance with EU law provisions, German commercial law and the German rules of professional conduct, and we have fulfilled our professional obligations applicable in Germany in accordance with these requirements. Furthermore, in accordance with Article 10, Paragraph 2 f) of the EU regulation on statutory audits of public interest entities, we declare that we did not render any prohibited non-audit services as per Article 5, Paragraph 1 of the EU regulation on statutory audits of public interest entities. We believe that the audit evidence we have obtained is sufficient and suitable to provide a basis for our audit opinion on the Consolidated Financial Statements and the Combined Management Report.

Key audit matters in the Consolidated Financial Statements audit

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the Consolidated Financial Statements for the financial year from January 1, 2020 to December 31, 2020. These matters were considered as a whole in conjunction with our audit of the Consolidated Financial Statements and also taken into account when we formed our audit opinion. We do not provide a separate audit opinion on these matters.

Below, we outline the key audit matters from our point of view:

1. Realization of revenue on an accrual basis
2. Evaluation of the general warranty provision
3. Evaluation of inventories

We have structured our presentation of these key audit matters as follows:

a) Description of key audit matter (including reference to related information in the Consolidated Financial Statements)

b) Auditing procedure

1. REALIZATION OF REVENUE ON AN ACCRUAL BASIS

a) Total sales of €1,026,583,000 are stated in the accounts from the supply of PV inverters and the associated equipment as well as service provisions and maintenance services. With this item of significant amount, there is a risk that the revenue will not be realized at the correct time, especially when close to the balance sheet date. Particularly with regard to the delivery of PV inverters, for which an Incoterm must be agreed upon as a delivery condition and according to which, unlike the standard process, the transfer of risk takes place only in the target country or with the shipment on board, there is the risk of premature revenue recognition. An additional risk regarding revenue recognition on an accrual basis results from the application of the rules of IFRS 15.

Due to the risk of revenue recognition on a non-accrual basis in relation to IFRS 15 and the intrinsic fraud risk, we have defined the realization of revenue as a whole as well as in relation to certain Incoterms, in particular, as a key audit matter.

Information from the legal representatives on sales can be found especially in the sections "Accounting and Valuation Policies," "Significant Judgements, Estimates and Assumptions," "Segment Reporting," "Other Financial Liabilities" and "Other Liabilities" of the Notes to the Consolidated Financial Statements.

b) Prior to the risk assessment, we assessed the results of the internal audit concerning this matter. In our audit, we then evaluated the appropriate implementation of revenue realization, in particular through a structural and functional check of the sales process as well as by means of a substantial audit procedure in the form of random samples and analytical validation of the revenue split up according to business unit. With regard to the high-risk Incoterms, we accomplished cut-off audit procedures before and after the balance sheet date. We have verified the reliability of the processes implemented by carrying out random checks comparing the postings on the revenue accounts with the corresponding outgoing invoices along with the proof of delivery and have satisfied ourselves that the required evidence was recorded in the SAP system.

2. EVALUATION OF THE GENERAL WARRANTY PROVISION

a) In the Consolidated Financial Statements under the balance sheet item "Provisions," provisions for statutory warranties totaling €152,094,000 (i. e., 14% of the consolidated balance sheet total) are stated in the accounts, of which €115,005,000 represents general warranty risks and €37,089,000 represents individual circumstances.

Because of the risk of an erroneous evaluation of the general warranty provision and due to the size of the amount, we identified the measurement of general warranty provisions as a key audit matter.

Information from SMA Solar Technology AG's legal representatives on the general warranty provisions can be found in the sections "Disclosures to the Accounting and Valuation Policies," "Significant Judgements, Estimates and Assumptions" and "Provisions" in the Notes to the Consolidated Financial Statements.

b) In particular, we checked the completeness of historical warranty claims resulting from reported damage and made sure that allocation of the respective error patterns to the relevant equipment groups was correct. In addition, we examined the selected forecast method and reviewed it with regard to completeness and correctness of the quantity component (number of expected warranty cases). To assess the reliability of the estimates for error pattern frequency, we compared the historical forecasts with the actual events of damage in the past. Subsequently, we checked the accuracy of the calculation of costs for remediation of expected damage. To this end, we inspected the cost accounting for full allocation of warranty costs to the individual error patterns. More specifically, in the review of total costs per claim for each equipment group, we assured that recognition of direct costs was correct and inclusion of indirect costs was appropriate.

3. EVALUATION OF INVENTORIES

a) Inventories totaling €255,469,000 (i.e., 24% of the consolidated balance sheet total) are stated in the accounts. This takes into account additions to value adjustments amounting to €24,101,000, which were formed, in particular, due to special circumstances in relation to finished products and in the event of low inventory turnover. In addition, devaluations for discontinued products and surplus inventories of materials unrelated to specific products are included as these inventories are no longer likely to be used in the production process based on the days in inventory analysis performed. SMA uses a time horizon of 36 months for the usage of the item to calculate excess inventories. In the case of stock items that are used exclusively in a discontinued product and are also not required by Service, a value adjustment is carried out for their full value. Material management and the determination of discontinuations is the responsibility of the established steering committees and Launch Management.

We determined this as a key audit matter because impairments and risks resulting from the scope for decisions of judgement in the inventory valuation regarding this item of significant amount for the Consolidated Financial Statements are considerable.

Information from SMA Solar Technology AG's legal representatives on the inventory value adjustments can be found in the sections "Disclosures to the Accounting and Valuation Policies" and "Inventories" of the Notes to the Consolidated Financial Statements.

b) As part of the audit of the valuation of the inventories, we attached particular importance to performing a structural and functional check to assess the correct use of the group-specific devaluation regulations by the system within the scope of testing the lowest values according to turnover for raw materials, consumables and supplies as well as unfinished and finished goods. In the case of materials that have been discontinued or that are part of a discontinued product, we were satisfied with the correct execution of the exclusivity test, which is performed by Supply Chain Management in collaboration with Controlling and Procurement and forms the basis for the respective discontinuation as well as the days in inventory analysis, including the resulting value adjustments posted. Subsequently, we checked whether the devaluations determined from the lowest value tests were considered to be correct and complete as per the inventory valuation.

Other information

The legal representatives and the Supervisory Board are responsible for other information. The other information contains:

→ The Supervisory Board Report

→ The sections of the Combined Management Report mentioned in the annex to the auditor's report, the content of which has not been audited

→ The responsibility statement of the legal representatives on the Consolidated Financial Statements and Combined Management Report according to Section 297 (2) Sentence 4, resp. Section 315 (1) Sentence 5 of the HGB

→ All the other sections of the Annual Report

→ Excluding the audited Consolidated Financial Statements, information in the Combined Management Report, the content of which has not been audited, and our auditor's report.

The Supervisory Board is responsible for the Supervisory Board Report. The legal representatives and the Supervisory Board are responsible for the Corporate Governance Statement in accordance with Sections 289f and 315d HGB that is included in the "Corporate Governance Report" section of the Combined Management Report. In addition, the legal representatives are responsible for other information.

Our audit opinions on the Consolidated Financial Statements and the Combined Management Report do not extend to the other information and, accordingly, we do not provide an audit opinion or any other kind of audit conclusion on them.

In connection with our audit of the Consolidated Financial Statements, we have a responsibility to read the other information and, in doing so, to assess whether the other information

→ demonstrates any significant inconsistencies with the Consolidated Financial Statements, the Combined Management Report or the knowledge that we have acquired from the audit, or

→ otherwise appears incorrect.

Responsibility of the legal representatives and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

The legal representatives are responsible for the preparation of the Consolidated Financial Statements, which comply with the IFRS as applicable in the EU and the additional statutory regulations applicable in Germany as per Section 315e (1) of the HGB in all material respects, and for ensuring that the Consolidated Financial Statements give a true and fair picture of the net assets, financial position and results of operations of the group in compliance with these requirements. Furthermore, the legal representatives are responsible for the internal controls they have deemed necessary to enable preparation of Consolidated Financial Statements that are free of material misstatements, whether intentional or unintentional.

When preparing the Consolidated Financial Statements, the legal representatives are responsible for assessing the group's ability to continue with its business activity. In addition, they are in charge of disclosing any matters related to the continuation of the business activity, where relevant. Furthermore, they are responsible for reporting on the continuation of the business activity based on the accounting policy unless there is an intention to liquidate the group or cease business operations, or if there is no realistic alternative.

The legal representatives are also responsible for preparing the Combined Management Report, which provides an accurate view of the group's position overall, is consistent with the Consolidated Financial Statements in all material respects, complies with German law and suitably presents the risks and opportunities of future development. Moreover, the legal representatives are responsible for the precautions and measures (systems) that they considered necessary to enable the preparation of a Combined Management Report in compliance with the applicable legal regulations in Germany and the provision of suitable evidence for statements made in the Combined Management Report.

The Supervisory Board is responsible for monitoring the accounting process of the group for preparing the Consolidated Financial Statements and the Combined Management Report.

Responsibility of the auditor to check the Consolidated Financial Statements and the Combined Management Report

Our aim is to obtain reasonable assurance about whether the Consolidated Financial Statements as a whole are free of material misstatements – whether intentional or unintentional – as well as whether the Combined Management Report provides an accurate view of the group's overall position, is consistent with the Consolidated Financial Statements and any knowledge gained from the audit in all material respects, complies with German law, suitably presents the risks and opportunities of future development, and to provide an auditor's report containing our audit opinions on the Consolidated Financial Statements and the Combined Management Report.

Reasonable assurance is a high degree of certainty but no guarantee that an audit performed in compliance with Section 317 of the HGB and the EU regulation on statutory audits of public interest entities in consideration of the generally accepted standards for financial audits in Germany as defined by the Institute of Public Auditors (IDW) will always reveal a material misstatement. Misstatements may result from inaccuracies or infringements and are considered material if it could be reasonably expected for them to influence the economic decisions made by the addressees, whether individually or as a whole, based on these Consolidated Financial Statements and Combined Management Report.

During the audit, we exercise professional judgement and maintain a critical stance. Furthermore:

→ We identify and assess the risks of material misstatements – whether intentional or unintentional – in the Consolidated Financial Statements and the Combined Management Report, plan and implement audit procedures as a response to these risks and gather audit evidence that is sufficient and appropriate to serve as the basis for our audit opinions. The risk that material misstatements will not be revealed is higher in the event of infringements as opposed to inaccuracies because infringements may include fraudulent collaboration, forgeries, intentional incompleteness, misleading representations, or the bypassing of internal controls.

- → We gain an understanding of the internal control system relevant to the audit of the Consolidated Financial Statements and of the precautions and measures relevant to the audit of the Combined Management Report in order to plan audit activities that are appropriate for the given circumstances. However, we do not aim to provide an audit opinion on the effectiveness of these systems.

- → We assess the appropriateness of the accounting methods applied by the legal representatives as well as the tenability of the values estimated by the legal representatives and the related information.

- → We draw conclusions about the appropriateness of the accounting policy for the continuation of business activity used by the legal representatives and, based on the audit evidence acquired, whether a material uncertainty exists in connection with occurrences or circumstances, which may raise significant doubts about the ability of the group to continue with its business activity. If we reach the conclusion that a material uncertainty exists, we are obliged to draw attention to the relevant information in the Consolidated Financial Statements and the Combined Management Report in the auditor's report or, if these statements are inadequate, modify our respective audit opinion. We draw our conclusions based on the audit evidence obtained up to the date of our auditor's report. However, future occurrences or circumstances can result in the group no longer being able to continue with its business activity.

- → We assess the overview, structure and content of the Consolidated Financial Statements, including the information provided, and check whether the Consolidated Financial Statements present the underlying business transactions and occurrences in such a way that the Consolidated Financial Statements give a true and fair picture of the net assets, financial position and results of operations of the group in accordance with the IFRS as applicable in the EU and the additional statutory regulations applicable in Germany as per Section 315e (1) of the HGB.

- → We obtain sufficient and appropriate audit evidence for the accounting information of the companies or business activities within the group in order to provide audit opinions on the Consolidated Financial Statements and the Combined Management Report. We are responsible for guiding, monitoring and implementing the audit of the Consolidated Financial Statements. We bear sole responsibility for our audit opinions.

- → We assess the correlation of the Combined Management Report with the Consolidated Financial Statements, its compliance with the law and the view of the group's position conveyed by it.

- → We subject the forward-looking statements presented by the legal representatives in the Combined Management Report to audit procedures. In particular, we use sufficient and suitable audit evidence to trace the significant assumptions on which the forward-looking statements are based and assess the proper deduction of the forward-looking statements stemming from these assumptions. We do not provide a separate audit opinion on the forward-looking statements or the underlying assumptions. There is a significant unavoidable risk that future occurrences may differ significantly from the forward-looking statements.

Among other things, we discuss the planned scope and timing of the audit with those responsible for overseeing it as well as significant audit findings, including any deficiencies in the internal control system that we identify during our audit.

We provide those responsible for overseeing the audit with a declaration that we have met the relevant independence requirements and discuss with them all the relationships and other circumstances that could reasonably be expected to affect our independence and the precautions taken for this purpose.

From the matters we discussed with those responsible for overseeing the audit, we determine those that were most significant to the audit of the Consolidated Financial Statements for the current reporting period and are therefore the key audit matters. We describe these key audit matters in the auditor's report unless the public disclosure of a key matter is ruled out by law or other statutory provisions.

OTHER LEGAL AND STATUTORY REQUIREMENTS

Note about the audit of the electronic reproductions of the Consolidated Financial Statements and of the Combined Management Report in accordance with Section 317 (3b) HGB that were prepared for purposes of disclosure.

Audit opinion

We have carried out an audit in accordance with Section 317 (3b) HGB with reasonable assurance as to whether the reproductions of the Consolidated Financial Statements and of the Combined Management Report (hereinafter also referred to as "ESEF documents") contained in the enclosed file, which has the SHA-256 value 0D9AB52913F63DE47B7A14FC22A1A6CA921ABE2F2D5E58D011A45FBD54E577CD, and prepared for purposes of disclosure comply with the regulations of Section 328 (1) HGB for the electronic reporting format ("ESEF format") in all material respects. In accordance with the German statutory provisions, this audit extends only to the transfer of the information in the Consolidated Financial Statements and Combined Management Report to the ESEF format and therefore neither to the information contained in these reproductions nor to the information contained in the aforementioned file.

In our opinion, the reproductions of the Consolidated Financial Statements and the Combined Management Report contained in the aforementioned, enclosed file and prepared for purposes of disclosure comply with the regulations of Section 328 (1) HGB for the electronic reporting format in all material respects. Beyond this audit opinion and our audit opinions contained in the above "Note about the Audit of the Consolidated Financial Statements and Combined Management Report" concerning the enclosed Consolidated Financial Statements and the enclosed Combined Management Report for the fiscal year from January 1 to December 31, 2020, we do not provide any audit opinion whatsoever on the information contained in these reproductions or on the other information contained in the aforementioned file.

Basis for the audit opinion

We carried out our audit of the reproductions of the Consolidated Financial Statements and of the Combined Management Report contained in the aforementioned, enclosed file in accordance with Section 317 (3b) HGB taking into account the draft audit standard of the Institute of Public Auditors (IDW) in Germany: "Auditing of electronic reproductions of financial statements and management reports prepared for purposes of disclosure in accordance with Section 317 (3b) HGB." Our responsibility under these requirements is further described in the section "Responsibility of the auditor of the Consolidated Financial Statements for the audit of the ESEF documents." In carrying out the audit, we applied the requirements stipulated for a quality assistance system in the IDW's quality assurance standard "Quality assurance requirements in auditing practice" (IDW QS 1).

Responsibility of the legal representatives and the Supervisory Board for the ESEF documents

The company's legal representatives are responsible for preparing the ESEF documents with the electronic reproductions of the Consolidated Financial Statements and of the Combined Management Report in accordance with Section 328 (1) sentence 4 no. 1 HGB and for marking up the Consolidated Financial Statements in accordance with Section 328 (1) sentence 4 no. 2 HGB.

In addition, the company's legal representatives are responsible for such internal controls as they deem necessary to enable the preparation of the ESEF documents that are free from material violations, whether intentional or unintentional, of the requirements for the electronic reporting format stipulated in Section 328 (1) HGB.

Furthermore, the company's legal representatives are responsible for submitting the ESEF documents, together with the auditor's report, the enclosed audited Consolidated Financial Statements and audited Combined Management Report as well as other documents to be disclosed, to the operator of the German Federal Gazette (Bundesanzeiger).

The Supervisory Board is responsible for monitoring the preparation of the ESEF documents as part of the accounting process

Responsibility of the auditor of the Consolidated Financial Statements for the audit of the ESEF documents

Our aim is to obtain reasonable assurance as to whether the ESEF documents are free from material violations, whether intentional or unintentional, of the requirements stipulated in Section 328 (1) HGB. During the audit, we exercise professional judgement and maintain a critical stance. Furthermore:

→ We identify and assess the risks of material violations of the requirements stipulated in Section 328 (1) HGB, whether intentional or unintentional, design and carry out audit procedures that respond to those risks and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinion.

→ We gain an understanding of the internal controls relevant to the audit of the ESEF documents in order to design audit procedures that are appropriate in the circumstances, but not with the aim of expressing an opinion on the effectiveness of such control.

→ We assess the technical validity of the ESEF documents, i. e., whether the file containing the ESEF documents meets the requirements relating to the technical specification for this file stipulated in the Delegated Regulation (EU) 2019/815 in the version applicable on the date of the financial statements.

→ We assess whether the ESEF documents enable reproduction of the audited Consolidated Financial Statements and audited Combined Management Report with the identical content in XHTML format.

→ We assess whether marking up the ESEF documents with Inline XBRL technology (iXBRL) enables an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Remaining information in accordance with Article 10 of the EU regulation on statutory audits of public interest entities

We were selected as the group auditor at the Annual General Meeting on June 4, 2020. We were also commissioned by the Supervisory Board on June 4, 2020. We have worked continuously as a group auditor for SMA Solar Technology AG, Niestetal, since fiscal year 2009.

We hereby declare that the audit opinions contained in this auditor's report conform with the additional report submitted to the audit committee in accordance with Article 11 of the EU regulation on statutory audits of public interest entities (auditor's report).

RESPONSIBLE AUDITOR

The auditor responsible for the audit is Elmar Meier.

Annex to the auditor's report: Sections of the Combined Management Report, the content of which has not been audited

We have not audited the content of the following sections of the Combined Management Report:

→ The Corporate Governance Statement in accordance with Sections 289f and 315d HGB that is contained in the "Corporate Governance Report" section of the Combined Management Report

→ The non-financial statement according to Sections 289b to 289e and 315b and 315c of the HGB, which is contained in the "Non-Financial Statement" section of the Combined Management Report

→ The other sections of the Combined Management Report marked as unaudited.

Hanover, March 10, 2021

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

(Thorsten Schwibinger)	(Elmar Meier)
German Public Auditor	German Public Auditor

OTHER INFORMATIONEN

GLOSSARY

Technical Glossary

A

AC (Alternating Current)
Grid-compliant current

C

Central Inverter
Inverters for large-scale PV power plants that are used with centralized design concepts

Change-of-Control Clause
Provision in the board member and management employment contracts that provides a special termination right in case of a change of ownership or a change in majority shareholders, usually against payment of a firmly agreed compensation, continued payment of remuneration, often also a corresponding pension provision

Compliance
Legally compliant conduct

Corporate Governance
Procedures for managing and controlling companies in a manner that is responsible and aimed at long-term value creation

D

DC (Direct Current)
Direct current must be converted to grid-compliant alternating current (AC) for the grid supply or household use.

G

Grid Management
For decentralized generation plants, participation in grid management means that they have to adapt their feed-in to meet current grid distribution capacities. It affects all PV systems feeding in at medium voltage level.

I

Inverter
An electrical device that converts direct into alternating voltage or direct into alternating current

M

Medium Voltage
Voltage range from 1,000 V to 60,000 V

P

PV-Diesel Hybrid Systems
So-called PV-diesel hybrid systems combine photovoltaics with diesel generators and if applicable with battery-storage systems. Integration of photovoltaics and storage systems into diesel power supply systems substantially reduces fuel costs and carbon emissions. PV-diesel hybrid systems are used mainly where an energy supply is not possible via a central utility grid.

R

Repowering
Modernization of older PV systems with new software and hardware components to enhance performance and optional extension with further functionalities such as storage or energy management

S

String Inverter
With string technology, the PV generator is divided into individual module areas, and each of these individual "strings" is assigned its own string inverter.

W

W, kW, MW, GW, TW
Units of power:

1 kilowatt (kW) = 1,000 watts (W)
1 megawatt (MW) = 1,000 kilowatts
1 gigawatt (GW) = 1,000 megawatts
1 terawatt (TW) = 1,000 gigawatts

Financial Glossary

E

Earn-out
An earn-out clause in a purchase agreement defines a portion of the purchase price that is paid at a later date on a performance-related basis.

EBIT
Earnings before interest and taxes

EBITDA
Earnings before interest, taxes, depreciation and amortization

EBIT Margin
The higher the percentage, the higher the earnings power. The EBIT margin is calculated by putting operating profit in relation to sales.

EBITDA Margin
The higher the percentage, the higher the earnings power. The EBITDA margin is calculated by putting EBITDA in relation to sales.

EBT
Earnings before taxes

Equity Ratio
Shows the share of equity in total assets.

F

Free Cash Flow
Operating cash flow minus investments plus negative investments in fixed and intangible assets. Free cash flow is important because it allows a company to pay dividends or to buy back shares. Therefore, free cash flow is a measure of how much cash can be paid to the shareholders of a company.

Free Cash Flow (Adjusted)
Operating cash flow minus investments plus negative investments in fixed and intangible assets before cash inflows or outflows from time deposits or investments in securities. Adjusted free cash flow is an indicator of ability to repay debt financing.

G

Gross Cash Flow
Shows the operating income prior to any commitment of funds. It is calculated by considering earnings before income tax and the financial result – plus interest received, depreciation and amortization, changes in other provisions, profit/loss from the disposal of fixed assets and other non-cash expenses/revenues less interest paid and income tax paid.

Gross Profit
Sales minus cost of sales

I

IAS
International Accounting Standards; newer standards refer to the initials IFRS.

IASB
International Accounting Standards Board

IFRIC
Interpretations of the International Financial Reporting Interpretations Committee on IAS/IFRS

IFRS
International Financial Reporting Standards defined by the IASB

N

Net Cash
Liquid funds and securities contained within working capital and cash on hand pledged as collateral less interest-bearing financial liabilities to banks

Net Cash Flow From Financing Activities
Outflow/inflow of liquid funds from equity financing and debt financing

Net Cash Flow From Investing Activities
Outflow/inflow of liquid funds from investments and disinvestments

Net Cash Flow From Operating Activities
Outflow/inflow of liquid funds, unaffected by investments, disinvestments and financing activities

Net Working Capital
The total amount of short-term, interest-free working capital (inventories plus trade receivables) less trade payables and liabilities from advanced payments received for orders

Net Working Capital Ratio
Net working capital in relation to net sales

O

Operating Profit (EBIT)
Earnings before interest and taxes

Order Backlog
This includes current sales and sales expected in the future. In this context, the requirements for all orders pending delivery and deliveries that have already been made but not yet posted as goods issue are taken into account based on their volume and value.

R

Return on Assets (After Taxes)
The return on assets (after taxes) is the consolidated net profit divided by the average total assets of the reporting period (average of total assets at the beginning and end of the reporting period).

Return on Equity (After Taxes)
The return on equity (after taxes) is the consolidated net profit divided by the averaged total equity for the reporting period (average of total equity at the beginning and end of the reporting period).

Return on Sales
Ratio of EBT to sales

GRI INDEX AND UN GLOBAL COMPACT PRINCIPLES

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GRI Content	GRI Indicator	UN Global Compact	UN Sustainable Development Goals	Page
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GRI Content	GRI Indicator	UN Global Compact	UN Sustainable Development Goals	Page
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SUSTAINABILITY KEY FIGURES OF THE SMA GROUP

AREA OF ACTION: PRODUCTS AND PROCESSES

		2020	2019
Sales	€ million	1,026.6	915.1
Inverter output sold	MW	14,416	11,409
Capital expenditure	€ million	38.8	27.6
Research and development expenses (including own work capitalized)	€ million	71.2	63.1
Research and development ratio in relation to sales	%	6.9	6.9
EBITDA	€ million	71.5	34.2
EBITDA margin	%	7	3.7
Patents and utility models		1,635	1,491
Prevented emissions [1]	Millions of tons of CO_2	56	59
Prevented environmental damage [2]	€ million	10,062	10,541
Quality – field failure rate	%	1.48	1.44

1 Global CO_2 savings by SMA products compared with the fuel mix in Germany. The figure for 2020 is lower than the previous year's figure because the calculation for CO_2 savings in 2019 was based on a value of 0.53 kg/kWh. In line with the growing proportion of the German fuel mix accounted for by renewable energy, this value was adjusted to 0.43 kg/kWh for the calculation of the savings in 2020.
2 €180 per prevented ton of CO_2 emissions (source: Federal Environment Agency)

AREA OF ACTION: ENVIRONMENT AND ENERGY [1]

		2020	2019
Total energy consumption	kWh/kW	27.78	28.47
Energy consumption per kW [2]	GWh	2.34	3.09
Total energy consumption, Germany	kWh/kW	24.92	25.89
Energy consumption per kW, Germany	GWh	2.10	2.81
Total power consumption	kWh/kW	21.47	22.76
Power consumption per kW [2]	GWh	1.82	2.47
Total power consumption, Germany	kWh/kW	19.67	20.97
Power consumption per kW, Germany [2]	%	1.66	2.27
Share of photovoltaics in total electricity consumption, Germany	%	40.6	38
Share of regional/decentralized renewable electricity, Germany	GWh	100	86.4
Total heat consumption	GWh	6.31	5.71
Total heat consumption, Germany	m^3/ employee	5.25	4.92
Water/effluent [3]	t	4.27	8.74
Total waste	t	2,468	1,835
Total waste, Germany	%	2,137	1,603
Share of recyclable waste	%	98.4	88.8
Share of hazardous waste	t/GW	11.8	10.0
Waste per GW, Germany [2]	t/GW	186.8	173.7
Intensity of greenhouse gas emissions [2]	t/€ million	2.33	3.21
CO_2 emissions S1 total	t	934	1,085
CO_2 emissions S2 total	t	1,461	1,855
CO_2 emissions S1+S2 total	t	2,395	2,940
Total CO_2 emissions S1+S2, Germany	t	762	1,339
CO_2 emissions S1+S2 per kW, Germany [3]	kg/kW	0.06	0.15
CO_2 emissions of SMA vehicle fleet passenger cars, Germany [4]	kg/ employee	114.3	173.1
Ø CO_2 emissions of company cars [5]	g/km	101	112
CO_2 emissions S3			
CO_2 emissions aircraft [4]	kg/ employee	49	485
CO_2 emissions rail [4]	kg/ employee	0	1.86
CO_2 emissions logistics truck	%	20	16
CO_2 emissions logistics aircraft	%	49	69
CO_2 emissions logistics ship	%	31	15
CO_2 emissions logistics rail	%	0	0

1 Total SMA production locations (Germany and Poland), if not specified otherwise
2 CO_2 emissions S1+S2 in relation to sales
3 In relation to inverter output produced
4 In relation to the number of employees at the end of the period
5 In accordance with manufacturer specifications as outlined in the WLTP standard

AREA OF ACTION: EMPLOYEES

		2020/12/31	2019/12/31
SMA Group employees			
Employees (excl. temporary employees)		3,264	3,124
of which domestic		2,262	2,186
of which abroad		1,002	938
Temporary employees		388	442
Total employees (incl. temporary employees)		**3,652**	**3,566**
Trainees		**58**	**59**
Gender diversity of SMA employees			
male	%	74.4	74.7
female	%	25.6	25.3
SMA Group executives			
male	%	83.2	83.7
female	%	16.7	16.3
Domestic executives			
male	%	88.5	88.4
female	%	11.5	11.6
Managing Board			
male	%	100	100
female	%	0	0
General Managers/Vice Presidents			
male	%	96.8	94.1
female	%	3.2	5.9
Directors			
male	%	84.9	86.2
female	%	15.1	13.8
Executives abroad			
male	%	74.5	76.1
female	%	25.5	23.9
SMA Supervisory Board			
male	%	67	67
female	%	33	33
Occupational safety and health			
Domestic Lost Work Day Rate [1]	Sick days/working hours	15.27	13.37
Domestic Lost Time Incident Rate [2]	Accidents/working hours	1.37	1.68
Deaths		0	0

1 Sick days due to work-related accidents x 200,000 in relation to working hours
2 Accidents >1 lost day x 200,000 in relation to working hours

AREA OF ACTION: CORPORATE SOCIAL RESPONSIBILITY

		2020	2019
Sustainability performance of suppliers according to EcoVadis [1]	%	49.6	48.6
Locations assessed for risks of corruption	%	0 [2]	86
Employees given corruption avoidance training		1,726	1,177
Cases of corruption		0	0

1 Since 2018, sustainability performance evaluation of the main suppliers is done by EcoVadis. The sustainability performance of SMA suppliers is in the green area of the EcoVadis scale.
2 The comprehensive corruption risk analysis for the sites is performed every two years.

REGISTERED TRADEMARKS

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The Annual Report, in particular the Forecast Report included in the Management Report, includes various forecasts and expectations as well as statements relating to the future development of the SMA Group and SMA Solar Technology AG. These statements are based on assumptions and estimates and may entail known and unknown risks and uncertainties. Actual development and results as well as the financial and asset situation may therefore differ substantially from the expectations and assumptions made. This may be due to market fluctuations, the development of world market prices for commodities, of financial markets and exchange rates, amendments to national and international legislation and provisions or fundamental changes in the economic and political environment. SMA does not intend to and does not undertake an obligation to update or revise any forward-looking statements to adapt them to events or developments after the publication of this Annual Report.

FINANCIAL CALENDAR

2021/5/12	Publication of Quarterly Statement: January to March 2021 Analyst Conference Call: 13:30 p.m. (CEST)
2021/6/1	Annual General Meeting 2021
2021/8/12	Publication of Half-Yearly Financial Report: January to June 2021 Analyst Conference Call: 13:30 p.m. (CEST)
2021/11/10	Publication of Quarterly Statement: January to September 2021 Analyst Conference Call: 13:30 p.m. (CET)

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Carsten Herwig
Gettyimages

CONTACT

SMA Solar Technology AG
Sonnenallee 1
34266 Niestetal
Germany
Phone: +49 561 9522-0
Fax: +49 561 9522-100
info@SMA.de
www.SMA.de/en

Investor Relations
www.IR.SMA.de/en/investor-relations

SMA Solar Technology AG
Sonnenallee 1
34266 Niestetal
Germany

Phone: +49 561 9522-0
Fax: +49 561 9522-100
info@SMA.de
www.SMA.de/en