



Half-Year Group Financial Report

H1/2021

We are shaping the future.
With innovation and precision.

AIXTRON

FINANCIALS AT A GLANCE

Key Quarterly Financials

In EUR million	H1 2021	H1 2020	+/- %	Q2 2021	Q1 2021	+/- %
Order intake	263.3	138.4	90%	139.0	124.4	12%
Order backlog (Equipment only)	295.0	156.6	88%	295.0	223.5	32%
Revenues	117.2	97.0	21%	67.7	49.5	37%
Gross profit	45.2	37.5	21%	27.9	17.3	61%
%	39%	39%	0pp	41%	35%	6pp
EBIT	4.9	2.2	123%	5.6	-0.7	900%
%	4%	2%	2pp	8%	-1%	9pp
Net result	11.5	2.5	360%	7.7	3.8	103%
%	10%	3%	7pp	11%	8%	3pp
Free cash flow	46.1	-8.4	649%	18.0	28.1	-36%

Key Balance Sheet Data

In EUR million	Jun 30 2021	Dec 31 2020
Inventories	125.5	79.1
Trade Receivables	34.7	41.3
Cash, cash equivalent and other financial asset	348.2	309.7
Trade Payables	22.4	10.8
Contract liabilities for advance payments	122.5	50.8
Equity	503.2	496.4
Equity Ratio	73%	84%

Key Share Data

In EUR	H1 2021	H1 2020
Closing Price (end of period)	22.93	10.66
Period High Price	23.30	11.49
Period Low Price	14.16	6.20
Number of shares issued (end of period)	113,202,020	112,927,320
Market capitalization (end of period), million EUR	2,595.7	1,203.2
Net result per share (EUR)	0,11	0,02

TABLE OF CONTENTS

FINANCIALS AT A GLANCE	2
BUSINESS DEVELOPMENT	4
INTERIM MANAGEMENT REPORT	6
Business Activity and Strategy	6
Economic Report	7
Macroeconomic developments	7
Industry developments	8
Results of Operations	9
Development of Orders	9
Exchange Rate Development of the US Dollar	10
Development of Revenues	10
Development of Results	11
Financial Position and Net Assets	13
Cashflow	14
Opportunities and Risks	14
Outlook	15
INTERIM FINANCIAL STATEMENTS	16
Consolidated Income Statement (unaudited)	16
Consolidated Statement of other Comprehensive Income (unaudited)	16
Consolidated Statement of Financial Position (unaudited)	17
Consolidated Statement of Cash Flows (unaudited)	18
Consolidated Statement of Changes in Equity (unaudited)	19
ADDITIONAL DISCLOSURES	20
Accounting Policies	20
Segment Reporting	21
Stock Option Plans	21
Employees	22
Dividend	22
Restructuring Costs	22
Financial Instruments	23
Management	23
Related Party Transactions	23
Post-Balance Sheet Date Events	23
Responsibility Statement	24
Forward-Looking Statements	25

BUSINESS DEVELOPMENT

Persistently high order momentum

Large orders in the second quarter

Increased full-year guidance for order intake

AIXTRON booked a number of large orders in the second quarter, which had a positive effect on the order intake of the second quarter and the first half year. Accordingly, order intake for H1/2021 was significantly higher than the previous year's figure at EUR 263.3 million (H1/2020: EUR 138.4 million). This is a result of the continued high demand from various end-markets, especially in the fields of gallium nitride power electronics, wireless and optical data transmission, as well as LEDs for fine pitch displays and indoor farming. Revenue in H1/2021 also improved as expected from the prior year and was 21% higher year-on-year at EUR 117.2 million (H1/2020: EUR 97.0 million). The positive and better-than-expected order situation in the first six months will lead to an increase in deliveries and revenues in the 2021 financial year. Accordingly, the Executive Board raised the forecast for the 2021 financial year on June 9, 2021 and communicated it via ad-hoc release. Based on the very positive order development, the Executive Board is once again raising the forecast for the **order intake** in the financial year 2021 to a range of **EUR 440 million to EUR 480 million** (previously: EUR 420 million to EUR 460 million). The Executive Board reaffirms the forecast for the financial year 2021, which was raised in June, of **revenues** between **EUR 400 million to EUR 440 million**, a **gross margin** of **around 40%** of revenues and an **EBIT margin** of **20% to 22%** of revenues.

At EUR 139.0 million in Q2/2021, **order intake** exceeded the high level of the previous quarter (Q1/2021: EUR 124.4 million) and reached the highest level since 2011. It was thus about twice as high as in the same quarter of the previous year (Q2/2020: EUR 69.6 million). This development is mainly due to high demand for equipment for the production of gallium nitride power electronics, components to build and expand 5G mobile and fibre optical networks, as well as LEDs for fine pitch displays and indoor farming. This was also reflected in the second quarter in corresponding large orders placed by our customers for the above-mentioned application. The **equipment order backlog** as of June 30, 2021, increased to EUR 295.0 million (Q1/2021: EUR 223.5 million).

The revenue and earnings development in Q2/2021 is fully in line with expectations and in line with our customers' delivery requests. Compared to the previous year, **revenues** in Q2 2021 increased by 21% to EUR 67.7 million (Q2/2020: EUR 56.0 million) and were 37% higher compared to the previous quarter (Q1/2021: EUR 49.5 million). **Gross profit** for Q2/2021 was EUR 27.9 million with a **gross margin** of 41% (Q2/2020: EUR 22.9 million; 41%; Q1/2021: EUR 17.3 million; 35%). The gross margin for H1/2021 was 39%. **Operating expenses** for Q2/2021 were EUR 22.3 million, higher than the previous quarter (Q1/2021: EUR 18.0 million; Q2/2020: EUR 19.6 million), which was mainly due to the structural adjustments at our OLED-specialist subsidiary APEVA announced in the supplementary report of the quarterly statement for the first quarter of 2021. This resulted in an **operating result (EBIT)** of EUR 5.6 million and an EBIT margin of 8% (Q1/2021: EUR -0.7 million; -1%; Q2/2020: EUR 3.3 million; 6%). The **net profit** in Q2/2021 was EUR 7.7 million (Q1/2021: EUR 3.8 million; Q2/2020: EUR 3.3 million). In this context, the capitalization of deferred taxes on loss carryforwards in the amount of EUR 3.4 million in Q2/2021 due to expected future profits had a positive impact.

Free cash flow in Q2/2021 was EUR 18.0 million (Q1/2021: EUR 28.1 million; Q2/2020: EUR -11.3 million), largely due to the current result and an increase in advance payments by customers.

AIXTRON reported **cash and cash equivalents including financial assets** of EUR 348.2 million as of June 30, 2021 (December 31, 2020: EUR 309.7 million; June 30, 2020: EUR 288.6 million). Due in particular to the significantly increased liabilities from advance payments by customers, the equity ratio was 73% as at June 30, 2021 (December 31, 2020: 84%).

The **COVID-19 pandemic** is still posing no significant risk to the AIXTRON Group and our business. Strict internal protective measures are in place to ensure safety in operations. This includes the offer to all AIXTRON employees to have a COVID-19 screening carried out regularly at work. AIXTRON was also able to offer COVID-19 vaccination to all interested employees in Q2. Approximately half of our employees have returned to the office from the mobile office since mid-July this year. The impact of the pandemic on our business remains at a low level and our supply chains are stable.

INTERIM MANAGEMENT REPORT

Business Activity and Strategy

A detailed overview of the business activities and strategy of the AIXTRON Group (“AIXTRON”, “the AIXTRON Group” or “the Company”) can be found in the Annual Report 2020. There were no changes in the first half of 2021. The Report is publicly available for download on the Company’s website at <https://www.aixtron.com/en/investors/publications>.

AIXTRON’s **R&D capability** remains of important strategic significance, as it provides for a competitive, leading edge technology portfolio and supports the future business development. Therefore, AIXTRON is committed to investing specifically in **research and development projects** to retain or to expand the Company’s leading technology position in MOCVD equipment for applications such as lasers, specialty LEDs and for the production of wide-band-gap materials for power electronics. In addition, the Group is working on novel 2D nanostructures, which are seen as having great potential in research in line with international predictions (roadmaps).

An example of the Group’s research work in 2021 is the **“NeuroSys - Neuromorphic Hardware for Autonomous Artificial Intelligence Systems”** future cluster of RWTH Aachen University and partners from the region, honoured by the Federal Ministry of Education and Research (BMBF) as part of the “Clusters4Future” ideas competition.

AIXTRON SE is a partner of the future cluster “NeuroSys”, developing, building and optimizing the necessary MOCVD tool for the new application.

“NeuroSys” researches adaptive and energy-efficient neuromorphic AI chips with the aim of allowing intelligent and resource-saving on-site data processing and thus creating an essential prerequisite for artificial intelligence (AI) applications. Resource-efficient neuromorphic hardware that makes neural networks more efficient and ecologically sustainable while also providing for data security as a design component is considered key to the widespread use of AI, especially in autonomous vehicles, medical technology, and sensor networks for intelligent production or urban regions. “NeuroSys” aims to work out the crucial prerequisites here. AIXTRON is at the beginning of the value chain in this project. Very thin layers of novel 2D materials, only a few atomic layers thick, are required as the material base for the neuromorphic chips. The production of these materials on the largest possible wafers is AIXTRON’s core competence. As part of this and other projects, AIXTRON will develop the world’s most powerful technology platform for the industrial production of these materials and operate it in its laboratory in Herzogenrath.

Environmental protection and the responsible use of resources are also an important part of the business strategy. The Company's engineers work to continuously improve AIXTRON's equipment both in terms of resource-saving design and environmentally friendly operation. Energy efficiency and the yield of chemicals used in the operation of the equipment is an important element in this strategy. Further information can be found in our 2020 **Sustainability Report** (CSR Report) on the AIXTRON website at <https://www.aixtron.com/en/investors/publications>.

Economic Report

Macroeconomic developments

The global economy is on the road to recovery. This is mainly thanks to the COVID-19 vaccines that are now available, but also to additional fiscal policy stimuli, especially in the USA, which further strengthen the fiscal and monetary policy measures of the past year. However, at the same time the recovery is taking place at many different speeds - depending, for example, on access to vaccines, national fiscal and monetary policy options, or the different ways in which individual economies have been affected, e.g. predominantly production versus tourism-oriented orientations. For example, the economies of China and the USA, which are especially important for AIXTRON, have already returned to pre-crisis GDP levels in 2020 or will do so again in the current year. Many other countries, particularly emerging and developing countries, are not expected to achieve this until 2022 or even 2023. Nevertheless, the International Monetary Fund (IMF) now assumes that the economic consequences of the COVID-19 pandemic will be less than those of the global financial crisis of 2008. Nevertheless, the development is subject to numerous uncertainties. In this environment, the IMF has significantly raised its growth forecast for the current year in its World Economic Outlook of April 2021. For 2021 as a whole, the IMF now expects global economic output to grow by 6.0% (+0.5 percentage points compared to January 2021) after a -3.3% decline in 2020. For the advanced economies, the expected growth rate is 5.1% (2020: -4.7%), while the growth rate for emerging and developing economies is expected to be 6.7% (2020: -2.2%). World trade is expected to grow by 8.4% (2020: -8.5%). The situation in the strongly export-oriented German mechanical and plant engineering sector also developed correspondingly positively. According to reports by the Verband Deutscher Maschinen- und Anlagenbau e. V. (VDMA), after a subdued start to the year the first five months of the year have now seen an increase in incoming orders of 25%.

Demand for AIXTRON's products is largely dependent on industry-specific developments, such as the introduction of new applications in IT-infrastructure, in consumer electronics, in the field of electromobility or demand in sub-segments of the global semiconductor market, which remained quite robust overall, partly as a result of the digitalization trend, which was reinforced by the pandemic. In addition, we have access to a stable supply chain without interruption.

Industry developments

Lasers that can be produced on AIXTRON systems have a wide range of applications in the fields of **3D sensor technology** and **optical data transmission**: According to the market research company Yole Développement, consumer electronics will be the main driver of demand for **lasers in 3D sensor technology** in the coming years. In addition, edge and surface emitting lasers are increasingly being used in the industrial and automotive sectors for 3D sensing. Yole expects a strong increase in demand for these components by 2024, especially from the automotive industry, as an element for distance measurement in driver assistance systems and in autonomous vehicles. The market for **lasers for ultra-fast optical data transmission** will be positively influenced in particular by the increasing use of cloud computing and Internet services such as video on demand and music streaming as well as by the communication of networked devices via the Internet (“Internet of Things”).

In addition, the **power electronics** sector is a significant growth market for AIXTRON: **Power semiconductors** based on **Wide-Band-Gap (WBG)** materials enable the production of very compact and highly efficient AC-DC and DC-DC converters, which are used in a wide range of applications. These range from low power (e.g. power supply of smart phones) to high power (e.g. fast charging station for electric vehicles). **Power components** made of the materials **silicon carbide (SiC)** and **gallium nitride (GaN)** are gaining market share in the overall market for power components at an increasing rate. GaN semiconductor devices are mainly used in low and medium power and voltage applications, such as high-performance and energy-efficient power supplies for smartphones and laptops, wireless charging, and power supplies for servers and other IT infrastructure. Furthermore, GaN semiconductor devices are increasingly used in high frequency applications such as 5G telecommunication networks. Silicon carbide (SiC) WBG power devices are particularly suitable for use in higher power and voltage classes. Areas of application are primarily electric vehicles and their fast-charging stations, but also photovoltaic and wind energy converters and other electric drives. In these applications, SiC enables a significant reduction in conversion losses, resulting in a greater range per battery charge in vehicles and a higher amount of energy delivered in the power generation sector. Due to the wide range of applications and high efficiency, industry experts expect strong growth for both GaN and SiC devices in the coming years.

In the **optoelectronics** sector, the **Micro LEDs** segment represents the greatest growth potential according to LEDinside. Potential drivers include large-area screens as well as very small displays in various end-uses such as smartphones, tablets, smartwatches and notebooks. According to Yole, the market for **red, orange and yellow LEDs (ROY LEDs)** is also predicted to continue growing due to the worldwide use of direct emitting, large area LED display walls or backlighting units. Another small segment of the LED market addressed by AIXTRON is the market for **UV LEDs**. These are used for curing plastics, for disinfecting surfaces, air and water. Due to increased hygiene awareness, this market could gain importance in the future. According to LEDinside market will grow at a significant double-digit compound annual growth rate in the coming year.

The growth forecasts for the market segments described here in detail are listed in the economic report of our Annual Report 2020. We consider these forecasts to remain valid.

According to the current analysis of the market research institute Gartner, AIXTRON saw its **global market leadership for MOCVD equipment** confirmed in 2020. Once again, AIXTRON has taken the top position: AIXTRON's market share was 58%, followed by Veeco (USA) with 26% and AMEC (China) with 16%.

Results of Operations

Development of Orders

Orders

(in EUR million)

	H1 2021	H1 2020	+/-	
			m EUR	%
Total order intake incl. spares & services	263.3	138.4	124.9	90
Equipment order backlog (end of Period)	295.0	156.6	138.4	88

H1/2021 order intake increased by around 90% year-on-year to EUR 263.3 million (H1/2020: EUR 138.4 million). This reflects the continued strong demand, especially in the fields of power electronics, data transmission and LEDs. At EUR 139.0 million in Q2 2021, order intake exceeded the already high level of the previous quarter (Q1/2021: EUR 124.4 million) and represented the highest value since 2011. The US dollar-based equipment order intake and equipment order backlog received in the 2021 financial year were translated at the internally determined annual budget rate of 1.25 USD/EUR for comparability reasons (2020: USD/EUR 1.20).

The total equipment order backlog as at June 30, 2021 was EUR 295.0 million, also significantly higher than both the previous year (H1/2020: EUR 156.6 million) and the previous quarter (Q1/2021: EUR 223.5 million). Most of this order backlog is scheduled for delivery in 2021.

In line with a strict internal process, AIXTRON has defined clear conditions that must be met for the recording of equipment orders in order intake and order backlog. These conditions include the following requirements:

- the receipt of a firm written purchase order,
- the receipt of an agreed down payment,

- accessibility to the required shipping documentation,
- a customer confirmed agreement on a system specific delivery date.

In addition, and taking into account current market conditions, the Management Board reserves the right to assess whether the actual realization of each system order is sufficiently likely to occur in a timely manner. If, as a result of this review, Management comes to the conclusion that the realization of an order is not sufficiently likely or involves an unacceptable degree of risk, Management will exclude this specific order or a portion of this order from the recorded order intake and order backlog figures until the risk has decreased to an acceptable level. The order backlog is regularly assessed and - if necessary - adjusted in line with potential execution risks.

Exchange Rate Development of the US Dollar

The average exchange rate used by AIXTRON to translate income and expenses denominated in US dollars in the first six months of 2021 was 1.21 USD/EUR (Q1/2021: 1.22 USD/EUR; Q2/2021: 1.20 USD/EUR), which compares to 1.11 USD/EUR in H1/2020. Thus, compared to the same period of the previous year, the US dollar was 9% weaker in H1/2021, having a corresponding impact on AIXTRON Group's US dollar denominated revenues and earnings in the period.

Development of Revenues

Total revenues for the first six months of 2021 amounted to EUR 117.2 million and were thus EUR 20.2 million or 21% higher year-on-year (H1/2020: EUR 97.0 million). This is mainly the result of the order intake in the relevant period of the previous year, which is now reflected in the revenue development - once the systems have been delivered. Compared to the previous quarter, revenues in Q2/2021 increased by 37% to EUR 67.7 million (Q1/2021: EUR 49.5 million). 61% of the equipment revenue in Q2 was generated particularly with equipment for optical data transmission and 5G applications. Another significant share of sales was contributed by the business with systems for power electronics, especially for gallium nitride applications.

Equipment revenues in H1/2021 were EUR 91.6 million, representing 78% of the total H1/2021 revenues (H1/2020: 76.4 million; 79%). In the second quarter 2021, equipment revenues amounted to EUR 53.4 million or 79% of revenues (Q2/2020: EUR 46.5m; 83%; Q1/2021: EUR 38.2 million; 77%).

The remaining revenues were generated from the sale of **spare parts and services**.

Revenues by Equipment, Spares & Service

	H1 2021		H1 2020		+/-	
	m EUR	%	m EUR	%	m EUR	%
Equipment revenues	91.6	78	76.4	79	15.1	20
Revenues from service, spare parts, etc.	25.7	22	20.6	21	5.1	25
Total	117.2	100	97.0	100	20.2	21

Revenues by Region

	H1 2021		H1 2020		+/-	
	m EUR	%	m EUR	%	m EUR	%
Asia	73.0	62	74.0	76	-1.0	-1
Europe	37.1	32	10.3	11	26.8	260
Americas	7.1	6	12.8	13	-5.7	-45
Total	117.2	100	97.0	100	20.2	21

Development of Results

Cost Structure

	H1 2021		H1 2020		+/-	
	m EUR	% Rev.	m EUR	% Rev.	m EUR	% Rev.
Cost of sales	72.1	61	59.5	61	12.6	21
Gross profit	45.2	39	37.5	39	7.7	21
Operating costs	40.2	34	35.3	36	4.9	14
Selling expenses	5.0	4	5.4	6	-0.4	-7
General and administration expenses	12.4	11	9.3	10	3.0	32
Research and development costs	26.7	23	28.6	30	-1.9	-7
Net other operating (income) and expenses	(3.9)	-3	(8.1)	-8	-4.2	-52

Gross profit was EUR 45.2 million in H1/2021 with a gross margin of 39% (H1/2020: EUR 37.5 million or 39%; Q2/2021: EUR 27.9 million or 41%; Q1/2021: EUR 17.3 million or 35%). The increased revenue volume compared to the previous year was offset by higher expenses for the preparation of production capacities for the planned increased output in the second half of the year.

Operating expenses of EUR 40.2 million increased in H1/2021 compared to the previous year (H1/2020: EUR 35.3 million; Q2/2021: EUR 22.3 million; Q1/2021: EUR 18.0 million). The increase in operating expenses in the first half of 2021 was due to additional restructuring costs for APEVA in the amount of approximately EUR 3.2 million (see chapter "Restructuring costs" in the Notes). Furthermore, higher variable remuneration components were incurred in the first half of 2021. In the previous year, a special effect due to a change of use for a production facility led to other operating income of EUR 2.9 million.

R&D expenses in H1/2021 decreased by EUR 1.9 million to EUR 26.7 million compared to the same period last year (H1/2020: EUR 28.6 million; Q2/2021: EUR 14.9 million; Q1/2021: EUR 11.9 million). which is mainly due to lower ongoing costs for the OLED technology, while on the other hand restructuring costs for APEVA amounting to EUR 2.8 million were recorded.

Compared to the previous quarter, R&D expenses increased from EUR 11.9 million in the first quarter to EUR 14.9 million in the second quarter of 2021, mainly due to the restructuring expenses mentioned above.

Key R&D Information

	H1 2021	H1 2020	+/-
R&D expenses (million EUR)	26.7	28.6	-7%
R&D expenses, % of revenues	23	30	-7pp

Net other operating income and expenses resulted in an operating income of EUR 3.9 million in H1/2021 (H1/2020: EUR 8.1 million; Q2/2021: EUR 2.2 million; Q1/2021: EUR 1.7 million income). This reflects in particular R&D grants of EUR 3.5 million. The high positive balance in the first half of the previous year was significantly influenced by the above-mentioned special effect from the reversal of impairment losses due to the planned change of use of a production facility.

The **operating result (EBIT)** improved year-on-year from EUR 2.2 million in H1 2020 to EUR 4.9 million in H1 2021 (Q2/2021: EUR 5.6 million; Q1/2021: EUR -0.7 million). This development is mainly due to the year-on-year increase in revenue and the corresponding gross margin and is attributable to the business and cost development described above.

The **result before taxes** in H1/2021 was EUR 4.9 million (H1/2020: EUR 2.4 million; Q2/2021: EUR 5.6 million; Q1/2021 EUR -0.7 million).

In H1/2021, income from income taxes of EUR 6.6 million was reported (H1/2020: income from income taxes EUR 0.1 million, Q2/2021: income from income taxes EUR 2.1 million; Q1/2021: income from income taxes EUR 4.4 million). This development is attributable to the recognition of EUR 7.9 million of deferred tax assets expected to be used against future taxable profits.

The Company's **net result** in H1/2021 amounted to EUR 11.5 million (H1/2020: EUR 2.5 million; Q2/2021: EUR 7.7 million; Q1/2021: EUR 3.8m).

Financial Position and Net Assets

The Company did not have any **bank borrowings** as of June 30, 2021 or December 31, 2020.

Total equity as of June 30, 2021 increased to EUR 503.2 million compared to EUR 496.4 million as of December 31, 2020. The main drivers were the net result and the dividend payment of AIXTRON SE. The equity ratio as of June 30, 2021 was 73% compared to 84% as at December 31, 2020 due to the significant increase in customer prepayments compared to the previous year.

Cash, cash equivalents and other financial assets, increased to EUR 348.2 million as of June 30, 2021, compared to EUR 309.7 million as of December 31, 2020. The difference is mainly due to increased advance payments from customers during the reporting period. **Other financial assets** as at June 30, 2021 include fund investments of EUR 132.4 million (December 31, 2020: EUR 62.4 million), short-term bank deposits of EUR 60.0 million (December 31, 2020: EUR 0 million) and long-term bank deposits of EUR 0 million (December 31, 2020: EUR 60.0 million). The long-term bank deposits of EUR 60.0 million included as at 31 December 2020 were reclassified to current financial assets as at 30 June 2021.

Property, plant and equipment as of June 30, 2021, increased slightly to EUR 65.9 million compared to December 31, 2020 (EUR 63.5 million as of December 31, 2020).

Goodwill recognized was EUR 71.7 million as of June 30, 2021, compared to EUR 71.0 million as of December 31, 2020. No impairment losses were recognized in the first six months of 2021. The difference is due to exchange rate fluctuations.

Inventories, including raw materials, components and work in progress, increased by 59% to EUR 125.5 million as of June 30, 2021, compared to EUR 79.1 million as of December 31, 2020, reflective of an increase in deliveries planned for subsequent quarters.

Trade receivables as of June 30, 2021, amounted to EUR 34.7 million (December 31, 2020: EUR 41.3 million) and thus mainly reflect the current business volume in the second quarter of 2021 compared to the fourth quarter of 2020. Due to country-specific payment modalities, the average days sales outstanding was 44 days (December 31, 2020: 18 days).

Contract liabilities from advance payments received amounted to EUR 122.5 million as of June 30, 2021, compared to EUR 50.8 million as of December 31, 2020, thus reflecting the current order backlog.

Cashflow

Free cash flow (cash flow from operating activities adjusted for changes in financial assets - investments + proceeds from disposals) was EUR 46.1 million in H1/2021 (H1/2020: EUR -8.4 million; Q2/2021: EUR 18.0 million; Q1/2021: EUR 28.1 million). This development is mainly due to advance payments received for customer orders and a simultaneous increase in inventories.

Opportunities and Risks

During the first six months of 2021, AIXTRON Management was not aware of any further significant additions or changes in the Opportunities and Risks as described in the 2020 Annual Report. The risks associated with COVID-19 continue to be assessed as not significant because it has been shown that demand for our products has not been significantly affected by the pandemic and our supply chains continue to function reliably during lockdown periods.

A description of the opportunities and risks of the AIXTRON Group can be found in the chapters "Risk Report" and "Opportunities Report" of the Annual Report 2020 which is publicly available for download on the Company's website at <https://www.aixtron.com/en/investors/publications>.

In particular, AIXTRON expects the following market trends and opportunities in the relevant end user markets could possibly have a positive effect on future business:

Short Term

- Increasing adoption of compound semiconductor-based lasers for 3D sensor systems in mobile devices as well as sensors for infrastructure applications
- Further increasing demand for lasers for optical data transmission of large volumes, such as for video streaming and Internet-of-Things (IoT) applications
- Increasing use of LEDs and specialty LEDs (esp. red-orange-yellow, UV or IR) for displays and other applications
- Increasing use of wide-band-gap GaN- or SiC-based components for energy-efficient power electronics devices in autos, in consumer electronics, in mobile devices and in IT infrastructure
- Increasing use of GaAs-based devices in mobile devices (e. g. smartphones) for 5G mobile communications or 6E WLAN technology
- Increasing use of GaN-based devices in the field of 5G network infrastructure

Mid- to Long-Term

- Development of new applications based on wide-band-gap materials such as high-frequency chips or system-on-chip architectures with integrated power management
- Adaptation of Micro LED displays in the mass market
- Development of alternative LED applications, such as visual-light communication technology or Micro LED displays
- Increased use of compound semiconductor-based laser sensors for autonomous driving
- Use of GaN-based devices in mobile terminals (e. g. smartphones) for the millimeter-wave range of 5G and 6G mobile communications
- Order for production-scale qualification of OVPD technology
- Increased development activities for high performance solar cells made of compound semiconductor

Outlook

Based on the results for the first six months of fiscal year 2021, the order intake development in particular, and the internal assessment of the development of demand the **Executive Board raised its previously issued forecast on June 9 of this year** and published this in an ad-hoc announcement. Due to the very positive order development, the Executive Board once again increases the forecast for **order intake** in the 2021 financial year to **EUR 440 million to EUR 480 million** (previously: EUR 420 million to EUR 460 million). The Executive Board reaffirms the forecast for the 2021 financial year, which was raised in June, **for revenues of EUR 400 million to EUR 440 million, a gross margin of around 40%** of revenues and an **EBIT margin of 20% to 22%** of revenue. The expectations for 2021 are based on the assumption that the COVID-19 pandemic will continue to have no significant impact on the development of business operations.

In addition, with a view to the AIXTRON Group's **sustainability goals**, which were redefined in 2020, the Executive Board is aiming for a discernible reduction in energy consumption in the medium term, as well as a significant expansion of further training measures for the employees.

The Executive Board will continuously monitor the further development of the global economy and the global trade in order to assess any potential effects on AIXTRON's own supply chain and production as well as on customer demand and thus on AIXTRON's business development at any time and - if necessary - to initiate appropriate counter measures.

Further details on the annual forecast can be found in the "Expected Developments" section of the Annual Report 2020, which is available on the Company's website at <https://www.aixtron.com/en/investors/publications>.

INTERIM FINANCIAL STATEMENTS

Consolidated Income Statement (unaudited)

in EUR thousands	H1/2021	H1/2020	+/-
Revenues	117,231	97,000	20,231
Cost of sales	72,074	59,525	12,549
Gross profit	45,157	37,475	7,682
Selling expenses	5,040	5,421	-381
General administration expenses	12,363	9,342	3,021
Research and development costs	26,742	28,638	-1,896
Other operating income	4,859	8,557	-3,698
Other operating expenses	938	471	467
Operating expenses	40,224	35,315	4,909
Operating result	4,933	2,160	2,773
Finance income	95	241	-146
Finance expense	108	42	66
Net finance income	-13	199	-212
Profit or loss before taxes	4,920	2,359	2,561
Taxes on income	-6,577	-98	-6,479
Profit for the period	11,497	2,457	9,040
Attributable to:			
Owners of AIXTRON SE	12,335	2,724	9,611
Non-controlling interests	-838	-267	-571
Basic earnings per share (EUR)	0.11	0.02	0.09
Diluted earnings per share (EUR)	0.11	0.02	0.09

Consolidated Statement of other Comprehensive Income (unaudited)

in EUR thousands	H1/2021	H1/2020	+/-
Net profit for the period	11,497	2,457	9,040
Currency translation	2,185	-1,872	4,057
Other comprehensive income/loss	2,185	-1,872	4,057
Total comprehensive income for the period	13,682	585	13,097
Attributable to:			
Owners of AIXTRON SE	14,520	871	13,649
Non-controlling interests	-838	-286	-552

Consolidated Statement of Financial Position (unaudited)

in EUR thousands	30/06/2021	31/12/2020
Assets		
Property, plant and equipment	65,906	63,469
Goodwill	71,686	70,977
Other intangible assets	2,533	2,876
Other non-current financial assets	491	60,497
Deferred tax assets	22,902	14,415
Total non-current assets	163,518	212,234
Inventories	125,515	79,087
Trade receivables	34,719	41,304
Current tax receivables	1,687	949
Other current assets	11,742	7,171
Other financial assets	192,366	62,422
Cash and cash equivalents	155,877	187,259
Total current assets	521,906	378,192
Total assets	685,424	590,426
Liabilities and shareholders' equity		
Share capital	112,118	111,843
Additional paid-in capital	381,599	376,399
Retained earnings	4,935	4,903
Currency translation reserve	4,426	2,241
Equity attributable to the owners of AIXTRON SE	503,078	495,386
Non-controlling interests	154	992
Total equity	503,232	496,378
Other non-current liabilities	3,656	2,617
Other non-current provisions	3,552	3,979
Total non-current liabilities	7,208	6,596
Trade payables	22,431	10,846
Advance payments from customers	122,489	50,824
Other current provisions	19,841	16,188
Other current liabilities	8,106	7,379
Current tax payables	2,117	2,215
Total current liabilities	174,984	87,452
Total liabilities	182,192	94,048
Total liabilities and shareholders' equity	685,424	590,426

Consolidated Statement of Cash Flows (unaudited)

in EUR thousands	H1/2021	H1/2020	+/-
Cash flow from operating activities			
Net profit	11,497	2,457	9,040
Adjustments to reconcile net profit to cash from operating activities			
Expense from share-based payments	1,860	374	1,486
Depreciation, amortization and impairment expense	4,650	2,386	2,264
Net result from disposal of property, plant and equipment	25	0	25
Deferred income taxes	-8,456	-113	-8,343
Interest and lease repayments shown under investing or financing activities	435	258	177
Change in			
Inventories	-45,747	-12,657	-33,090
Trade receivables	6,313	5,292	1,021
Other assets	-5,060	-8,140	3,080
Financial assets at FVTPL	-69,944	0	-69,944
Trade payables	11,706	-1,435	13,141
Provisions and other liabilities	4,044	-2,205	6,249
Non-current liabilities	529	-121	650
Advance payments from customers	70,836	10,689	60,147
Cash from operating activities	-17,312	-3,215	-14,097
Investing			
Capital expenditures in property, plant and equipment	-6,144	-4,214	-1,930
Capital expenditures in intangible assets	-465	-957	492
Proceeds from disposal of fixed assets	89	14	75
Interest received	81	226	-145
Bank deposits with a maturity of more than 90 days	0	-30,000	30,000
Net cash provided by (used in) investing activities	-6,439	-34,931	28,492
Financing			
Interest paid	-71	-8	-63
Repayment of lease liabilities	-445	-476	31
Dividend paid	-12,303	0	-12,303
Proceeds from issue of shares	3,615	0	3,615
Net cash provided by (used in) financing activities	-9,204	-484	-8,720
Effect of changes in exchange rates on cash and cash equivalents	1,573	-1,122	2,695
Net change in cash and cash equivalents	-31,382	-39,752	8,370
Cash and cash equivalents at the beginning of the period	187,259	270,819	-83,560
Cash and cash equivalents at the end of the period	155,877	231,067	-75,190
Income taxes paid	-2,726	-3,344	618
Income taxes received	76	274	-198

Consolidated Statement of Changes in Equity (unaudited)

in EUR thousands	Subscribed capital under IFRS	Additional paid-in capital	Currency translation	Retained Earnings/ Accumulated deficit	Shareholders' equity attributable to the owners of AIXTRON SE	Non-controlling interests	Total
Balance January 1, 2020	111,840	375,273	5,564	-29,955	462,722	1,422	464,144
Share based payments		374			374		374
Net loss for the period				2,724	2,724	-267	2,457
Other comprehensive income/loss			-1,873	20	-1,853	-19	-1,872
Total comprehensive profit for the period			-1,873	2,744	871	-286	585
Balance June 30, 2020	111,840	375,647	3,691	-27,211	463,967	1,136	465,103
Balance January 1, 2021	111,843	376,399	2,241	4,903	495,386	992	496,378
Dividends				-12,303	-12,303		
Share based payments		1,860			1,860		1,860
Issue of shares	275	3,340			3,615		3,615
Net profit for the period				12,335	12,335	-838	11,497
Other comprehensive income			2,185		2,185	0	2,185
Total comprehensive loss for the period			2,185	12,335	14,520	-838	13,682
Balance June 30, 2021	112,118	381,599	4,426	4,935	503,078	154	503,232

ADDITIONAL DISCLOSURES

Accounting Policies

This consolidated interim financial report of AIXTRON SE has been prepared in accordance with International Financial Reporting Standards (IFRS) applicable for Interim Financial Reporting, IAS 34.

The accounting policies adopted in this interim financial report are consistent with those followed in the preparation of the Group's annual financial statements for the year ended December 31, 2020.

The consolidated interim financial statements of AIXTRON SE include the following subsidiaries (collectively referred to as "AIXTRON", "the AIXTRON Group", "the Group" or "the Company"): APEVA SE, Herzogenrath (Germany), AIXTRON, Inc., Santa Clara (USA); AIXTRON Ltd., Cambridge (United Kingdom); AIXinno Ltd., Cambridge (United Kingdom); APEVA Holdings Ltd., Cambridge (UK); APEVA Co Ltd., Asan (South Korea); AIXTRON Korea Co. Ltd., Hwasung (South Korea); AIXTRON China Ltd., Shanghai (PR of China); AIXTRON KK, Tokyo (Japan) and AIXTRON Taiwan Co. Ltd., Hsinchu (Taiwan).

Due to rounding, numbers presented throughout this report may not add up precisely to the totals indicated and percentages may not precisely reflect the absolute figures for the same reason.

As in previous years, the consolidated interim financial report was not audited according to §317 HGB or reviewed by a certified auditor.

Segment Reporting

The following segment information has been prepared in accordance with IFRS 8 „Operating Segments“. As AIXTRON has only one operating segment, the information provided relates only to geographical data.

The Company markets and sells its products in Asia, Europe, and the United States, mainly through its direct sales organization and cooperation partners.

In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers. Segment assets are based on the geographical location of the assets.

Geographical Segments

(in EUR thousands)

		Asia	Europe	Americas	Group
Revenues realized with third parties	H1 2021	72,954	37,130	7,147	117,231
	H1 2020	73,981	10,255	12,764	97,000
Segment assets (property, plant and equipment)	Jun. 30, 2021	1,540	64,168	198	65,906
	Dec. 31, 2020	893	62,299	277	63,469

Stock Option Plans

As of June 30, 2021, AIXTRON's employees and Executive Board members held stock options, representing the right to receive AIXTRON common shares. The status of these options developed as follows:

AIXTRON ordinary shares

	Jun. 30, 2021	Exercised	Expired/ Forfeited	Allocation	Dec. 31, 2020
Stock options	274,100	274,700	52,800	0	601,600

Employees

The total number of full-time equivalent employees increased from 700 on June 30, 2020 to 718 persons on June 30, 2021.

Split by Region

	2021		2020		+/-	
	Jun. 30	%	Jun 30	%	abs.	%
Asia	106	15	118	17	-12	-10
Europe	583	81	550	79	33	6
USA	29	4	32	5	-3	-9
Total	718	100	700	100	17	2

Dividend

The Annual General Meeting on May 19, 2021 resolved to distribute a dividend in the amount of EUR 0.11 per no-par value share entitled to dividend out of the unappropriated net profit of AIXTRON SE for fiscal year 2020. Taking into account the treasury shares and the new shares resulting from the exercise of stock options, each without dividend entitlement, this resulted in a distribution of EUR 12.3 million.

Restructuring Costs

in EUR thousands	H1/2021
Cost of sale	42
General and administration expenses	404
Research and development expenses	2,787
	3,233

On April 28, 2021, the OLED subsidiary APEVA announced its realignment to the Chinese market and a planned reduction of the workforce in Korea and Germany. As part of these activities, costs of kEUR 3,233 were incurred in the first half of the year, mainly for severance payments and other personnel-related expenses.

Financial Instruments

Other financial assets include fund investments on EUR 132,366k (December 31, 2020: EUR 62,422k) which are measured at fair value through profit or loss. The valuation is based on a market price that corresponds to hierarchy level 1.

All other financial assets and financial liabilities are measured at amortised cost. Their carrying amounts approximates their fair values.

Management

Since Dr. Christian Danninger assumed his position as new Chief Financial Officer on May 1, 2021, the Executive Board of AIXTRON SE consists of a total of three persons. In addition to Dr. Danninger, these are Dr. Felix Grawert (Chairman since April 1, 2021) and Dr. Joachim Linck (COO). The composition of the Supervisory Board has not changed compared to December 31, 2020.

Related Party Transactions

During the reporting period, AIXTRON did not initiate or conclude any material transactions with related parties.

Post-Balance Sheet Date Events

There were no events of particular significance or with significant effects on AIXTRON's net assets, results of operations or financial position known to the Executive Board after the reporting date of June 30, 2021.

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles for interim financial reporting, the interim consolidated financial statements for the six months ended June 30, 2021 give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the interim management report of the Group includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group for the remaining months of the financial year.

Herzogenrath, July 29, 2021

AIXTRON SE

Executive Board



Dr. Jochen Linck



Dr. Christian Danninger



Dr. Felix Grawert

Forward-Looking Statements

This document may contain forward-looking statements regarding the business, results of operations, financial condition and earnings outlook of AIXTRON. These statements may be identified by words such as “may”, “will”, “expect”, “anticipate”, “contemplate”, “intend”, “plan”, “believe”, “continue” and “estimate” and variations of such words or similar expressions. These forward-looking statements are based on the current assessments, expectations and assumptions of the executive board of AIXTRON, of which many are beyond control of AIXTRON, based on information available at the date hereof and subject to risks and uncertainties. You should not place undue reliance on these forward-looking statements. Should these risks or uncertainties materialize, or should underlying expectations not occur or assumptions prove incorrect, actual results, performance or achievements of AIXTRON may materially vary from those described explicitly or implicitly in the relevant forward-looking statement. This could result from a variety of factors, such as those discussed by AIXTRON in public reports and statements, including but not limited to those reported in the chapter “Risk Report”. AIXTRON undertakes no obligation to revise or update any forward-looking statements as a result of new information, future events or otherwise, unless expressly required to do so by law.

This document is an English language translation of a document in German language. In case of discrepancies, the German language document shall prevail and shall be the valid version.

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This financial report should be read in conjunction with the interim financial statements and the additional disclosures included elsewhere in this report.

AIXTRON

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AIXTRON does not routinely print or mail its financial reports. These are available on the AIXTRON website under www.aixtron.com/en/investors/publications at any time.

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