

Sustainability report

in addition to the annual report 2022



AIXTRON
Our technology. Your future.

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AIXTRON-Group

2022 at a glance

58.5%

EU taxonomy-aligned revenues

Previous year: 56.7%

238

New hires**

Previous year: 90

38.3%

EU-taxonomy-aligned capital expenditures (CapEx)*

Previous year: 39.2%

50

Nationalities

Previous year: 42

73.1%

EU-taxonomy aligned operating expenses (OpEx)*

Previous year: 71.5%

32.8

Learning hours per employee

Previous year: 13.3

1,202

Suppliers worldwide

Previous year: 1.126

83% · 16% · 2%

Europe · America · Asia

Distribution of purchasing volume

Previous year: 85% · 14% · 1%

* In terms of the EU taxonomy regulation ** incl. 24 employees who will not start their work at AIXTRON until the 2023 financial year

Ladies and Gentlemen,

The year 2022 was not only very successful for AIXTRON in economic terms. We were also able to make further major progress in the area of sustainability & ESG (environmental, social, and corporate governance).

In 2022, AIXTRON was able to increase the share of taxonomy-aligned revenues to 58% of total revenues of EUR 463 million (2021: 57%). Thus, with EUR 271 million in taxonomy-aligned revenues, the majority of AIXTRON's business activities were ecologically sustainable in the sense of the EU taxonomy (2021: 243 million). In the previous year, we voluntarily reported on the taxonomy alignment of our business activities in accordance with the new EU taxonomy regulation for the first time.

In our core business of equipment technologies for compound semiconductors, we continue to invest substantially in research and development. We are currently in the process of completely renewing our system portfolio: In the third quarter, we presented our new product platform **G10-SiC**, a significant innovation for the production of components for power electronics based on silicon carbide (SiC). In the future, SiC technology will play a decisive role in the field of electromobility, among other things — both in the electric drive train and in the expansion of the necessary high-performance charging infrastructure. In January 2023 we publicly presented our new **G10-AsP** to the world; Among other things, it paves the way for the next generation of high-resolution Micro LED displays, which are considered to be particularly energy-efficient. In this way, we serve the current megatrends of sustainability, electrification and digitization, and help to bring technologies to the market that offer an improved CO₂ balance.

Our focus on sustainable future technologies is also reflected in our EU aligned operating expenses (OpEx)¹ and capital expenditures (CapEx)¹. We were able to increase the high proportion of taxonomy-aligned operating expenses (OpEx)¹ from EUR 43 million (72%) in 2021 to EUR 45 million (73%) in the reporting year. The taxonomy-aligned capital expenditures (CapEx) has also improved again and has almost doubled in the reporting period — from EUR 8 million (39%) in 2021 to EUR 14 million (38%).

Wide-band-gap (WBG) Power semiconductors based on **gallium nitride (GaN)** and **silicon carbide (SiC)** form the basis for the energy-efficient power electronics of the future. **Micro LEDs** enable the next generation of displays and **laser diodes** for data communication bring decisive advantages in the further digitization of our world. In addition, we are looking at other exciting technologies in the field of renewable energies (e.g. solar cells).

Our sustainable business model is also confirmed by **positive ESG ratings**. For example, our current MSCI rating is AA (2021: A).

We also continuously strive to improve in the area of energy efficiency and directly controllable CO₂ emissions. AIXTRON has been climate neutral since 2019. For several years we have been successfully using waste heat generated in our laboratories at our central location in Herzogenrath and using it specifically for heating the building. At the end of 2022, a new heat pump was also installed, which is expected to save most of the remaining gas consumption. Since 2019, we have been sourcing electricity exclusively from renewable energies at our European locations and also in the USA. In 2022, AIXTRON also replaced the existing lighting systems at its locations with state-of-the-art LED lighting technology in order to further reduce energy consumption.

Our employees are the key to our company's success. Their creativity and problem-solving skills, their commitment and their understanding of the industry in combination with an extraordinary willingness to perform are still the foundation of AIXTRON. In 2022 we were able to add more than 230 highly qualified colleagues. We were able to further increase the diversity and internationality of our workforce: We already employ people from around 50 nations (2021: 42).

At the same time, we are very focused on developing our employees. We are therefore very proud that we managed to more than double the learning hours per employee last year. In 2022 they amounted to 32.8 hours per employee (2021: 13.3 hours).



Our board members Dr. Jochen Linck, Dr. Felix Grawert and Dr. Christian Danninger (f.l.t.r.).

Our focus is also on the careful and responsible further development of our strong, AIXTRON-specific corporate culture. This also includes our awareness that we have a responsibility towards society. With our social and community activities, we therefore support initiatives and institutions that improve people's lives. In the course of the 2022 reporting year, we donated a total of EUR 50,000 to support war refugees from Ukraine in our region. The German Red Cross, the joint aid campaign of the RWTH Aachen and the university hospital as well as the emergency aid Ukraine of the "Aktion Deutschland Hilft" were considered.

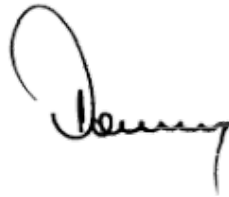
Effective and efficient corporate governance is the basis and sets the framework for our financial and non-financial success. Since many years, we have had highly developed corporate governance systems in place as the basis for good corporate management. For details, we refer to the further explanations in this report or in our annual report.

In this sustainability report we give you an overview of our sustainability strategy and its concrete implementation. We would like to present the results we have achieved to you and also show you what we are working on today and in the future.

The Executive Board of AIXTRON SE



Dr. Felix Grawert
Chairman of the Board



Dr. Christian Danninger
Member of the Board



Dr. Jochen Linck
Member of the Board



01

About this report

About this report

With this sustainability report, AIXTRON documents the ecological and social performance and the progress made in implementing its sustainability goals for the 2022 reporting year. This should make it clear to our stakeholders how ecological and social goals and measures have contributed to the company's success.

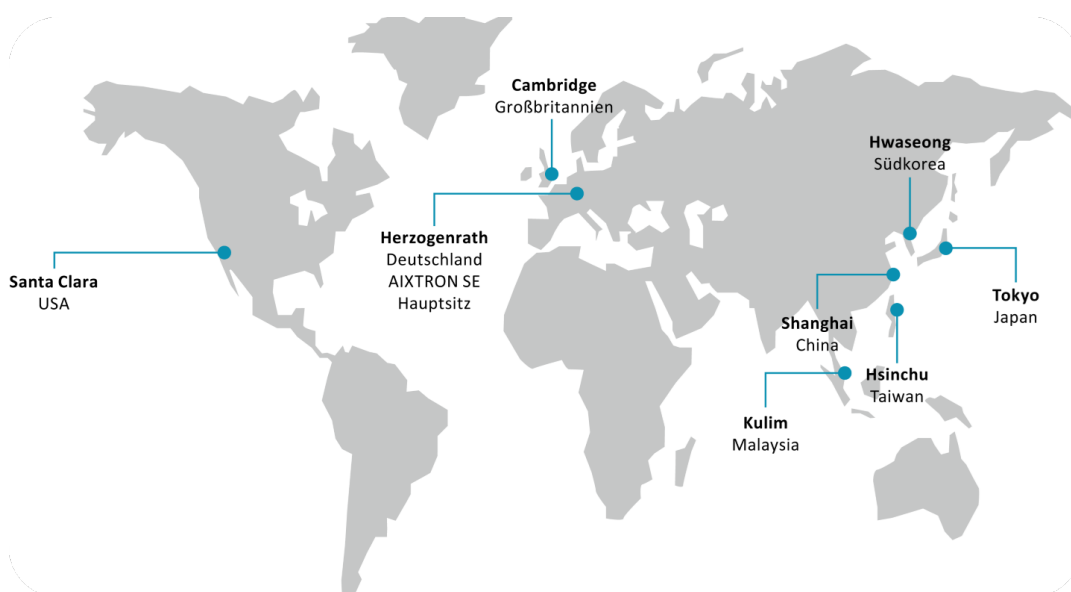
You can find the economic data and performance of AIXTRON for the 2022 financial year in our annual report.

The reporting period corresponds to the 2022 financial year, i.e. the period from January 01, 2022 to December 31, 2022.

The report covers the following locations and subsidiaries of the AIXTRON Group. These essentially include:

- AIXTRON SE, Germany
- AIXTRON Ltd., Great Britain
- AIXTRON, Inc., USA
- AIXTRON K.K., Japan
- AIXTRON Korea Co. Ltd., Korea
- AIXTRON China Ltd., China
- AIXTRON Taiwan Co. Ltd., Taiwan
- AIXTRON, Sdn. Bhd., Malaysia

As of December 31, 2022, AIXTRON has one production site and one research/development site in Herzogenrath and one in Cambridge (UK) as well as sales and service sites in the USA and Asia. The vast majority of our employees work at our location in Germany and a considerably smaller number in Great Britain. The focus of the reporting is therefore on these two locations.



Main site	Country	Utilization in 2022	Size (approx.)	Thereof biodiverse	Share of m ²	Share of employee
Herzogenrath	Germany	Company headquarters, R&D, production	60,304 m ²			
Herzogenrath		Production	7,875 m ²	Europe 29.7%	Europe 94.8%	Europe 81.3%
Cambridge	UK	R&D, production, customer service	5,146 m ²			
Santa Clara	USA	Sales, customer service	491 m ²	USA 0.0%	USA 0.6%	USA 3.4%
Hwasung	South Korea	Sales, customer service	1,151 m ²			
Shanghai	China	Sales, customer service	594 m ²			
Hsinchu	Taiwan	Sales, customer service	677 m ²	Asia 0.0%	Asia 4.6%	Asia 15.3%
Tokio	Japan	Sales, customer service	364 m ²			
Kulim	Malaysia	Customer service	766 m ²			

Overview of the locations per country including use, size, distribution of employees and distribution of biodiverse areas by region. AIXTRON understands biodiverse areas to include green areas, meadow meadows, hedges, shrubs, areas for insect hotels, etc.

We refer here to further information e.g. on the structure and management of the company in the chapters "Fundamentals of the Group" of the current annual report of the AIXTRON Group.

Editorial note


For better legibility, we refer to “employees” throughout this report. That includes all genders. The same applies to similar terms such as participants, representatives, etc.

Framework and Reporting

The sustainability report is prepared in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (GRI). The table at the end of the report provides information on the assignment of the content to the requirements of the GRI framework. On our AIXTRON website under the menu item "Sustainability," you will find accompanying explanations of the information and projects presented in this report.


With the report, we primarily want to give our interest groups (stakeholders) the most comprehensive possible picture of the non-financial aspects and key figures of our business activities. Individual key figures were recorded for the first time in the 2022 reporting year and included in this report. If in individual cases, we do not have any data from previous years, it is not possible to compare these key figures with previous years. In this case, this is indicated by a corresponding note.

The requirements of the German CSR Directive Implementation Act oblige AIXTRON to publish a non-financial statement. With our separate non-financial report, we meet the requirements that arise for us from Section 315b (1-3) HGB.

All sections of text, tables, and graphics in the sustainability report that are assigned to the non-financial report are marked with an omega symbol . Therefore, not all information contained in this report is also a mandatory part of the separate non-financial statement. References to information in the management report are part of the non-financial statement.

According to Section 289c (3) HGB, we are obliged to examine topics for their "double materiality". Dual materiality requires disclosures on non-financial aspects to be made as soon as the following criteria are met:

1. The information is necessary to understand the course of business, the business result, and the position of the company.
2. The information makes it possible to understand how the company's business activities affect non-financial aspects.

We checked the issues identified for this double materiality. The topics that fit this definition are also marked in the report by an omega sign . These topics are assigned to the respective chapters in this report. In terms of Sections 289c Paragraphs 2 and 3, 315c HGB, no "material risks" have been identified either with regard to our business activities or with regard to our business relationships, products, and services that have or will have "very likely serious negative effects".

The non-financial information and key figures on our sustainability activities given in this report were subjected to an independent review with "limited assurance" by KPMG AG Wirtschaftsprüfungsgesellschaft, Duesseldorf (Germany) using the relevant auditing standards for sustainability reporting (ISAE 3000 Revised).

Dialogue with our stakeholders

We maintain trusting and long-term partnerships with our stakeholders. In doing so, it is important to us - just as in our company to each other - that we treat each other in a spirit of partnership, respectful and constructive. We see ourselves as part of this society. That is why we are committed to community and social projects – particularly in the region where our headquarters are located.

The key interest groups for AIXTRON are:

- Customers
- Employees
- Capital market participants
- Delivery
- State and politics
- Media
- Science and Research

The identification of the most important stakeholders and their interests are crucial for a successful stakeholder dialogue (see also the chapter on [sustainable corporate management and sustainability strategy / materiality analysis](#)). The interest groups were categorized and prioritized based on the following criteria:

- Interests of the stakeholders
- Stakeholder Influence
- Stakeholder expectations of AIXTRON
- Dependence of stakeholders on AIXTRON
- Value for AIXTRON to get in touch with this stakeholder

We regularly reflect on the process for identifying the most important stakeholders and the relevant topics and adjust them where necessary.

Stakeholder	Topics of dialog	Forms of dialog
Capital market	<ul style="list-style-type: none"> • Business performance • Product innovations • Application possibilities 	<ul style="list-style-type: none"> • Sustainability • Strategy
Customers	<ul style="list-style-type: none"> • Product quality and safety • Sustainable technologies • Product energy efficiency 	<ul style="list-style-type: none"> • Human rights • Compliance
Suppliers and business partners	<ul style="list-style-type: none"> • Product quality and safety • Environmental protection 	<ul style="list-style-type: none"> • Responsible purchasing • Compliance with AIXTRON's standards
Employees	<ul style="list-style-type: none"> • Health and safety • Career advancement • Co-determination • Training opportunities 	<ul style="list-style-type: none"> • Compensation and benefits • Work-life balance / parental leave • Diversity & equal opportunities
Science and university	<ul style="list-style-type: none"> • Development of new technologies • Promotion of research and teaching 	<ul style="list-style-type: none"> • Networking of industry and research • Recruitment / PhD students
Media representatives	<ul style="list-style-type: none"> • Innovation and technologies • Semiconductor technologies 	<ul style="list-style-type: none"> • AIXTRON as employer • Finance
Government and politicians	<ul style="list-style-type: none"> • Eco-efficiency • Innovation and technology promotion 	<ul style="list-style-type: none"> • Economic and labor policy

Most important stakeholders, topics and forms of dialogue



02

Sustainable corporate management and sustainability strategy

Sustainable corporate management and sustainability strategy

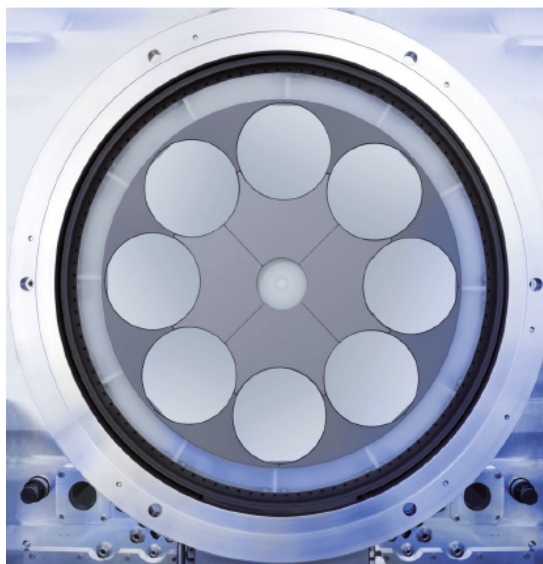
Who we are and what we do

The AIXTRON Group (“AIXTRON” or “the Company”) is a leading provider of deposition equipment for the semiconductor industry. The company was founded in 1983 and is based in Herzogenrath (Aachen region) with branches and representative offices in Europe, the USA, and Asia. At the end of 2022, we employed a total of 940 people (headcount). Since 2020, AIXTRON has been listed in the MDAX in addition to the TecDAX.

AIXTRON's business activities include the development, production, and installation of systems for the deposition of complex semiconductor materials, the development of process technologies, consulting, and training as well as customer support.

Our products are used by customers worldwide to manufacture high-performance components for power electronic and optoelectronic applications based on compound semiconductors. These devices are used in a variety of innovative applications, technologies and industries. These include, for example, Micro LED and display technologies, data transmission, communication, signaling and lighting technology, sensors and power electronics based on silicon carbide (SiC) and gallium nitride (GaN), as well as many other demanding high-tech applications.

In the 2022 reporting year, we invested EUR 58 million (2021: EUR 57 million) in research and development with revenues of EUR 463 million (2021: EUR 429 million). This corresponds to around 13% of our revenues, with an equity ratio of 74% (2021: 80%). Asia accounted for the lion's share of our revenues at almost 68% (2021: 70%), followed by Europe at 14% (2021: 20%) and North America at 18% (2021: 10%).



Our self-image and our values

In addition to economic success, our business activities also focus on ecological and social challenges. Sustainability is a prerequisite for long-term economic success.

As a supplier to pioneering key industry, we conduct our business prudently and responsibly, taking into account the interests of key stakeholders. The aim is to act sustainably at all levels of the value chain and to further promote sustainability in the company.

Acting responsibly is one of four corporate values at AIXTRON and is therefore a central part of our corporate culture. The Board of Directors and our managers have a particular responsibility and act as role models.

As a future-oriented technology company, efficient and resource-optimized management has always been part of our core business. Thanks to our technologies and systems, semiconductors are becoming more and more efficient and resource-saving, which increases the efficiency of a large number of end products.

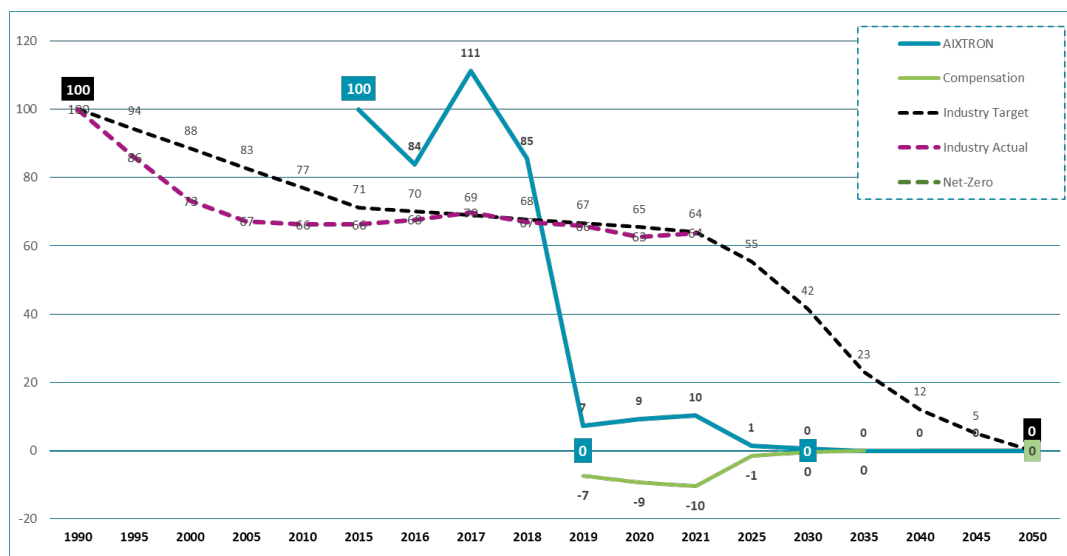
This applies to applications from areas such as energy supply, electromobility, entertainment electronics, or communication. Our products thus contribute to reducing not only our own ecological footprint but also that of our customers and especially that of the end consumers in these areas (see also the chapter on [innovations as a competitive factor](#)).

Our values	Excellent. Leading position through goal-oriented action.
	Forward thinking. Provide impulses for the future instead of following them.
	Open minded. Communicate openly for a healthy corporate culture.
	Responsible. Setting a good example for sustainable success.

Our sustainability strategy

In recent years, sustainability has been increasingly anchored in our company as an important principle of corporate management. The cornerstone for our current strategy was laid in 2018. Two years later, concrete sustainability goals were defined and incentivized by the Supervisory Board and Board of Directors. In doing so, we have also given non-financial goals greater weight.

An important goal as part of our sustainability strategy was to become carbon neutral, which we achieved in 2019. We obtain our electricity from renewable energies and compensate for all unavoidable CO₂ emissions through climate protection projects. The goal of climate neutrality was thus achieved much earlier than the goals set by the federal government for industry.



Scope 1&2; AIXTRON Index 100 = 7.411 t CO₂e in 2015; Industries Index 100 = Climate targets BMUV (284 Mio. t CO₂e in 1990)

Since 2021 we have also been reporting on the upstream value chain (Scope 3). This analysis was further optimized in the current reporting year. We also determined the values for the previous year according to the new, stricter criteria and adjusted them retrospectively.

This corresponds to our claim to continuously improve our sustainability activities, the associated guidelines, standards and programs. In this way, we can better meet the needs and expectations of our stakeholders.

Against this background, we have defined five priority topics in our sustainability strategy.



The five core topics of the AIXTRON sustainability strategy

Some of these topics were defined in our “Sustainability Policy” and are also based on the United Nations Sustainable Development Goals (SDG).

The SDGs we support relate to the following goals:

- No poverty
- Health and well-being
- Quality education
- Gender equality
- Affordable and clean energy
- Decent work and economic growth
- Industry, innovation and infrastructure
- Sustainable consumption and production
- Measures for climate protection
- Life on land

These goals serve as orientation for our daily and strategic work.

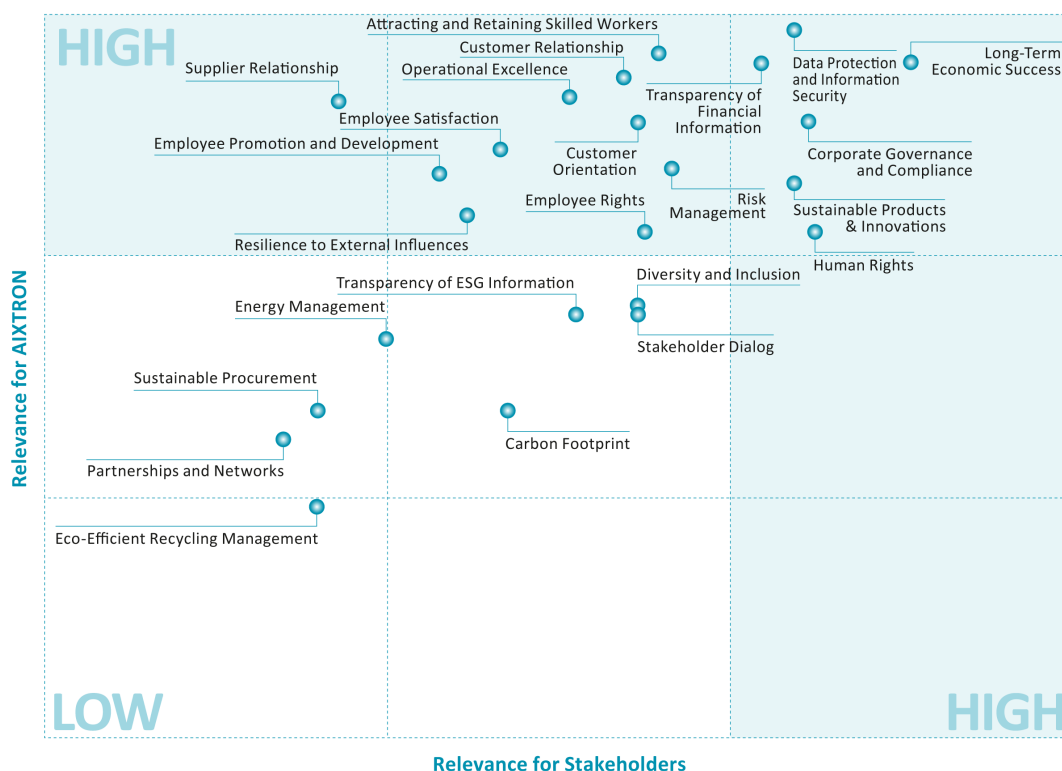


The SDGs supported by AIXTRON relate to the above goals

📍 Identification of material issues

In 2020, we systematically created a materiality analysis for the first time, thereby creating a comprehensive process that evaluates economic, ecological and social issues that are important to us. The focus is on aspects that have a significant impact on the company. To this end, internal experts and employees who are in constant contact with our stakeholders were surveyed. In 2022, we further optimized our process and already aligned it with the future Corporate Sustainability Reporting Directive (CSRD). In particular, both the inside-out and the outside-in perspectives were taken into account when deriving key subject areas.

We were also able to cover the external perspective through a comprehensive internal survey, which was based on the expertise and many years of experience of our employees. As a result, five topic clusters were defined, which we have shown in the overview below. In the 2022 reporting year, we reviewed this allocation and made the necessary changes. The following two overviews illustrate the importance of the respective topic complexes and their chronological classification - across all stakeholders.



AIXTRON materiality analysis 2022

The following overview shows the stakeholders' assessment of the respective time horizon of the subject areas considered to be material.

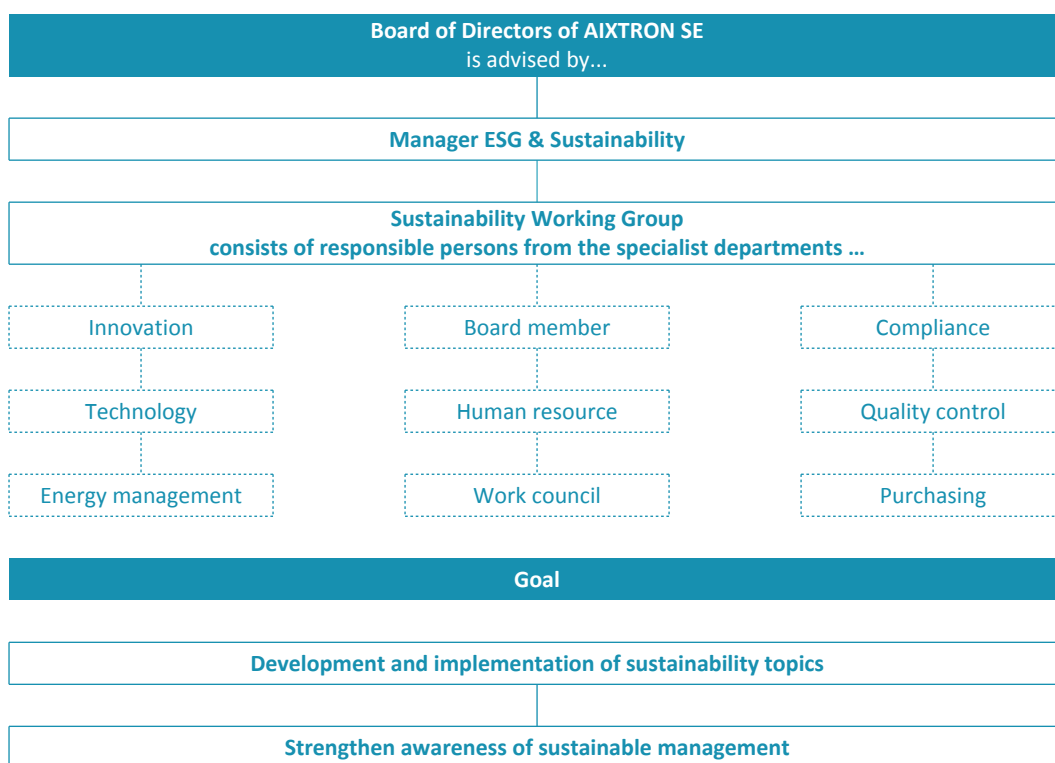
Data protection and information security		
Transparency of Financial Information		
Corporate Governance and Compliance	Long-term economic success	
Attracting and retaining qualified workers	Sustainable products and innovation	
Customer relationships	Human rights	
Customer focus	Operational excellence	
Risk management	Workers rights	
Supplier relationships	Employee satisfaction	
Resilience to external influences	Employee promotion and -development	...
1-2 years	3-5 years	> 5 years

In the following overview, the subject areas considered essential by the stakeholders are assigned to the three overarching subject areas of environment, social affairs, and corporate management.

Environment	Social	Corporate governance
Sustainable products and innovation	Human rights	Long-term economic success
Carbon footprint	Workers rights	Data protection and information security
	Employee satisfaction	Transparency of Financial Information
	Employee promotion and -development	Corporate Governance and Compliance
	Attracting and retaining qualified workers	Customer relationships
		Customer focus
		Risk management
		Operational excellence
		Supplier relationships
		Resilience to external influences

Organizational anchoring

The Board of Directors of AIXTRON SE bears overall responsibility for the topic of sustainability. It is advised by the ESG and Sustainability department and decides on important sustainability issues. The respective departments and branches of AIXTRON SE are responsible for implementing the goals and projects decided by the Board of Directors. The sustainability working group consists of those responsible for the respective topic, e.g. B. innovation, technology, energy management, human resources, works council, compliance, quality assurance or purchasing. The aim is to develop relevant sustainability topics along the corporate strategy, to strengthen awareness of sustainable management, and to anchor it in all areas of the company. Within the working group, those responsible regularly report actively on the progress of individual projects in the company and drive them forward. The cornerstones of our sustainability management for all units of AIXTRON SE are formally and bindingly laid down in our CSR guidelines.





03

Environment

Environment

We see the protection of the environment as a key factor in the sustainability of our business model and align our actions accordingly. In addition, we are in close contact with our customers and suppliers. Our innovative technologies and products, on which our success is based and whose efficiency and performance convince our customers worldwide, make a decisive contribution.

Technology and climate protection

Using efficiencies, saving natural resources and thus driving current megatrends forward - AIXTRON actively supports the topics of decarbonization, digitization and electromobility with its products. Our systems are therefore the key to numerous future technologies that help to significantly reduce CO₂. With our innovations in the field of power electronics based on silicon carbide and gallium nitride as well as optoelectronics, we support the development towards a sustainable and networked society.



Dr. Felix Grawert · Chairman of the Board (CEO)

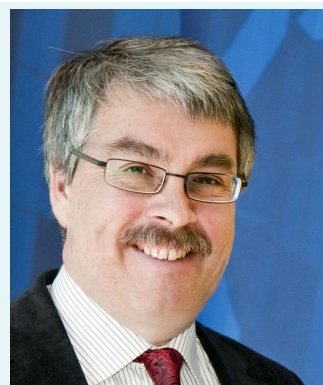
Our customers benefit from forward-looking solutions that save costs, conserve resources, and are energy-efficient in equal measure. Our customers include companies from the areas of electromobility (drive trains, charging infrastructure), renewable energies (network circuits), IT infrastructure (power supply), consumer electronics (3D sensors, fast chargers) as well as data transmission (fiber optic networks) and telecommunications (5G network).

We also make a significant contribution to digital progress in the areas of display technology (mini and Micro LEDs), lighting and UV radiation for disinfection/hygiene. Components for a variety of innovative applications, technologies and industries are manufactured on AIXTRON systems.

Highest precision in the manufacture of power electronics

As a technology leader, we have been shaping the further development of power electronics and their manufacturing processes for more than 30 years.

Power electronics based on gallium nitride (GaN) and silicon carbide (SiC) are significantly more energy-efficient than conventional silicon-based power electronics: If GaN components are used in the power supply of large data centers, for example, 30 to 40% of the energy losses that occur during conversion can be saved. The global IT infrastructure has a significant impact on the climate. It is currently already responsible for around 3% of global CO₂ emissions and is becoming increasingly important in view of the constantly growing amount of data.



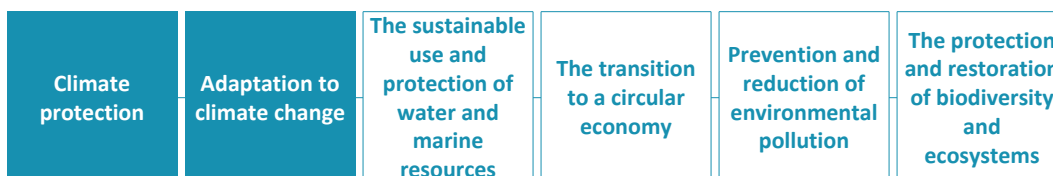
Prof. Dr. Michael Heuken
Vice President Advanced Technologies

Our technologies are at the heart of sustainable power electronics and thus support global efforts to combat climate change.



EU Taxonomy

With the Action Plan on Sustainable Growth, the EU Commission aims to make the economic and financial system in the EU more sustainable. Climate neutrality should be achieved by 2050, i.e. the same amount of CO₂ emissions should then be avoided or eliminated as is emitted. The core of this action plan is the EU taxonomy regulation, a standardized classification system for sustainable economic activities. It defines six environmental goals:



According to EU taxonomy guidelines, economic activities are “environmentally sustainable” if they

- make a significant contribution to achieving one or more of the six environmental goals mentioned,
- do not significantly harm the achievement of the five other EU environmental targets (“Do no significant harm”; DNSH), and
- comply with minimum regulations for occupational safety and human rights (“minimum safeguards”)

Technical assessment criteria are used to assess whether an economic activity makes a significant contribution to one of the goals and does not significantly impair the achievement of the other five goals. Criteria are currently only available for the first two EU environmental goals (climate protection/adaptation to climate change). Therefore, information only needs to be provided on these two targets for the 2022 financial year.

- Activities are “eligible” for taxonomy if they can be assigned to taxonomy criteria.
- Activities are “taxonomy-aligned” (aligned) if the taxonomy-eligible activities also meet the criteria.

Against the background of the EU Taxonomy Regulation, we are reporting in the 2022 financial year on the taxonomy-eligible (eligible) and taxonomy-aligned (aligned) share of revenues, capital expenditure (CapEx) and operating expenses (OpEx) of our economic activities.

Method

In the 2021 financial year, a project to implement the taxonomy requirements in relation to the EU environmental goals [1. Climate change mitigation](#) and [2. Climate change adaptation](#) was started. The project team, consisting of experts from different areas, first identified the economic sector “Manufacture of machines for other specific economic sectors a. n.g.” (NACE Code 28.99) as applicable to AIXTRON. Subsequently, our economic activities were assigned to the relevant taxonomy criteria and interviews and workshops were conducted with the respective contact persons and experts from the responsible departments.

The aim of the discussions was to check whether the economic activities can be assigned to taxonomy criteria (eligibility check) and whether they actually meet the corresponding technical taxonomy criteria (alignment check). The assessments of the experts were documented and corresponding evidence and evidence were examined.

The analysis has been updated for the 2022 financial year, in particular taking into account the interpretation of the taxonomy specifications. The analysis took into account aspects of materiality and cost/benefit considerations. AIXTRON has identified the following activities as taxonomy-eligible with regard to EU environmental goal 1:

- 3.1 Manufacture of renewable energy technologies
- 3.6 Manufacture of other low-CO₂ technologies
- 7.3 Installation, maintenance and repair of energy efficient devices
- 7.6 Installation, maintenance and repair of renewable energy technologies
- 7.7 Acquisition and ownership of buildings



The set of criteria “Production of other low-CO₂ technologies” is of particular relevance for the supplier industry in mechanical and plant engineering. This set of criteria includes economic activities that produce technologies that aim to achieve significant savings in life-cycle greenhouse gas emissions and are proven to achieve them compared to the best performing alternative technology available on the market. Unlike criteria sets 3.1, 7.3, 7.3 and 7.7, criteria set 3.6 contains several terms that require interpretation, which are defined below.

For the identification of taxonomy-eligible economic activities within the meaning of Criteria Set 3.6, those technologies were identified from AIXTRON's technology portfolio that shows low CO₂ emissions in their application. As a result, only those technologies that lead to significant savings in greenhouse gas emissions were classified as both taxonomy-eligible and taxonomy-aligned. Against this background, both our taxonomy-eligible and our taxonomy-aligned revenues correspond, as do CapEx and OpEx. The reduction in greenhouse gas emissions must be significant. However, a minimum value is not specified.

It can be assumed that the purpose pursued with the "EU Action Plan on Financing Sustainable Growth" is to focus on technological leaps rather than efficiency increases within the existing system: A saving of 20% should regularly be significant and thus a significant one contribute to climate protection. AIXTRON has set this value as the minimum value for significant savings in CO₂ emissions. A reference technology is the technology that dominates the market and not a possibly very efficient niche technology with only a very small market share. With regard to the reference standard, we therefore only used this reference technology for the evaluation.

The analysis of the taxonomy conformity was carried out as follows:

- **Substantial Contribution:** Compliance with the technical assessment criteria was checked individually for each taxonomy-eligible business activity.
- **Do not significant harm (DNSH):** DNSH compliance with the EU environmental goals **2. Adaptation to climate change**, **3. Sustainable use and protection of water and marine resources** and **6. Protection and restoration of biodiversity and ecosystems** were assessed for the Herzogenrath and Cambridge locations. The DNSH conformity with regard to the EU environmental goals **4. Circular economy** and **5. Pollution prevention and control** were assessed at the group level and at the level of the business activity.
- **Minimum Safeguards:** A Group-wide approach to ensuring the Minimum Safeguards requirements was pursued, which appropriately takes into account the risk situation, the circumstances, and the context of AIXTRON. In external relations, we limit ourselves to the upstream supply chain as part of a risk-based approach. We consider the downstream value chain ("business relationships") to be uncritical in this regard. Country and product-specific aspects in particular were taken into account as part of the risk-based approach. Due to the focused business model and the demanding high-tech requirements, AIXTRON relies on a relatively small number of key suppliers, most of whom are based in the region. In the 2022 financial year, for example, more than 98% of the total order volume came from suppliers in OECD countries, which are generally considered to be low-risk. A detailed risk analysis was carried out for the remaining suppliers from potentially risky countries. These suppliers are essentially local needs that are not strategically relevant to the company. AIXTRON regularly informs suppliers about current requirements. The Minimum Safeguards requirements are ensured using the existing compliance management structures (e.g. sustainability guidelines, global standards of employment, code of ethics, management system for conflict minerals, obligations on human rights within the framework of the general terms and conditions, and the supplier manual, supplier audits, whistleblowing mechanism).

🔍 Criteria for climate protection and adaptation to climate change

As part of this analysis, the following taxonomy-eligible and at the same time taxonomy-aligned economic activities were identified at AIXTRON, which make a significant contribution to environmental goal **1. Climate change mitigation**.

Production of other low-CO₂ technologies (3.6)

AIXTRON develops, produces and sells systems for the deposition of compound semiconductors. This separation is the essential step in the production of compound semiconductors, which contribute significantly to avoiding energy losses and thus to a significant saving of CO₂.

Power semiconductors with a wide-band-gap (WBG) based on gallium nitride (GaN) or silicon carbide (SiC)

WBG power transistors make a significant contribution to energy savings compared to established silicon-based technology through significantly reduced energy losses in the conversion of current and voltage (e.g. when charging and discharging batteries and electric vehicles or in power supply units and switches in the power grid). AIXTRON enables research into more energy-efficient power transistor designs and enables industry to mass produce the new devices.

Micro LEDs for next-generation displays

Micro LEDs make a significant contribution to energy savings by reducing the energy consumption of displays by up to 90% compared to established LCD technology. Imaging is done selectively, i. H. Light is generated only in the pixels necessary to display the image. Black areas of the image remain dark and consume no energy, whereas conventional technology requires the shadowing of a permanently bright backlight. AIXTRON enables industry to mass produce new displays based on Micro LEDs.

Laser diodes for data communication

The transition from wired to optical telecommunications, especially in the "last mile", contributes significantly to reducing the energy consumption of telecommunications networks while increasing data throughput at the same time. AIXTRON enables research into more energy-efficient and faster laser diode designs and enables the mass production of the new fiber optic modules by industry.

Quantum technology

AIXTRON is researching the technology for depositing complex nanostructures. These nano-materials are used, for example, in neural computers or in quantum sensors, which are able, among other things, to enable machine vision, speech recognition and data classification with 500 to 1000 times lower energy consumption.

Manufacture of renewable energy technologies (3.1)

AIXTRON develops, produces and sells systems on which compound semiconductors are made that generate electricity from solar energy.

Solar cells

Compound semiconductors for concentrator photovoltaic (CPV) solar cells are much more efficient at generating electricity from solar energy than conventional crystalline silicon-based solar cells. Solar cells made from compound semiconductors are often used for high-tech applications such as B. used in space travel.

Within the framework of the analysis carried out, no economic activities were identified that make a significant contribution to environmental goal [2. Climate change adaptation](#).



Compliance with the „Do no significant harm“ (DNSH) criteria

With regard to the EU environmental target [2. Climate change adaptation](#), there are no indications that AIXTRON activities increase the adverse effects of the current and expected future climate on AIXTRON itself or on people, nature, or assets. The AIXTRON production sites are not subject to any significant physical climate risks.

The criteria for the EU environmental target [3. Sustainable use and protection of water and marine resources](#) essentially relates to legal and official requirements that AIXTRON is obliged to comply with. Water is not used to any significant extent in the production process at AIXTRON. The systems are to be kept away from water.

With regard to environmental goal [4. Transition to a circular economy](#), there are general requirements such as long usability, easy maintenance or dismantling. Most of the components are designed for very long service life, can be recycled and still have a monetary value at the end of their useful life (e.g. steel, stainless steel, aluminium, copper, electronics).

With regard to the EU environmental goal [5. Pollution prevention and control](#), there are no indications that AIXTRON is violating the corresponding specifications. AIXTRON does not manufacture, place on the market or use substances of very high concern in terms of the taxonomy specifications.

With regard to the EU environmental goal [6. Protection and restoration of biodiversity and ecosystems](#), environmental impact assessments and assessments are carried out where there is a corresponding requirement.

Information on compliance with the minimum requirements with regard to occupational safety and human rights can be found in the "[Occupational health and safety](#)" chapter and in the "[Conflict minerals](#)" chapter in this report and on the [AIXTRON website](#) in the sustainability section.





Definition of revenue, CapEx and OpEx

To determine the key figures (KPIs) to be reported, the taxonomy-eligible and taxonomy-aligned net revenues, investments (CapEx) and operating expenses (OpEx) are set in relation to the total net revenues, the total investments or the total operating expenses to be taken into account according to the taxonomy specifications. The definition of the respective KPI is based on Annex I of the Delegated Act to Article 8 on the content and presentation of the information to be disclosed.

Double counting is avoided by clearly assigning the taxonomy-eligible or taxonomy-aligned revenues, CapEx and OpEx to a taxonomy-eligible or taxonomy-aligned economic activity.

Revenue within the meaning of the EU Taxonomy Regulation is defined as net revenue in accordance with International Financial Reporting Standards (IFRS) as reported in the consolidated income statement and relates only to fully consolidated subsidiaries. Further information on revenues can be found in the section “development of revenues” on page 80 of the annual report. The majority of the taxonomy-aligned AIXTRON revenues are attributable to the sale of the systems presented on page 5 and can be assigned to taxonomy criteria set 3.6.

The calculation of **CapEx within the meaning of the EU Taxonomy Regulation** is carried out on a gross basis, i.e. without taking into account revaluations or scheduled or unscheduled depreciation. CapEx includes investments in long-term intangible or tangible assets as reflected in the consolidated balance sheet. Further information on CapEx can be found in the investments section on page 94 of the annual report.

The numerator corresponds to that part of the CapEx contained in the denominator that relates to assets or processes associated with taxonomy-aligned economic activities. Other CapEx within the meaning of Article 1.1.2.2. b) or c) of the delegated act on Article 8 of the EU Taxonomy Regulation (C(2021) 4987 final) of July 6, 2021, does not apply.

OpEx within the meaning of the EU Taxonomy Regulation takes into account non-capitalizable expenses that are recognized in the consolidated income statement. In the 2022 reporting year, in addition to the expenses for research and development, the expenses for building renovation measures, short-term leasing, maintenance, and repairs were also included, which were considered immaterial in the previous year's report. The values for the 2021 financial year have been adjusted accordingly.

	in EUR Mio.	2022			2021		
		Revenue	CapEx	OpEx	Revenue	CapEx	OpEx
Total		463.2	35.4	61.2	429.0	19.4	60.1
	%	100%	100%	100%	100%	100%	100%
Taxonomy eligible		270.9	20.0	44.7	243.2	7.6	43.0
	%	58%	56%	73%	57%	39%	72%
Taxonomy aligned		270.9	13.6	44.7	243.2	7.6	43.0
	%	58%	38%	73%	57%	39%	72%
Taxonomy not eligible		192.3	15.4	16.5	185.8	11.8	17.1
	%	42%	44%	27%	43%	61%	28%

taxonomy-eligible and taxonomy-aligned revenues, CapEx and OpEx shares



🔍 Innovations as a competitive factor

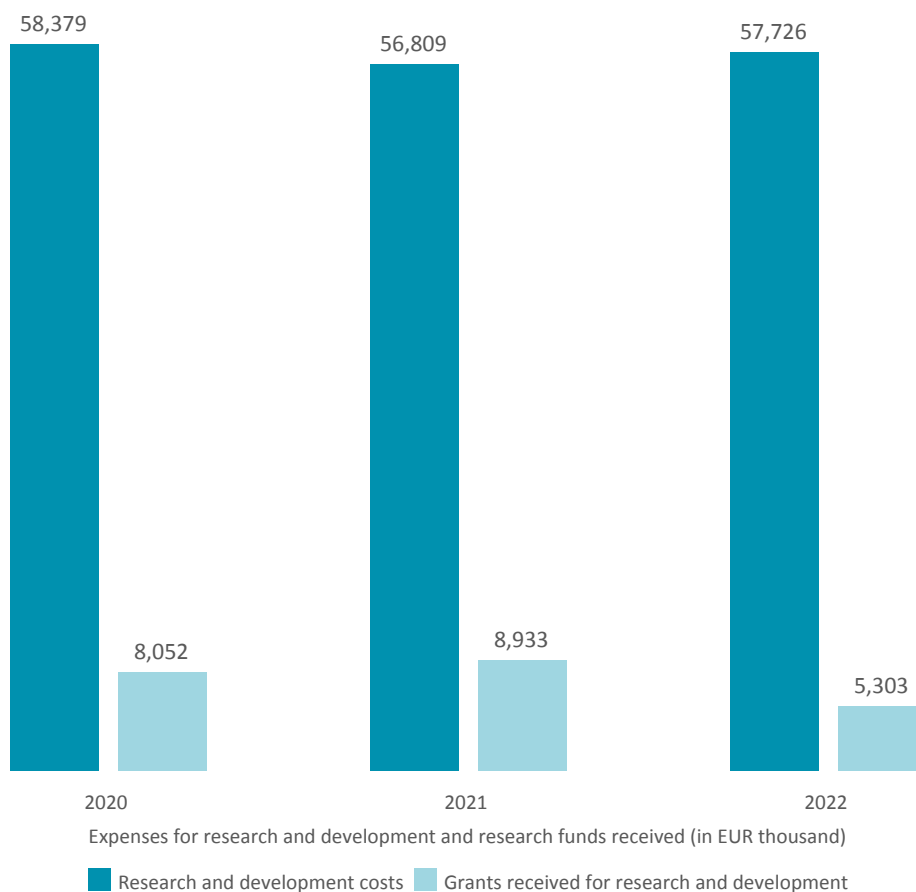
For us, new technologies are the result of targeted investments in our research and development. The R&D process starts with basic research on materials and then moves on to processes and procedures. A key result of our research work is our innovative product portfolio with technology solutions that enable our customers to manufacture products that save greenhouse gas emissions during their use.

We work together with renowned universities, research centers, and industrial partners around the world in order to implement demanding projects on a national and international level in partnership. We benefit from the fact that we can work together with qualified partners, but at the same time, we are also in demand as a partner for research projects.

When developing innovations for materials and processes, we work together with our partners in nationally or Europe-wide funded joint projects. In close cooperation, solutions are created that should lead to marketable products.

In the "Research and Development" section of the AIXTRON Annual Report 2022, you will find some examples of research projects in which AIXTRON is involved.

🔍 Expenditures and grants for R&D



Climate balance sheet

In the previous year, a climate balance including an overview of the total CO₂ emissions (Scope 1, Scope 2, and Scope 3) was drawn up for the first time. For the current report, the analytical instruments used in the previous year were further optimized and the values determined for 2021 were once more checked and adjusted.

The newly determined value for 2021 is 50,258 CO₂e*. For the year 2022, AIXTRON will have emissions of 53,298 CO₂e. The value for 2022 as a whole is therefore slightly higher than the values determined for 2021. Reasons for this increase include the good order situation and production capacity utilization as well as more business trips again after various COVID travel restrictions were lifted in many places.

		2022	Δ	2021
Environment Climate balance sheet	Scope 1 emissions (CO ₂ e in t)	120	-183	304
	Scope 2 emissions (CO ₂ e in t)	609	110	499
	Scope 3 emissions (CO ₂ e in t)	52,569	3,114	49,456
Total emissions volume (Scopes 1-3) (CO₂e in t)		53,298	3,040	50,258
CO₂e Intensity (Scope 1-3) (CO₂e in t/EUR Mio. Revenue)		115	-2	117

Overview of CO₂ emissions [in tons of CO₂e]

* To standardize the climate impact of the different greenhouse gases, we use the representation of the CO₂ equivalents (CO₂e) as the unit of measurement.

CO ₂ e in t			2022	2021
Scope 1	Scope 1.1	Fuel consumption in stationary plants	86	268
	Scope 1.2	Fuel consumption in mobile plants	34	31
	Scope 1.3	Other emissions	0	5
Scope 1 total			120	304
Scope 2	Scope 2.1	Purchased energy	609	499
Scope 3	Scope 3.1	Purchased goods and services	34,768	31,008
	Scope 3.3	Fuel and energy-related emissions	817	475
	Scope 3.4	Upstream logistics	14,013	16,370
	Scope 3.5	Waste generation	81	13
	Scope 3.6	Business travel	1,732	1,284
	Scope 3.7	Employee commuting	1,158	306
	Scope 3 total			52,569
			53,298	50,258

Gas consumption (Scope 1.2) was not recorded at all locations due to the small amounts. No quantities were incurred in scope 1.4. Scope 3.2, 3.8, 3.10 and 3.13-3.15 do not apply to AIXTRON. A separate identification of Scope 3.9 and 3.11-3.12 is not possible due to the data situation.

Compensation projects in Peru and Uganda

We have been offsetting the unavoidable CO₂ emissions of our business activities (Scope 2 and parts of Scope 3 emissions) since 2019 by supporting two climate protection projects certified to the highest standard. We chose the projects because of the positive impact on the environment, climate and residents. The emission savings are regularly checked and confirmed by independent experts. The funding period for the two projects currently extends to 2023. Further details on the projects that AIXTRON supports are published on the company website (<https://www.aixtron.com/>).

We support certified climate protection projects

Protection of the rainforest

The project for sustainable forestry in the Peruvian region "Madre de Dios" implements measures and initiatives for the sustainable use of the Amazon forest together with the residents and opens up alternative sources of income for the local population.



Energy efficient and healthier cooking stoves

In Uganda, we support the spread of energy-efficient cooking stoves in private households. The improved stoves help the families to save up to 50% fuel and thus reduce the pollution of the air in kitchens and living rooms.



Energy management and consumption indicators

Q *Confirmation of the certification of our energy management*

As a basis for our efforts to further reduce our energy requirements, we implemented an energy management system according to the ISO 50001:2011 standard at the German locations of AIXTRON SE many years ago. The successful conversion to the requirements of ISO 50001:2018 was confirmed by the re-certification audit in 2020, which is valid until 2023.

Q *Further development of the award-winning energy management concept*

At our German locations, we work continuously to improve our energy management systems. To do this, we use extensive evaluations with which systems and processes can be controlled and optimized in a targeted manner. In order to improve the evaluation, we continued the concept of the cloud-based dashboard for the 2022 reporting year by implementing new meters in order to optimize the control technology of the energy center. The system, consisting of more than 160 electrical meters, has been further optimized. The data from these meters is recorded and evaluated centrally every 15 minutes. In addition to data acquisition, the system offers an extensive determination, evaluation, and documentation tool. In this way, targeted measures to reduce CO₂ emissions can be initiated and the corresponding progress can be monitored immediately.

Electricity from renewable energy sources and photovoltaics

Since 2019, we have been sourcing electricity exclusively from renewable energies at our European locations and also in the USA. Due to the small quantities, the purchase of electricity from renewable energy sources in Asian countries has not been economically feasible up to now. We intend to source electricity from renewable energy sources in these regions as well from 2023. In addition, we installed a photovoltaic system at our Kaiserstrasse location many years ago. 3,293 kWh of electricity generated in 2022 will be 100% fed into the grid.

Practical examples

Derived from our systematic energy management, we have already initiated and implemented many projects and measures with the aim of sustainably reducing energy consumption. The most important projects of the past year are listed here as examples:

New 4-pipe air heat pump compensates for gas consumption

For a number of years, we have been successfully using waste heat from the cooling processes in our laboratories at our central location in Herzogenrath, and using it specifically for heating the building. It has already been possible to save 90 percent of gas and 10 percent of electricity consumption. A new 4-pipe air heat pump was installed at the end of 2022, which will avoid most of the remaining gas consumption. The device is the latest technology available on the market: the combination device can be used for both cold and hot water production. To do this, it uses independent and mutually closed circuits. This enables us to further reduce the footprint of CO₂ emissions that we directly cause.

State-of-the-art lighting technology creates even more energy efficiency

AIXTRON replaced the existing lighting systems at its worldwide locations with the latest LED lighting technology in 2022. This will enable us to further reduce energy consumption. Since the installation was carried out gradually over the reporting year, it will only be possible to compare with previous values from 2023 on.



** When calculating the energy and CO₂ savings, we were advised by external companies who gave us technical advice with their engineering knowledge and specialist know-how. All calculations were based on a systematic and scientifically sound approach with specific assumptions for the calculations.*



Energy saving targets achieved for the fifth year in a row

In the past fiscal year, we were able to increase our revenues significantly, which was accompanied by a higher demand for electricity. However, thanks to the various energy-saving projects, we were able to mitigate the increase in overall consumption. Energy requirements rose by 5.2% in the past financial year, with energy consumption per EUR million in revenues falling by -2.6%.

Our successes are confirmation and incentive at the same time: Every year we review our status quo and set ourselves new, ambitious energy-saving targets. At the same time, this is also an economic consideration for us, because the lower consumption also reduces our costs.

We are constantly developing measures to increase energy efficiency. Our goals primarily relate to our research and production sites in Germany and Great Britain.

The electricity requirement in 2022 was 12,677,293 kWh higher than in 2021 (10,883,534 kWh). The reason for this was the continued strong growth in business volume and the continuing good order situation.

The demand for natural gas (426,321 kWh) and district heating (1,973,982 kWh) has fallen significantly to a total of 2,400,303 kWh compared to 2021 (3,452,892 kWh). This is proof of the effectiveness of our ambitious energy management and our strategy of using waste heat and state-of-the-art heat pumps. In this context, however, it should also be noted that consumption in 2021 was significantly higher than in 2020. This was mainly due to certain COVID protective measures.



Power consumption

(kWh)	Energy	2022	2021	Δ
Natural gas	Scope 1	426,321	1,326,842	-67.9%
Electricity	Scope 2	12,677,293	10,883,534	16.5%
Long distance heating	Scope 2	1,973,982	2,126,050	-7.2%
Total		15,077,596	14,336,426	5.2%
Energy intensity	(kWh/EUR Mio. Revenue)	32,553	33,422	-2.6%

Energy consumption in the AIXTRON Group for heating, district heating and electricity

Waste management

In the manufacture of our systems, AIXTRON uses numerous materials whose procurement, transport, use and disposal have an impact on people and the environment. AIXTRON has made it its goal to reduce this influence to a minimum. Avoiding waste has the highest priority, i.e. keeping material consumption and disposal quantities as low as possible. In the area of our waste management, separate and safe disposal is therefore very important to us, depending on the type of waste and recycling process. We record and classify locally the quantities that are recycled or disposed of, distinguishing between hazardous and non-hazardous waste. Residual materials are reused whenever possible. Waste is recycled materially or thermally or — if this is not feasible - disposed of properly.

Disposal of hazardous waste

Hazardous substances and materials are used in the process chambers of our systems and sometimes also in the pipelines, which must be disposed of separately. During disposal, the individual components and assemblies are collected in specially secured containers so that the hazardous substances cannot escape. At our European locations, we work together with local specialist companies who professionally dispose of hazardous waste at regular intervals. Wherever possible, e.g. B. in the pipes of the exhaust system, the sometimes high-quality materials (e.g. stainless steel) are processed again and then reused in the sense of a circular economy. When it comes to exhaust gas cleaning, we use catalytic cleaning processes wherever possible, which largely prevent the accumulation of hazardous waste. Our exhaust gas cleaning system completely dispenses with wet-chemical processes, so that no contaminated wastewater is produced throughout the entire operation.

The increased amount of **non-hazardous waste** in Herzogenrath (D) and Cambridge (UK) is due to the increase in production volume.

	Hazardous waste (kg)		Non-hazardous waste (kg)	
	2022	2021	2022	2021
Germany	1,834	1,972	76,708	62,380
UK	2	362	62,532	42,852
Asia/USA	0	0	34,849	21,504
Total	1,836	2,334	174,089	126,736

Hazardous and non-hazardous waste by region.

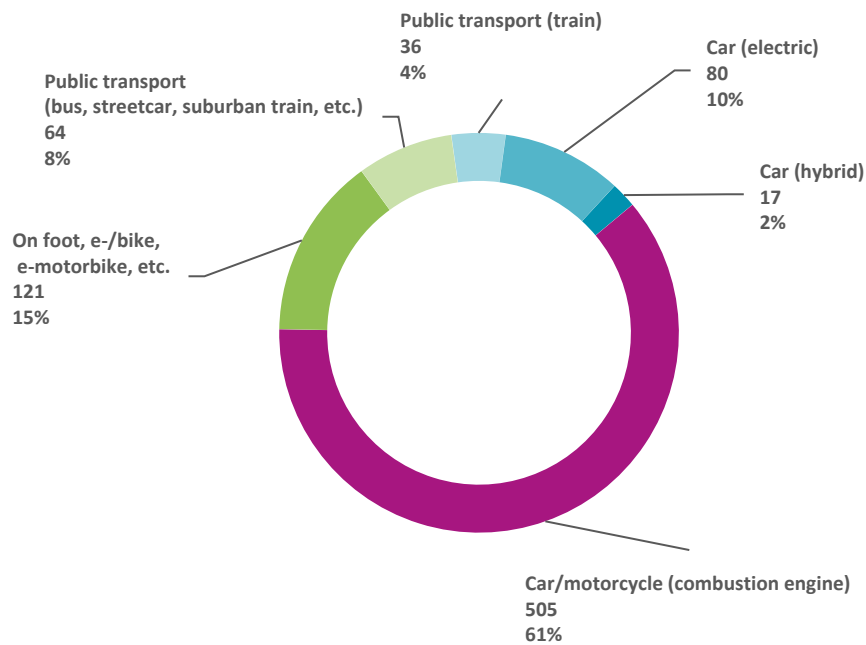
Mobility


Due to the complexity of our systems, it is necessary to provide customers with targeted advice on-site. Systems are developed and optimized jointly in some cases. We also support our customers in training employees. As a rule, this requires corresponding travel activity by our employees. Most of our customers are based outside of Germany, which affects the kilometers traveled and the choice of transport.

Commuter behavior

In the 2022 reporting year, we conducted a survey among all employees on their commuting behavior for the first time. It turned out that 39% of employees come to work sustainably: 15% walk or use a bicycle/e-bike, 12% use public transport and 12% rely on vehicles with alternative drives - be it hybrid - (10%) or purely battery electric vehicles (2%). At 61%, however, the majority still uses vehicles with classic combustion engines.

We have a total of 15 e-car charging stations and 24 e-bike charging stations on our company premises in Herzogenrath.



Number of employees per means of transport and the shares in % (projection from survey in November 2022 with  headcount)

Air travel

Traveling by plane cannot always be avoided as we sell our systems and technologies worldwide. However, we are trying to limit our air travel to what is necessary. For intercontinental travel, however, they are the only viable option in day-to-day business. In the reporting year 2022, there were 2,450 bookings (2021: 1,750).

A total of 5,801,299 kilometers were flown (2021: 3,646,072 km), an increase of 59% compared to 2021. 1,474 t CO₂e (2021: 1,213 t CO₂e) were emitted.

The reason for this increase compared to 2021 is the relaxed travel restrictions in connection with the corona pandemic.

Company vehicles

In 2022, our company fleet consisted of 14 cars (2021: 12), two diesel-powered vehicle, four four gasoline-powered vehicles, seven hybrid-powered vehicles, and one purely electric vehicle. Since 2020, in accordance with our internal guidelines, we have limited ourselves to hybrid and electric cars when purchasing new company vehicles (with the exception of Korea due to a lack of availability in the selected vehicle class): Compared to 2021, one gasoline-powered vehicle has been added. The number of hybrid-powered vehicles increased by two to seven in 2022.

		2022	2021	Δ
Company vehicles	Gasoline	4	3	1
	Diesel	2	3	-1
	Electric	1	1	0
	Hybrid	7	5	2
	Total	14	12	2

A total of 234,443 km were driven last year (2021: 216,412 km).

Rental cars, taxi bookings, private car trips

In the 2022 reporting year, our employees traveled a total of 1,107,798 km with a rental car, taxi, or private car (previous year: 1,378,715 km).

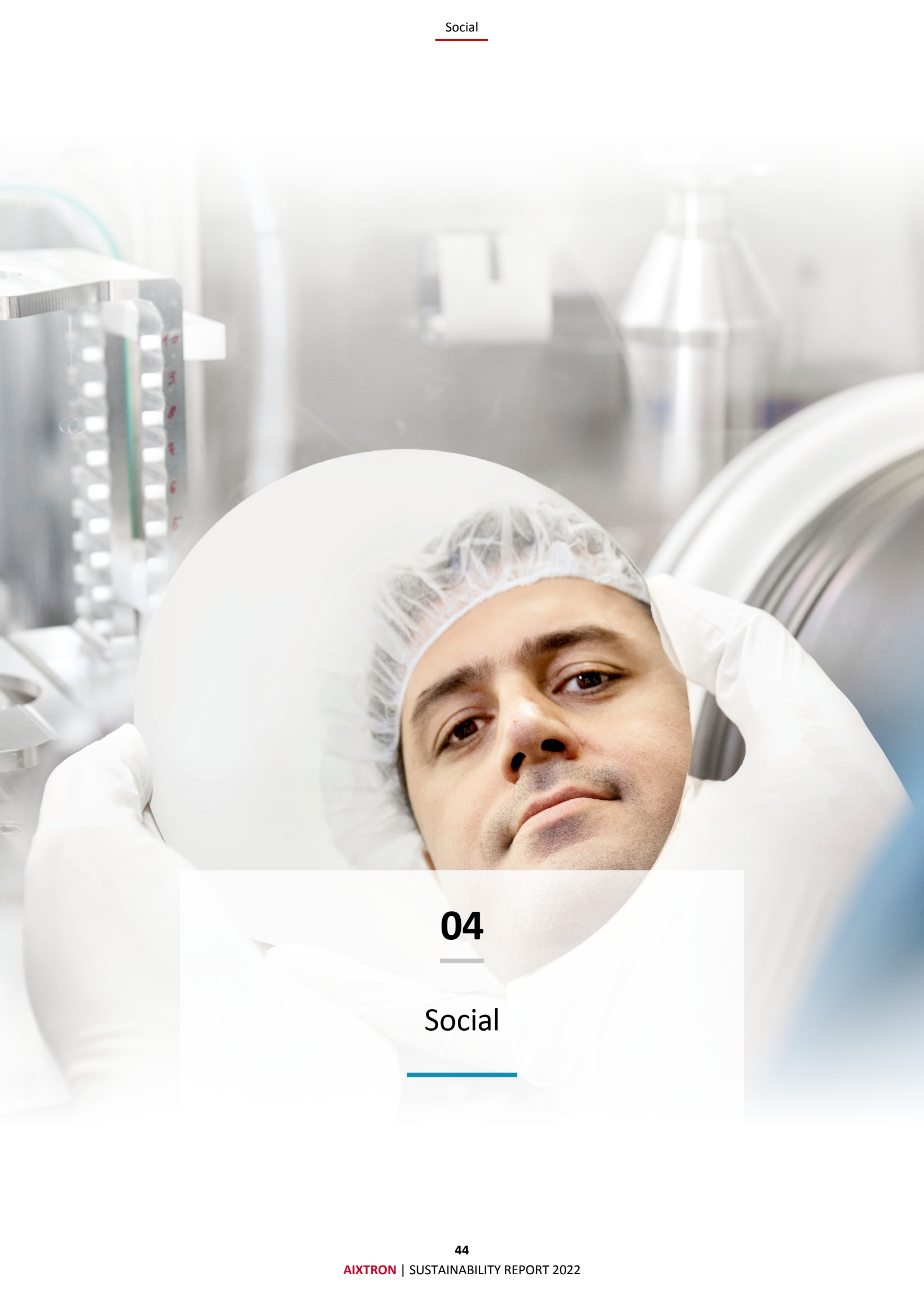
Train rides

We encourage our employees to travel by train whenever possible on business trips. While employees traveled 643,259 km by train in 2021, it was slightly less in the 2022 reporting year at 616,307 km.

Mobility metrics

		2022	2021	Δ
Flights	number	2,450	1,750	700
	Total kilometers traveled	5,801,299	3,646,072	2,155,227
Company vehicles	number	14	12	2
	Total kilometers traveled	234,443	216,412	18,031
Rental cars, taxi bookings, private cars	number	15,677	8,339	7,338
	Total kilometers traveled	1,107,798	1,378,715	-270,917
Rail journey	number	1,618	1,547	71
	Total kilometers traveled	616,307	643,259	-26,953





04

Social

Social

Our world-leading position is based on our highly innovative technologies. These are based on the know-how of our dedicated colleagues, who ensure the innovative strength of the company. Our position is strengthened by the many talented new employees that we are able to recruit: Structured HR work and safe, healthy and employee-friendly working conditions are essential prerequisites for this. Because only satisfied and committed employees enable long-term entrepreneurial best performance.

Occupational safety and health protection

Our principle of occupational safety is "zero tolerance for accidents". We are pursuing a preventive approach. Our top priority is always to avoid any injuries and to minimize possible risks. Every accident at work is therefore examined in order to identify and permanently eliminate potential risks in our technical and organizational processes. Occupational safety and health protection are the responsibility of our managers. Our goal is for every employee to understand and support our goals and measures in the area of occupational safety and health protection as part of their job. In 2022, this also included hygiene concepts based on the recommendations of the federal and state governments and the Robert Koch Institute for combating pandemics.

"Safety First!" - that's what the Occupational Health and Safety Committee ensures

The members of the Occupational Health and Safety Committee (OHSC), consisting of a management representative, two members of the works council, the company doctor, the safety experts and the safety officer, meet every quarter. This group of participants is supplemented in the OHSC meetings by members of the severely disabled representative, representatives of the human resources and compliance departments and facility management.

It is our aim to train our employees at least once a year in occupational health and safety issues. Current aspects, e.g. B. Protective measures in times of the corona pandemic, included in the instructions.

Two employees from the OHSC Group have been appointed as internal safety experts. Together with the company doctor, they are responsible for advising the company management, the executives, the works council and the employees as well as training the safety officers.

The work of the OHSC at the German locations is currently supported by a total of 108 company first aiders.

Employee Health and Safety

The number of days lost from work was 41 in 2022 (2021: 43). There were 5 accidents on business trips in 2022 (2021: 1) and a total of 9 injuries with entries in the first aid manual (2021: 14). As in previous years, we, fortunately, had no deaths to report in 2022.

At AIXTRON, around 29% of our workforce works in production and around 29% in research & development. These are workplaces where the environment must meet the highest safety standards and every move — even unconscious ones — must be made safely and smoothly. For this reason, we attach great importance to regular training and optimal occupational safety equipment.

A company integration management system after prolonged illness and reintegration assistance after accidents are not just legal obligation for us. They are part of our corporate culture and are crucial for maintaining the ability to work and employability of our employees at all locations. In the reporting period, no penalties or fines were imposed on AIXTRON due to violations of occupational health and safety regulations.

	2022	2021
LTIFR = Lost Time Injury Frequency Rate *	0.186	0.146
IR = Injury Rate **	1.484	2.049
Accidents at work ***	9	2
Working days lost (work-related sickness and accidents) ***	41	43
Number of injuries ***	9	14
Accidents on way to/from work	5	1
Work-related sickness	0	0

* LTIFR = Lost Time Injury Frequency Rate; Number of accidents at work resulting in lost time of more than one working day in relation to the number of hours actually worked in the reporting period, normalized to two hundred thousand working hours.

** Number of injuries / hours worked, normalized to two hundred thousand hours worked.

*** Days lost from work as a result of occupational diseases and accidents at work (excluding accidents on the way to and from work).

Health protection is a management issue

The health and well-being of our employees are our top priority. As preventive measures as part of health management, we offer our employees e.g. B. regular and ongoing occupational medical examinations as well as flu or corona vaccinations.

We are aware that good working conditions, a collegial and constructive environment, and a cooperative management style have an important influence on the well-being and health of our employees. For this reason, we attach great importance to a cooperative and constructive feedback culture.

Our employees are encouraged by our managers to take responsibility for themselves and their colleagues. In addition, we allow our employees the greatest possible flexibility in work planning to reconcile private life and work - as far as operational requirements allow.

Diversity and equal opportunities

We see diversity as a real opportunity: Because only through equal opportunities can we develop our full innovative power and strengthen our competitiveness. We value and treat all of our employees equally, regardless of nationality, religion, sexual identity, age, gender, or social group.

As in the entire technology industry, AIXTRON faces the challenge of increasing the proportion of female employees, despite various efforts such as appropriate recruiting or communication in social media channels. The ratio is still not balanced: as of December 31, 2022, 81% of male and 19% of female employees were employed.

In 2022, 940 employees (2021: 739) from around 50 (2020: 42) nations were working for AIXTRON worldwide.



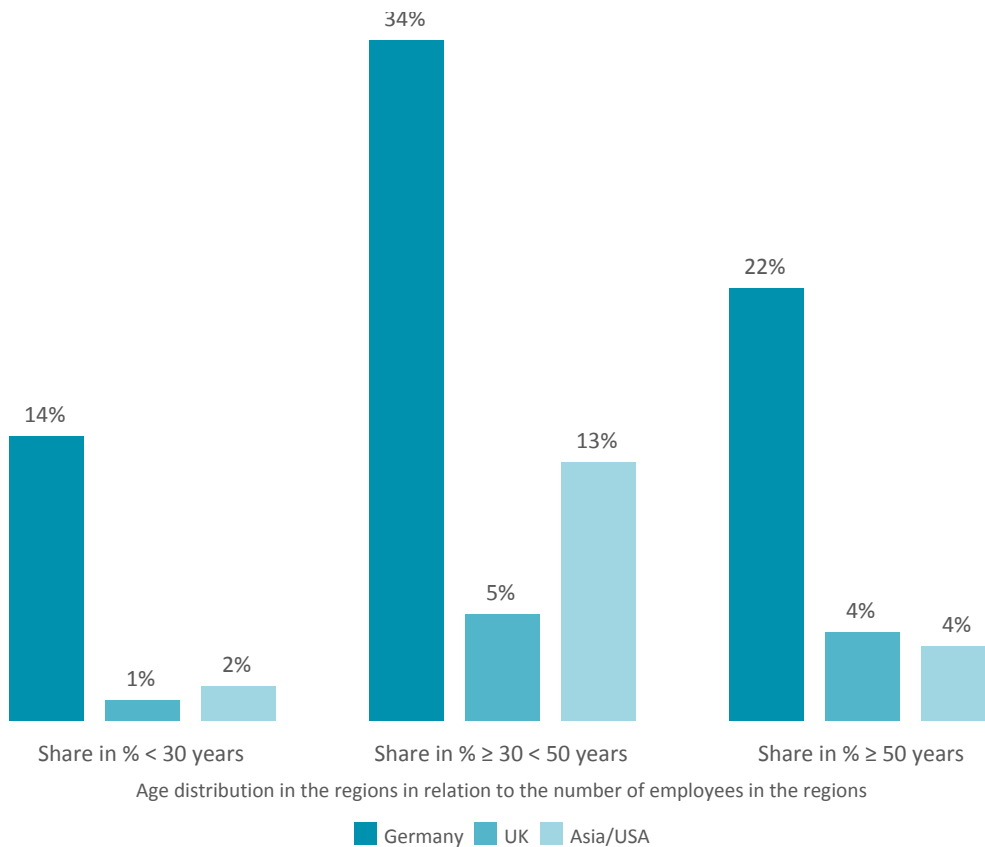
Flexible working day, employee recruitment & retention

Efficient and digital processes

In recent years, we have digitized an increasing part of our processes. This was also driven by measures related to the corona pandemic, which established mobile working on a larger scale than before.

Due to the past travel restrictions, we have partly switched customer care to digital solutions, partly based on augmented reality. Another current focus of development is the digitization of our processes using efficient SAP tools. Internally, we continue to use programs for video telephony to exchange information.

Age structure at AIXTRON by region 2022



Transparent communication

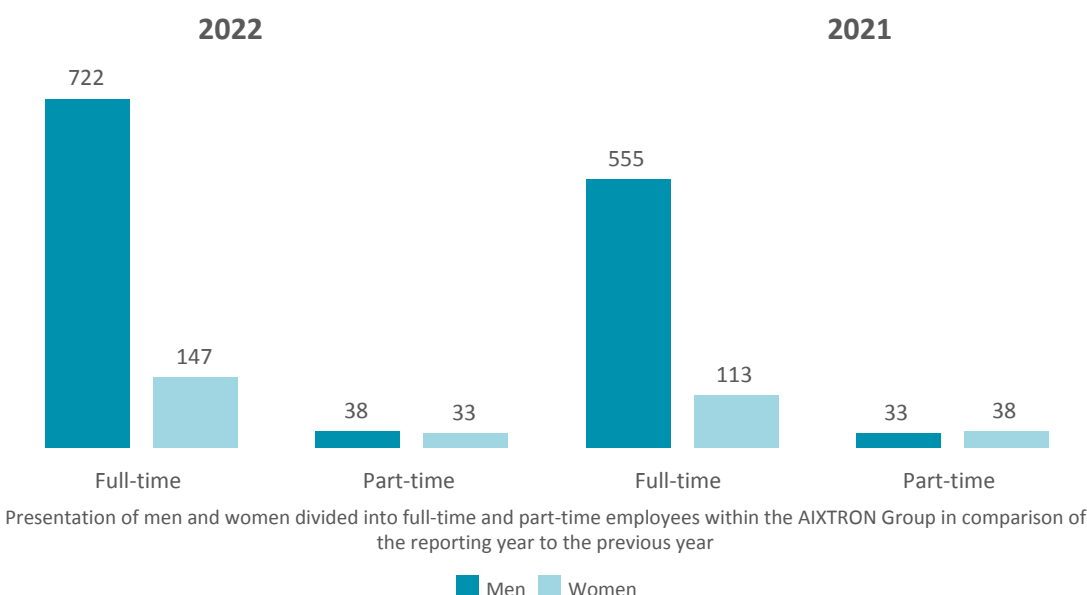
In order to ensure good cooperation, we attach great importance to open and cooperative communication. This also includes regular and transparent information for the entire workforce. Quarterly, the Management Board informs all colleagues worldwide in digital employee meetings about business development, customer requests, market developments or new company agreements. In addition, all relevant information is published promptly in the appropriate media. We regularly provide information about current topics and developments in the company via the intranet. In 2020, the go-ahead was also given for targeted employee surveys on various relevant topics.

		2022		2021	
		Full-time	Part-time	Full-time	Part-time
GER	Men	497	36	375	29
	Women	98	30	74	33
UK	Men	87	2	76	2
	Women	11	3	7	5
Asia/ USA	Men	138	0	104	2
	Women	38	0	32	0
Total	Men	722	38	555	33
	Women	147	33	113	38
Total (headcount)		940		739	
Total (FTE)		895		718	

Total number of employees broken down by employment type (full-time and part-time) at the end of the year.

Flexible working models and time off

Today's working world places a variety of demands on employees and their families. Therefore, we strive, whenever possible, to reconcile the private and family needs of our employees with economic interests.



Our employees have been taking advantage of the flexible working hours for many years. With the help of individual time accounts, every employee can arrange their working hours individually in coordination with operational and personal needs and largely determine them themselves. We also offer our employees individually tailored part-time jobs. In 2022, there were a total of 71 part-time employees (2021: 71), of whom 33 were women (2021: 38) and 38 were men (2021: 33).

Flexible working models for the time after the pandemic

With a view to the time after the pandemic, a company agreement was passed in 2022 that generally allows employees to work mobile to an extent of up to 80% of the standard working time. The respective framework depends individually on the type of activity as well as the area and department. For this reason, individual maximum quotas were agreed in order to take account of the respective operational needs.

At our global locations, we also encourage people to take advantage of the regulations that apply there in the same way as they do for parental leave: In Europe, for example, a total of 25 employees took parental leave (2021: 19). In the Asia/USA regions, the offer was accepted once (2021: 0). We are pleased that 19 of the 25 employees returned to work after their parental leave during the reporting year (2021: 16).

	Employees		Employees returning to work after parental leave	
	2022	2021	2022	2021
Europe	25	19	19	16
Asia / USA	1	0	1	0

Since 2012 we have been supporting a local daycare center (TP Hasen) to support AIXTRON employees and parents at the Herzogenrath site in their search for a daycare center close to the workplace.

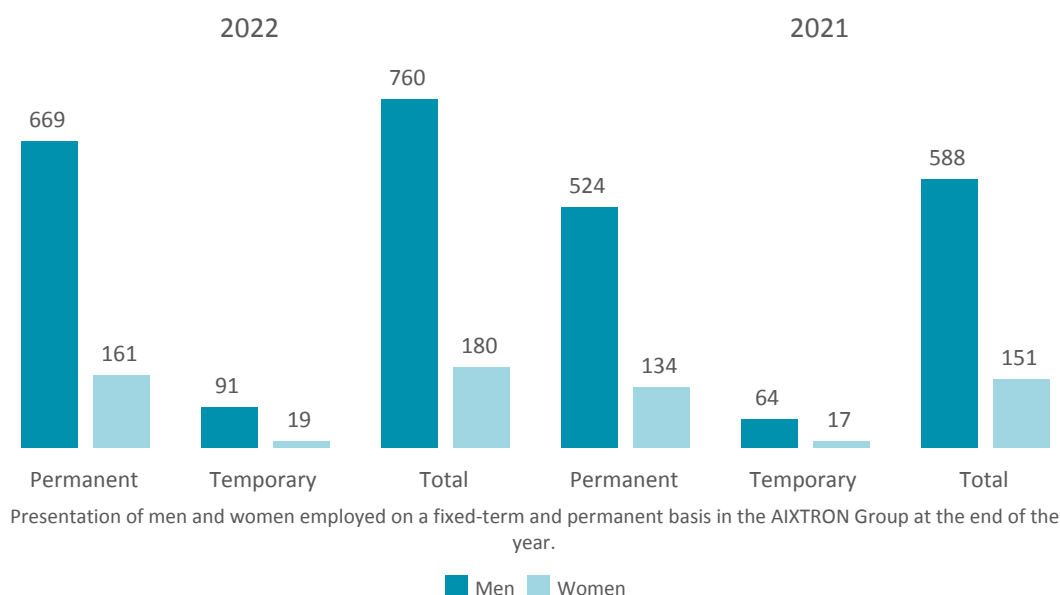
Temporary work and fixed-term contracts

Due to the great importance of special knowledge and expertise, AIXTRON has a strong interest in retaining its employees in the company in the long term. At the same time, AIXTRON products are sometimes subject to strong fluctuations in demand. In order to be able to react flexibly to these fluctuations, we also use fixed-term contracts or work together with established engineering service providers and temporary employment agencies.

		2022		2021	
		Permanent	Temporary	Permanent	Temporary
GER	Men	475	58	372	32
	Women	109	19	93	14
United Kingdom	Men	84	5	76	2
	Women	14	0	12	0
Asia/ USA	Men	110	28	76	30
	Women	38	0	29	3
Total	Men	669	91	524	64
	Women	161	19	134	17
Total (headcount)		940		739	
Total (FTE)		895		718	

At the German locations, we have concluded a works agreement for such cases. In addition, we are committed worldwide to the principle of “equal pay” and compliance with the principle of equal treatment for temporary workers and permanent staff.

For example, likewise with our employees, temporary workers receive meal allowances for using our cafeteria. Temporary workers are equally welcome at company events such as employee and works meetings as well as summer or Christmas parties.



In 2022, AIXTRON employed an annual average of 82 temporary workers (2021: 74). Of these, 73 (2021: 64) temporary workers worked for us in Germany, 8 in England (2021: 9) and 1 in Asia (2021: 1). Of the 940 employees, 830 (2021: 658) had a permanent contract. The number of fixed-term contracts in the reporting year totaled 110 employees (2021: 81), which corresponds to a share of almost 12% (2021: 11%) of the total workforce. Of these, 19 were women (2021: 17) and 91 were men (2021: 64).

Inflation premium and salary level

In view of the inflation trend and rising energy costs, AIXTRON has decided to fully utilize the legal framework of EUR 3,000 of the German government's relief package for its employees. In December 2022, all employees therefore received an inflation compensation bonus of EUR 1,500 — tax- and duty-free. A further payment of EUR 1,500 will be made at the end of 2023. This is intended to help our employees cope better with the rising cost of living.

In 2022, the average salary level of AIXTRON employees across the Group was examined for the first time in comparison with the applicable minimum wages in the individual countries. This shows that, on average, 3.8 times the minimum wage was paid across the Group in 2022.

	2022
Multiple	3.8
∅ FTE (fix & variable paid in year) in EUR	88,709
∅ Minimum Wage/FTE in EUR	23,396

🔗 Attracting and retaining highly qualified employees

AIXTRON operates in a rapidly changing economic environment and relies on highly qualified and committed specialists and managers. Being an attractive employer is important to us in order to attract and retain the best talent and employees.

In the reporting year 2022, the number of employees was strongly increased — a consistent consequence of AIXTRON's continuing good order situation. We were able to add a total of 201 employees (2021: -6) (balance: additions minus departures) — 29 of them women and 172 men. In the same period, the total fluctuation was 7.3% (2021: 13.3%).

		2022	2021	Δ
GER	Men	533	404	129
	Women	128	107	21
	Total	661	511	150
UK	Men	89	78	11
	Women	14	12	2
	Total	103	90	13
Asia/ USA	Men	138	106	32
	Women	38	32	6
	Total	176	138	38
Total	Men	760	588	172
	Women	180	151	29
	Total (headcount)	940	739	201

We attach great importance to transparency and equality in our selection and hiring process. As a rule, we offer new colleagues permanent employment contracts. We claim to comply at all times with national legal requirements for the protection of employee rights, internal company agreements and prescribed statutory notification periods.

Important elements of our employer presence include both our presence on career-relevant social media channels and our completely renewed careers page. Employees are selected on the basis of a concrete requirements profile according to professional and personal qualifications as well as the respective experience.

		< 30 years	Share in %	≥ 30 < 50 years	Share in %	≥ 50 years	Share in %	Men Total	Women Total
2022	GER	59	28%	64	30%	5	2%	97	31
	UK	4	2%	15	7%	14	7%	27	6
	Asia / USA	10	5%	39	18%	4	2%	45	8
2021	GER	26	29%	26	29%	5	6%	40	17
	UK	5	6%	4	4%	3	3%	10	2
	Asia / USA	6	7%	15	17%	0	0%	19	2

Age structure of newly hired AIXTRON employees

It is very important to us that new employees are familiarized quickly and well with our processes and integrated into the circle of colleagues. To this end, we use a structured on-boarding process that is individually designed for the new employee and his or her role.

	< 30 years		≥ 30 < 50 years		≥ 50 years		Turnover rate	
	2022	2021	2022	2021	2022	2021	2022	2021
GER	10	3	13	34	10	18	5.0%	10.8%
UK	8	3	7	5	8	6	22.3%	15.6%
Asia / USA	1	6	7	20	5	3	7.4%	21.0%
Group							7.3%	13.3%

Departures by age group and turnover rate in relation to the total number of employees per region. In the reporting year 2022, the total fluctuation for the AIXTRON Group was 7.3% (2021: 13.3%).

Aixtron supports young scientists

As a partner of the international doctoral program QUANTIMONY, we support the training of young academics and at the same time research into the future field of quantum technologies with the use of the chemical element antimony (Sb). The EU funding program QUANTIMONY ("Innovative Training Network in Quantum Semiconductor Technologies Exploiting Antimony") is an innovative network for doctoral training and offers 14 young researchers high-level training.

The network consists of eleven international research teams and is supported by 13 partner organizations from Europe as well as the USA, Taiwan and Brazil.

With the help of QUANTIMONY, antimony (Sb) compounds are expected to make their way into mass production — using MOCVD technology and for use in computers, memories, telecommunications, automobiles, robotics and many other applications. These go beyond existing applications in aerospace. Quantum technologies based on antimony are an important future field and the potential applications are very promising.

Project not part of the auditor's review



For more information on personnel selection, please refer to the section "Employees" in the chapter "Business model" in the Group management report.

Personnel development, training and continuing education

Lifelong learning, the further training of our employees and their expertise in specialist areas provide us with the prerequisites for maintaining our leading position in the long term. That is why we attach great importance to supporting our employees competently and in a spirit of partnership, promoting them individually and challenging them with future-oriented projects. Continuous alignment with the company's needs plays just as important a role as the employees' responsibility for shaping the company.

Year	Total hours	of employees	per employee	Average hours per employee	Number of hours for men	Average hours for men	Number of hours for women	Average hours for women
2022	30,842	940	568€	32.8	26,138	34.4	4,704	26.1
2021	9,822	739	472€	13.3	7,331	12.5	2,491	16.5

Overview of average further training within the AIXTRON Group and broken down by men and women

We offer our employees a wide range of continuous training measures as part of our company-wide personnel development program. This also includes individual training measures. The core component of this is the company's own AIXTRON Academy, which offers general training courses on topics such as interview management, time and stress management, as well as specialist content.

In addition, we promote the development of managers and employees through external, individual coaching and internal coaching programs. We also increasingly support the exchange of ideas among employees.

The basis for personnel development and career planning is the annual employee appraisal that has taken place since 2013, in which the qualification requirements for current and future tasks are determined. The personal interests and wishes of the employees are also recorded. Based on a company-wide standard, managers, and employees can give each other feedback and discuss measures to improve cooperation where necessary and promote the employee's strengths. Another component of the employee appraisal is the agreement on development goals.

In 2022, AIXTRON invested an average of over EUR 568 (2021: EUR 472) per employee in personnel development and training. On average, each employee received over 32.8 hours of training per year in 2022 (2021: 13.3).

Securing our young talent with training

We see it not only as our social obligation but also as the basis for the continued success of our company to train young people in technical and commercial professions as well as in dual study programs. In this way, we give young people the chance to prove themselves, develop their strengths with us, and make a contribution. We are proud that AIXTRON trainees are repeatedly recognized for outstanding performance by the Aachen Chamber of Industry and Commerce.

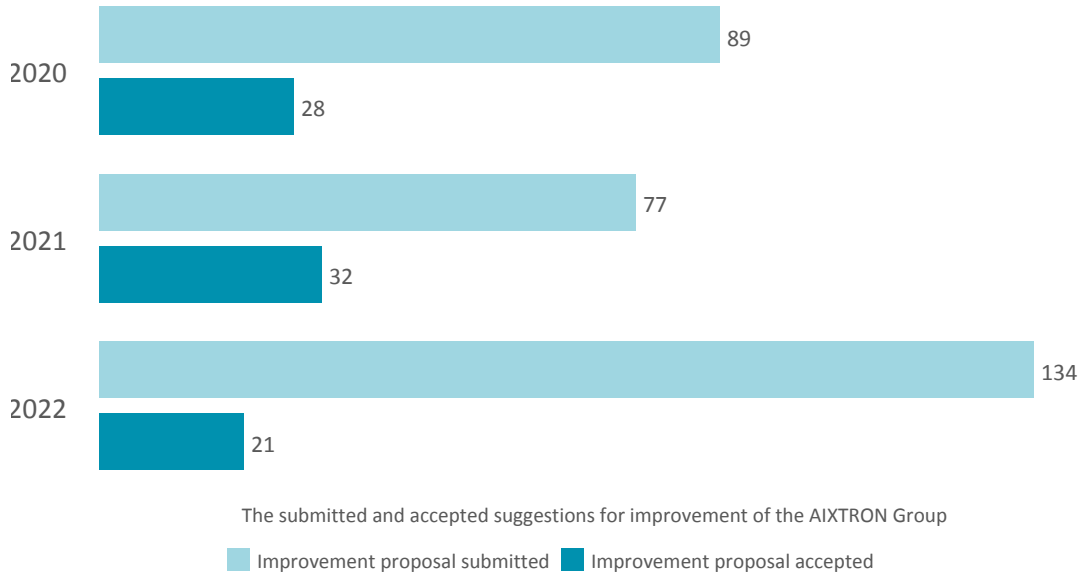
In fiscal 2022, we employed a total of 53 trainees and students (2021: 54). It is important to us to offer young people prospects after they have completed their training.

For this reason, all trainees and dual students who wished to remain with the company were taken on in recent years. To this end, a corresponding agreement was reached with the works council at the Herzogenrath site.



Company suggestion scheme

New ideas and wishes often arise in the thoroughly structured and planned everyday processes, some of which are not implemented or shared throughout the company. However, as we want to make these usable and valuable for everyone, we established a globally standardized company suggestion scheme as part of the innovation management process in 2015.



We encourage our employees to submit their ideas for process improvements, cost savings, product enhancements, or the like. Accepted suggestions are compensated by the company. This year, a total of 134 suggestions were submitted and 21 of these were accepted. Since its introduction, the number of improvement suggestions submitted has been at a gratifyingly high level. Since 2015, the submitted and accepted suggestions have been remunerated.

Q Regional and social engagement

We see our company as part of society and in this sense, we also want to fulfill our social responsibility. For this reason, we have been sponsoring social projects for many years and supporting the voluntary work of our employees at the annual company run. In addition, we give schoolchildren and students the opportunity to gain professional orientation by gaining an insight into our company.

Promotion of science, education and professional development

Supporting young people in science, education and career development is important to us. Since 2017, we have therefore maintained long-term school cooperation with Aachen's Einhard Gymnasium. We also offer schoolchildren and students the opportunity to gain insight into the various professional fields of our technology company through lectures, company tours, or internships. As a sponsoring member of the Industry and Economy Working Group of the German Physical Society, we have thus been offering the "Day on Site" for many years, for example.

Cooperation with the Aachen Einhard High School

Since 2017, AIXTRON and Einhard-Gymnasium in Aachen have been involved in a learning partnership as part of the KURS initiative (Cooperation Network for Companies in the Region and Schools). As part of this "learning partnership", schools have the opportunity to give their students a tangible demonstration of business using the concrete example of a partner company. At the same time, companies have the opportunity to present themselves as employers and "good neighbors".

For example, as part of "career exploration days" and "Girls' and Boys' Day", the students were given the opportunity to have a personal exchange with our trainees during a company visit. Reports on their experiences with career guidance were exchanged and the topic of training and related career opportunities at AIXTRON were discussed. In addition, dual training and study programs were presented as an alternative to university studies, and a selection process was simulated as part of an assessment center. At the regular "Berufsstraße" event, we also explain in detail the various apprenticeships at AIXTRON to school students and are available to answer their individual questions.

Third „AIXTRON Global Virtual Run“

Since 2011, we have participated in the annual “Aachen Company Run” and have taken part in the “Chariots of Fire” relay race in Cambridge for the second time. We support the motivation of employees to do something for their health and pay the entry fees, which are then donated to charitable organizations in the region.

In the past reporting year 2022, our “AIXTRON Global Virtual Run” (AGVR) took place for the third time — with growing success: While a total of 177 colleagues worldwide took part in 2021, we already had 262 registrations in the current reporting year — 51% more than in the previous year. In 2022, AIXTRON employees covered more than 1,500 kilometers walking and running and 2,190 kilometers on bicycles as a team. This time, AIXTRON teams from Germany, the UK, the USA, Malaysia, Japan, Taiwan, Korea, and China took part.

The annual “Global Virtual Run” was first launched in 2020 - partly in response to the Corona pandemic. This was because it allowed employees to do something sporty together. This was regardless of where they happened to be in the world, without having to come together in one place. The focus of the “Virtual Run” is on the “we feeling”: A kind of competition does develop. But it's less about which individuals achieve the best times, and more about how much the AIXTRON team can achieve together.



AIXTRON supports

In total, the participants ran more than 3,700 kilometers, which resulted in a donation of EUR 7,500 due to our offer to donate about EUR 2 per kilometer run. The amount was donated to “Wings for Life” at the beginning of 2023. This is a non-profit, state-recognized foundation for spinal cord research, whose goal is to find a cure for paraplegia.

At the beginning of 2022, the images and news about the war in Ukraine shook us for the first time. Since the issue has moved us greatly ever since we have been looking for a way to help the victims and fulfill our responsibility in terms of humanitarian solidarity: During the reporting year 2022, a total of EUR 50,000 was donated to support war refugees in our region. The German Red Cross, the joint aid campaign of RWTH Aachen University and the University Hospital as well as the Ukraine emergency aid of "Aktion Deutschland hilft" were considered.

At the end of the year, we again made a conscious decision to forego printed Christmas cards and to provide our employees with digital company Christmas cards for their business contacts. Since this also saved printing and material costs, we donated an amount of EUR 5,000 at the beginning of 2023 to the charitable project Brückenschlag — an association of many Aachen-based service providers, institutions, and individuals to support families with a family member or parent suffering from cancer.



05

Corporate Governance

Corporate Governance

AIXTRON is committed to the principles of transparent, responsible corporate governance focused on sustainable value creation. By managing and monitoring the Company accordingly, we — the Executive Board and the Supervisory Board — aim to live up to the trust placed in us by our shareholders, the financial markets, our customers, business partners, employees, and the general public. We are convinced that this type of sustainable corporate governance, as well as the responsible actions of our employees, form an essential basis for the success of our company.

The corporate governance declaration pursuant to sections 289f, 315d of the German Commercial Code (HGB) and the current declaration of conformity pursuant to section 161 of the German Stock Corporation Act (AktG), which was adopted by the Executive Board and Supervisory Board in February 2023, are permanently available on our website under [Investoren/Corporate Governance](#).

Legal conformity, compliance and information security

The Executive Board is committed to conducting all business in an ethical and legally sound manner. In addition to compliance with legal requirements, our internal guidelines and the interests of key stakeholders are taken into account.

AIXTRON does not tolerate any corrupt or criminal behavior and expressly distances itself from human rights violations. In addition to the legal framework, our internal company codes, guidelines, and management systems provide the framework for action.

Since 2006, the AIXTRON Code of Ethics has applied to the Finance department, and in particular to members of the Executive Board and senior finance executives and persons in key positions. This is intended to ensure that honest and ethical behavior is practiced.

Finance executives and persons in key functions confirm annually for their area of responsibility that the Code of Ethics issued by the Executive Board is known and complied with.

In addition, the Executive Board, Supervisory Board, senior management team, and our employees throughout the company are bound by a Compliance Code of Conduct which obliges them to act responsibly and in compliance with the law. This is underpinned by the regularly updated Compliance Manual and additional compliance policies with specific guidelines for action and is taught in training courses. Adherence to our compliance requirements is confirmed in writing on a quarterly basis by the senior management team and key employees. Participation in compliance training is mandatory for all new employees of the company. Compliance training is conducted on a regular basis using a risk-based approach. This process is managed and monitored by our Compliance department.

Reports of possible violations of international and national laws as well as compliance requirements and rules of conduct of the AIXTRON Group can be made directly to AIXTRON's Compliance Department as well as through AIXTRON's Whistleblowing System.

Our company-wide Anti-Corruption Policy defines formal and concrete rules and principles of conduct to combat corruption and bribery and is binding for our employees. An elementary component of our company-wide compliance training program is to sensitize our employees to identify potential corruption and bribery risks in their daily activities at an early stage. This also includes preventive anti-corruption measures.

In the reporting year 2022, as in the previous year, no events relating to bribery and corruption were reported to us throughout the AIXTRON Group.

Supplier Manual

AIXTRON places the same expectations and conditions on its suppliers as it does on itself. These are defined in a mandatory supplier manual.

This defines the ethical and legal framework for social and ecological standards, e.g. with regard to human rights, corruption, or conflict minerals such as raw materials and mineral resources that are mined or extracted in conflict areas.

In addition to the price and quality of the purchased goods, compliance with these standards is a fundamental prerequisite for long-term cooperation (see chapter “Konfliktmineralien”).



Conflict Minerals

Competition for natural resources such as minerals, oil, and charcoal, promotes the systematic violation of human rights and environmental pollution worldwide. Proceeds from the extraction of raw materials help fuel armed conflicts and finance civil wars. Production or mining of these materials often takes place illegally and outside state control, controlled by groups of rebels or militias, and at the expense of the miners.

AIXTRON is committed to conducting its business fairly and with decency and respect in all countries where the company is present. Therefore, AIXTRON supports the objectives of both the US Dodd-Frank Act and the EU Conflict Minerals Regulations to disclose the origin of risky minerals used in our products. As part of its due diligence, the AIXTRON Group has implemented a management system for this purpose, based on the OECD Guidelines for responsible supply chains of minerals from conflict-affected and high-risk regions.

All direct suppliers who may be supplying materials with potential conflict minerals are contacted and asked to identify the countries of origin of the minerals and report them to AIXTRON. Should this reveal the use of a raw material supplier that is linked to human rights violations and environmental pollution, we react consistently and work to ensure that this supplier critically examines the raw material supplier in question and removes it from the joint supply chain. In order to enable internal and external persons and stakeholders to raise indications, concerns, and complaints in connection with conflict minerals - anonymously if desired - AIXTRON has established a complaints mechanism, which can be viewed on the AIXTRON website, among others.



AIXTRON's ability to work towards completely conflict-free smelters worldwide as part of its supply chain is limited. In order to maximize the influence and impact of conflict-free sourcing, we decided to join the Responsible Minerals Initiative (RMI) many years ago. We actively participate in the organization, including assisting smelters to sustainably meet the demonstration of conflict-free mineral sourcing and as part of the RMI certification process.

Privacy compliance

Handling the personal data of our customers, partners, and employees in a legally compliant and trustworthy manner is our top priority. For many years, data protection has been anchored in our company through corresponding guidelines, standards, and processes. In order to meet the requirements of the European Union's General Data Protection Regulation (EU GDPR), which has been in force in all member states since May 2018, we have further developed our processes - where necessary.

In implementing the legal requirements, we are supported and advised by an external, independent data protection officer. We did not report any incidents to our data protection officer or the relevant authorities for the reporting year 2022.

Information Security

As a technologically forward-looking company, the focus is on protecting our IT infrastructure to protect us from the loss of valuable and important data as well as sensitive failures in our operating business. We take these threats very seriously.

Dr. Christian Danninger · Executive Board (CFO)



The protection of our business and trade secrets as well as the protection of sensitive data is of very high importance to us as a global technology company with high innovative strength. In times of advancing digitization and networking in our society, the threat of cyber espionage and sabotage is also growing. Information security has played an essential role for years and enjoys a very high priority because attacks on the IT infrastructure can lead to the loss or violation of the integrity of this sensitive and confidential data. Our "Information Security" department is part of the independent corporate governance organization and is tasked with continuously identifying, analyzing, and evaluating potential vulnerabilities together with our IT department and other specialist departments. Based on these results, suitable protection mechanisms are integrated into our existing information security environment and their effectiveness is monitored.

In addition to technical and organizational measures, our employees and their awareness in dealing with sensitive and confidential data play a very important role. Our Group-wide training program and the mandatory participation of all employees in regular security training sessions are key components in promoting awareness. Our existing information security environment is subject to continuous further development in order to protect our business and trade secrets as well as sensitive data in the best possible way. In fiscal year 2022, we were not aware of any incidents relating to breaches of our information security.

Quality management and product safety

The best product safety and reliability of our equipment are the result of our high quality standards and an important basis for our lasting business success.

Dr. Jochen Linck · Executive Board (COO)



We enjoy a leading position in the market, resulting from a great deal of trust placed in us by our customers. For us, it is both an obligation and an incentive to ensure our technical excellence, first-class service and high-quality standards at all times.

We consistently pursue a zero-defect strategy in our promise of quality and the safety of our equipment. This is the claim we make on ourselves, as well as on our suppliers. It is not only our self-image to comply with all legal product requirements, standards and norms as well as safety aspects and proper labelling.

It is also part of our self-image to implement all local requirements in our customer markets. For this reason, product safety begins with our product development and accompanies the entire procurement and production process.

Formal, overarching responsibility for product safety and quality lies with the Executive Board, which has assigned the goals and tasks to the Head of Quality Management. Our Quality Department is responsible for the further development of our quality management system, issues company-wide regulations and regularly checks compliance with them. The quality manual and the quality policy describe the core of our actions and are publicly available.

Guidelines and processes ensure both our product safety and product development and regulate the handling of possible defects at appropriate escalation levels. Our Head of Quality Management regularly informs the Executive Board about significant developments and possible quality incidents that could be classified as critical.

In fiscal 2022, no significant quality defects were identified that had a material impact on the health and safety of our customers.

Q *Key figures of supplier relations*

Due to the high value added contribution in the supply chain, the procurement process is of high importance for AIXTRON's long-term success. We do not manufacture mechanical and electrical systems and components ourselves, but focus on development, configuration and final assembly.

We place a high value on working in partnership with our suppliers. This is expressed, for example, through development partnerships in which we jointly develop components and assemblies with suppliers. Decisive factors for the selection of suppliers are primarily quality, manufacturing competence, delivery reliability, and price.

Furthermore, we require compliance with applicable laws, regulations, and the provisions of our supplier manual. In addition, we demand that international minimum standards in the area of sustainability, such as the core labor standards of the International Labor Organization (ILO), are met. We do not tolerate the use of conflict minerals within the supply chain.

We currently work with 1,202 suppliers from 28 countries (2021: 1,126 suppliers from 29 countries). We use a risk-oriented approach to monitor that all material sustainability aspects are taken into account. In the first step, compliance with the environmental and social standards of all suppliers is checked by means of self-disclosure in the form of a questionnaire. In the questionnaire, suppliers must explain the processes established in their company to ensure compliance with the standards. All relevant documents are made available to existing and potential suppliers via our corporate website.

As part of the expansion of our quality department, the frequency and scope of our audits were successively increased: While there were 13 audits in 2020, we already had 19 in 2021 and 32 in the current reporting year 2022.

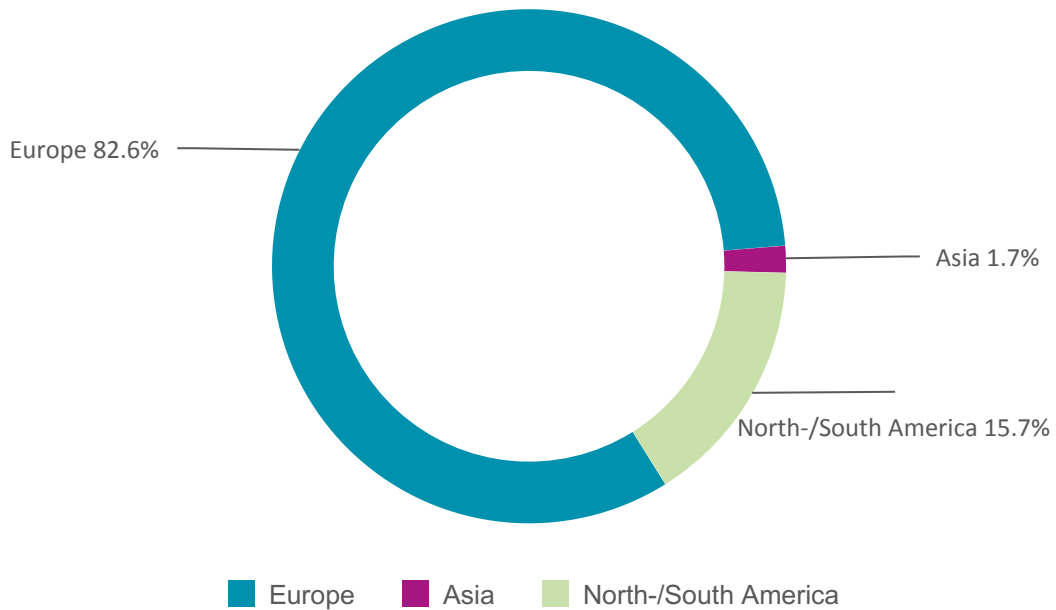
We encourage our suppliers to establish management systems in the areas of occupational safety, health, and environmental protection that comply with DIN EN ISO 9001, ISO 14001, or BS OHSAS 18001, or similar standards.

The cooperation extends to suppliers, e.g. from the mechanical and plant engineering sector, and the electrical engineering sector, but also engineering service providers as well as suppliers of technical gases or even energy suppliers. AIXTRON is an international company but still has local roots.

Key data supplier	2022	2021	Δ
Order-Volume in EUR Mio.	313	266	47
Number of Supplier	1,202	1,126	76
Number of Countries	28	29	-1
Number of Supplier Audits	32	19	13

Prior-year figures adjusted

2022 - Distribution of purchasing volume per region



Despite global purchasing, local value creation plays a very important role for us. The reason for this is, among other things, the high technical demands on our suppliers and the short communication channels. In Germany, for example, 58.7% (2021: 57.1%) of the purchasing volume is procured. The decisive factor for the selection is always that the supplier meets our high-quality requirements, has the necessary manufacturing expertise, and offers competitive prices.

Associations and initiatives

We are involved in a variety of organizations and associations to further promote ecologically sustainable development and resource efficiency in photonics and semiconductor technology. We are a founding member of Photonics21, now a Private Public Partnership (PPP) with the European Commission, and the International Solid State Lighting Alliance (ISA) in China, and actively promote their further development.

Carbon Disclosure Project (CDP) / MSCI

Since 2010, as part of our participation in the Carbon Disclosure Project (CDP), we have reported once a year on the environmental impact of our business activities and our corporate strategy to reduce CO₂ emissions. In this way, AIXTRON promotes transparency for investors, companies, political decision-makers, and the media. AIXTRON achieved a B rating in the current reporting year 2022. In the MSCI rating, we were able to improve - from A to now AA.



Part of the national initiative „Energy-Efficiency-Network“

Since 2016, we have been involved in the "Energy Efficiency Network" as a founding member together with six other companies in the Aachen region. The aim of the network is to identify and realize economic energy-saving potential in companies. In recent years, more than 60,000 megawatt hours of energy have already been saved, avoiding more than 18,000 tons of CO₂ emissions. AIXTRON has also been able to leverage the benefits of the network, with its quarterly meetings, for its energy and climate footprint. In 2020, we renewed our membership in the Energy Efficiency Network and plan to continue our participation in the coming years. The network is part of the nationwide "Energy Efficiency Networks" initiative launched by the German government and leading German industry associations and organizations. The goal of the initiative was to save up to 75 PJ of primary energy or 5 million tons of GHG emissions by 2020 through the initiation and implementation of around 500 new energy efficiency company networks. In September 2020, the German Federal Ministry for Economic Affairs and Energy (BMWi) commissioned the continuation of the project until 2025, now under the title "Initiative Energy Efficiency and Climate Protection Networks". By the end of 2025, the initiative aims to establish 350 new networks, saving nine to eleven terawatt hours of final energy and five to six million tons of GHG emissions.

Memberships in organizations and associations

Organizations/associations	Function/committee	Thematic focus	organization/ association
ISA, International Solid State Lighting Alliance	Founding member	Promoting sustainable development and application of LED solid state lighting.	Shanghai, China
Responsible Minerals Initiative	Active member of the "Smelter Engagement Team" for Europe and Africa	Identification of all worldwide melts aimed at ensuring responsible mineral procurement by the companies.	Alexandria, USA
DGKK, Deutsche Gesellschaft für Kristallwachstum und Kristallzüchtung e.V.	Member	Promoting research, teaching and technology in crystal growth, crystal breeding, and epitaxy.	Erlangen, Germany
DPG, Deutsche Physikalische Gesellschaft	Supporting member in Industry and Business Workgroup (AIW)	Promoting contacts and dialog in physics and industry with a focus on training physicists during their studies. Participation in the DPG's "Tag vor Ort" (Day on Site) visit and lecture program for young physics students.	Bad Honnef, Germany
IVAM e.V.; Internationaler Fachverband für Mikrotechnik	Member	Technology marketing for innovative technologies and products of high-tech industries.	Dortmund, Germany
EPIC, European Photonics Industry Consortium	Member	Promoting the sustainable development of photonics in Europe.	Paris, France
OE-A – Organic and Printed Electronics Association (VDMA)	Member	Promoting the development of a competitive production infrastructure for organic and printed electronics.	Frankfurt/Main, Germany
Photonics-21 (European Private Public Partnership)	Founding member and member of Board of Stakeholders	PPP aimed at securing Europe's leading role in the development and introduction of photonics technologies in various fields of application.	Düsseldorf, Germany
SEMI/FlexTech, Semiconductor Equipment and Materials International	Member	Promoting access to regional markets and opening up diversified business opportunities, as well as promoting the growth and progress of emerging economies and adjacent technology markets.	Milpitas (Kalifornien), USA
NanoMikroWerkstoffePhotonik e.V. NMWP e.V.	Member of Board	Promoting the development of new ideas, projects and partnerships in the fields of nanotechnology, microsystems technology, tools, materials, and photonics.	Düsseldorf, Germany

List of key memberships in business or other associations

06

Key figures

Key figures

📌 Non-financial key figures at a glance

In the following, we have compiled the most important non-financial key figures in tabular form, as well as the content index of the Global Reporting Initiative GRI, which shows where in this report information that meets the requirements of the GRI can be found. In addition, we have included the report of the auditor who performed an independent limited assurance engagement on this report.

Performance aspect		2022	2021	Δ
Environment EU taxonomy (first calculated for 2021)	Total revenues	463,167	428,954	34,213
	of which taxonomy-eligible	270,916	243,160	27,756
	of which taxonomy-aligned	270,916	243,160	27,756
	Total CapEx* (EUR 000s)	35,430	19,400	16,030
	of which taxonomy-eligible	20,005	7,624	12,381
	of which taxonomy-aligned	13,570	7,624	5,946
	Total OpEx* (EUR 000s)	61,195	60,075	1,120
	of which taxonomy-eligible	44,710	42,974	1,736
	of which taxonomy-aligned	44,710	42,974	1,736

* as defined in the EU Taxonomy Regulation

Performance aspect		2022	2021	Δ
Environment EU taxonomy (first calculated for 2021)	Total revenues	100.0%	100.0%	—%
	of which taxonomy-eligible	58.5%	56.7%	1.8%
	of which taxonomy-aligned	58.5%	56.7%	1.8%
	Total CapEx*	100.0%	100.0%	—%
	of which taxonomy-eligible	56.5%	39.2%	17.3%
	of which taxonomy-aligned	38.3%	39.2%	-0.9%
	Total OpEx*	100.0%	100.0%	—%
	of which taxonomy-eligible	73.1%	71.5%	1.5%
	of which taxonomy-aligned	73.1%	71.5%	1.5%

* as defined in the EU Taxonomy Regulation

Key figures

Environment / CO ₂ e in t			2022	2021	Δ
Scope 1	Scope 1.1	Fuel consumption in stationary plants	86	268	-182
	Scope 1.2	Fuel consumption in mobile plants	34	31	3
	Scope 1.3	Other emissions	0	5	-5
Scope 1 total			120	304	-183
Scope 2	Scope 2.1	Purchased energy	609	499	110
Scope 3	Scope 3.1	Purchased goods and services	34,768	31,008	3,760
	Scope 3.3	Fuel and energy-related emissions	817	475	343
	Scope 3.4	Upstream logistics	14,013	16,370	-2,358
	Scope 3.5	Waste generation	81	13	69
	Scope 3.6	Business travel	1,732	1,284	447
	Scope 3.7	Employee commuting	1,158	306	852
Scope 3 total			52,569	49,456	3,114
Scope 1-3 total			53,298	50,258	3,040

Environment / Quantities in recorded units			2022	2021	Δ
Scope 1	Scope 1.1	Fuel consumption in stationary plants (kWh)	426,321	1,326,842	-900,521
	Scope 1.2	Fuel consumption in mobile plants (km)	234,443	216,412	18,031
	Scope 1.3	Other emissions (kg)	104	1	103
Scope 2	Scope 2.1	Purchased energy (kWh)	14,651,275	13,009,584	1,641,691
Scope 3	Scope 3.1	Purchased goods and services (kg)	1,605,059	1,597,832	7,227
	Scope 3.4	Upstream logistics (tkm)	10,328,726	9,310,819	1,017,907
	Scope 3.5	Waste generation (kg)	175,925	129,070	46,855
	Scope 3.6	Business travel (pkm)	7,534,605	5,668,046	1,866,559
	Scope 3.7	Employee commuting	6,848,070	2,275,913	4,572,157

Gas consumption (Scope 1.2) was not recorded at all sites due to insignificant quantities. No quantities were incurred in Scope 1.4. Scope 3.2, 3.8, 3.10 and 3.13-3.15 do not apply to AIXTRON. A separate disclosure of Scope 3.9 and 3.11-3.12 is not possible due to the data situation.

Environment Innovation		2022	2021	Δ
Funds received for research and development (EUR 000s)		5,303	8,933	-3,630
Proprietary expenses for R&D (EUR 000s)		57,726	56,809	917

Key figures

Performance aspect Social		2022	2021	Δ	
Employee health & safety	Lost Time Injury Frequency Rate – LTIFR	0	0	0	
	Injury Rate – IR	1	2	-1	
	Accidents at work	14	2	12	
	No. of workdays lost (work-related sickness + accidents)	Men	41	43	-2
		Women	0	0	0
	Number of injuries	Men	9	11	-2
		Women	0	3	-3
	Accidents on way to/from work	Men	5	1	4
		Women	0	0	0
	Work-related fatalities	0	0	0	
Training & personnel development	Hours of further training	Men	26,138	7,331	18,807
		Women	4,704	2,491	2,213
	Average hours of training per employee	33	13	20	
	Average hours of training	Men	34	13	21
		Women	26	17	9
	Hours of further training (total)	30,842	9,822	21,020	
Apprenticeship *	Total	Trainees	10	16	-6
		Students	43	38	5
Company suggestion scheme *	Total	Submitted	134	77	57
		accepted	21	32	-11

Key figures

Governance / Supplier		2022	2021	Δ
Number of suppliers		1,202	1,126	76
Regional distribution of suppliers				
	Europe	1,047	981	66
	- NRW(regional)	337	301	36
	- other Germany	339	305	34
	- Europe w/o Germany	371	375	-4
	Asia	105	92	13
	America (N/S)	50	53	-3
Order-Volume in EUR		313	266	47
Regional distribution of purchasing volumes				
	Europe	258	225	33
	- NRW(regional)	74	58	16
	- other Germany	109	94	16
	- Europe w/o Germany	75	74	1
	Asia	5	3	3
	America (N/S)	49	38	11
Number of Countries		28	29	-1
Regional distribution of countries				
	Europe	20	21	-1
	- NRW(regional)	0	0	0
	- other Germany	1	1	0
	- Europe w/o Germany	19	20	-1
	Asia	7	6	1
	America (N/S)	1	2	-1
Number of Supplier Audits		32	19	13
Regional distribution of supplier audits				
	Europe	26	18	8
	- NRW(regional)	0	0	0
	- other Germany	18	13	5
	- Europe w/o Germany	8	5	3
	Asia	2	0	2
	America (N/S)	4	1	3

GRI Content Index

GRI disclosures	Disclosures/topic	Page in 2022 Sustainability Report	Page in 2022 Annual Report	Note
GRI 100	General disclosures			
GRI 101:	FOUNDATION 2016	General Disclosures		
GRI 102:	GENERAL DISCLOSURES 2016			
1.	Organizational profile & strategy			
GRI 102-1	Name of the organization	Cover/imprint	1, 187	
GRI 102-2	Activities, brands, products and services	4	5, 66	
GRI 102-3	Location of headquarters	8	5	
GRI 102-4	Location of operations	8-9	63, 67	
GRI 102-5	Ownership and legal form	8	67	Further explanations in "Investors" section of our website
GRI 102-6	Markets served	14	68, 71, 80-83	
GRI 102-7	Scale of the organization	14	64- 66, 75-78, 80, 112, 136	
GRI 102-8	Information on employees and other workers	45-57	70, 71	
GRI 102-9	Supply chain	68-69, 76	65-66	
GRI 102-10	Significant changes to the organization and its supply chain	68-69	65-66	There were no significant changes to the supply chain in the 2021 year under report.
GRI 102-11	Precautionary principle or approach	45, 62-67	99-105	More detailed information in Annual Report
GRI 102-12	External initiatives	70		Responsible Minerals Initiative (RMI) GRI Energy Efficiency Network Aachen
GRI 102-13	Membership of associations	71		
2.	Strategy			
GRI 102-14	Statement from senior decision-maker	22-23, 65, 67	8	
3.	Ethics and integrity			
GRI 102-16	Values, principles, standards, and norms of behavior	4, 15		
4.	Governance			
GRI 102-18	Governance structure	14-15	26-36	
5.	Stakeholder engagement			
GRI 102-40	List of stakeholder groups	11-12		
GRI 102-41	Collective bargaining agreements	No reference		AIXTRON is not subject to any collective bargaining agreements
GRI 102-42	Identifying and selecting stakeholders	11-12		
GRI 102-43	Approach to stakeholder engagement	11-12		
GRI 102-44	Key topics and concerns raised	18-19		None
6.	Reporting practice			
GRI 102-45	Entities included in the consolidated financial statements	8	67, 143, 181	
GRI 102-46	Defining reporting content and topic boundaries	18	118-135	The reporting contents are significantly influenced by the materiality analysis, Sustainability strategy and legal requirements.
GRI 102-47	List of material topics	18-19		
GRI 102-48	Restatements of information	10		Basis for quantitative data —> Explanation of extension and revision of climate balance sheet
GRI 102-49	Changes in reporting	41, 52		Publication of a complete climate balance sheet EU taxonomy report
GRI 102-50	Reporting period	8, 87		
GRI 102-51	Date of most recent report	4, 83		

Key figures

GRI 102-52	Reporting cycle	4		
GRI 102-53	Contact point for questions regarding the report	87		Contact partner on website
GRI 102-54	Claims of reporting in accordance with the GRI Standards	10		
GRI 102-55	GRI content index	77-78		
GRI 102-56	External assurance	83-86	178, 186	Audit opinion in notes to financial statements
GRI 200: Economic				
GRI 103	Management approach	62		
GRI 103-1	Explanation of the material topic and its boundary	18-19		
GRI 202-2	Proportion of senior management hired from the local community	53		100% of senior managers were hired locally in Germany and locally in Asia/USA (for the 2021 year under report)
GRI 202-4	Proportion of spending on local suppliers	68		
GRI 205-2	Communication and training about anti-corruption policies	55, 62	103-104	
GRI 205-3	Confirmed incidents of corruption and actions taken	63		No incidents requiring report here occurred in 2021
GRI 300: Environmental				
GRI 302-1	Energy consumption within the organization	38-39,74		
GRI 302-2	Energy consumption outside of the organization	74		
GRI 302-4	Reduction of energy consumption	36-38		
GRI 305: Emissions				
GRI 305-1	Direct (Scope 1) GHG emissions	34, 74		
GRI 305-2	Energy indirect (Scope 2) GHG emissions	34, 74		
GRI 305-3	Other indirect (Scope 3) GHG emissions	34, 74		
GRI 306: Effluents and waste				
GRI 306-2	Waste by type and disposal method	40, 74		See climate balance sheet (Pages 68-70) for information about waste-related emissions
GRI 400 Social topics				
GRI 401 Employment				
GRI 401-1	New employee hires and employee turnover	51-53	67	
GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	47	157-160	No distinction is made between full-time and part-time employees. We comply with national legal requirements for the protection of employers' rights. The company is bound, also in terms of the contract structures for employment relationships, by national legal requirements, company-internal agreements, and mandatory statutory notification periods.
GRI 401-3	Parental leave	50		
GRI 403 Health and safety				
GRI 403-1	Workers representation in formal joint management-worker health and safety committees	45		
GRI 403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	46, 75		
GRI 404 Training				
GRI 404-1	Average hours of training per year per employee	55	50	
GRI 404-3	Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period	55		
GRI 405 Diversity and Equal Opportunity				
GRI 405-1	Diversity of governance bodies and employees	47	37-40	

**) Within this document, references are made to the pages to which the respective GRI content refers. References with the suffix "GB" refer to our Annual Report 2022.*

Template: Proportion of turnover from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2022

Economic activities (1)	Code (2)	Absolute Turnover (3)	Share of Turnover (4)	Substantial contribution criteria		DNSH-Criteria ("Does Not Significant Harm")		Minimum protection (17)	taxonomy-aligned Turnover share Year 2022 (18)	taxonomy-aligned Turnover share Year 2021 (19)	Category (enabling activities) (20)	Category "(transitional activities)" (21)
				%	%	J/N	J/N					
A. TAXONOMY-ALIGNED ACTIVITIES												
A.1 Ecologically sustainable activities (taxonomy aligned)												
Production of renewable energy technologies	3.1	9,094,982	2.0%	2.0%			J	J	3.8%	52.9%		—%
Manufacture of other low-CO2 technologies	3.6	261,821,440	56.5%	56.5%			J	J	56.5%	56.5%		
Turnover of environmentally sustainable activities (taxonomy aligned) (A.1)		270,916,422	58.5%	58.5%			J	J	56.7%	56.7%		—%
A.2 Taxonomy-aligned but not environmentally sustainable activities (non-taxonomy-aligned activities)												
Turnover of taxonomy-eligible but not environmentally sustainable activities (non-taxonomy-aligned) (A.2)		—	—%	—%								
TOTAL (A.1 + A.2)		270,916,422	58.5%	58.5%								
B. NON-TAXONOMY ALIGNED ACTIVITIES												
Turnover of non-taxonomy aligned activities (B)		192,250,503	41.5%	41.5%								
Total (A + B)		463,166,924	100.0%	100.0%								

Reporting form 1: Activities in the fields of nuclear energy and fossil gas

Template 1 Nuclear and fossil gas related activities

Line	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	No
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	No
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	No
Fossil gas related activities		
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	No
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	No
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	No

Limited Assurance Report of the Independent Auditor Regarding the Separate Consolidated Non-financial Report¹

To the Executive Board of AIXTRON SE, Herzogenrath

We have performed an independent limited assurance engagement on the separate consolidated non-financial report of AIXTRON SE, Herzogenrath (hereinafter, "AIXTRON"), for the period from January 1, 2022 to December 31, 2022 (hereinafter, "NFS"). The separate consolidated non-financial report consists of the reporting sections of the sustainability report marked with an omega sign ("Ω") - with the exception of individual disclosures marked as unaudited.

Management Responsibilities

The legal representatives of AIXTRON are responsible for the preparation of the separate consolidated non-financial report for the period from January 1, 2022 to December 31, 2022 in accordance with §§ 315c in conjunction with 289c to 289e HGB and Article 8 of REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of June 18, 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (hereinafter "EU Taxonomy Regulation") and the supplementing Delegated Acts as well as the interpretation of the wordings and terms contained in the EU Taxonomy Regulation.

This responsibility of the legal representatives includes the selection and application of appropriate methods to prepare the separate consolidated non-financial report and the use of assumptions and estimates for individual disclosures which are reasonable under the given circumstances. Furthermore, the legal representatives are responsible for the internal controls they deem necessary for the preparation of the separate consolidated non-financial report that is free from material misstatement, whether due to fraud (manipulation of the separate consolidated non-financial report) or error.

The EU Taxonomy Regulation and the supplementing Delegated Acts contain wordings and terms that are still subject to substantial uncertainties regarding their interpretation and for which not all clarifications have been published yet. Therefore, the legal representatives have included a description of their interpretation in Chapter „EU-Taxonomy“ of the separated consolidated non-financial report. They are responsible for the validity of this interpretation. Due to the innate risk of diverging interpretations of vague legal concepts, the legal conformity of these interpretations is subject to uncertainty.

¹ Our engagement applied to the German version of the separate consolidated non-financial report. This text is a translation of the Independent Assurance Report issued in German, whereas the German text is authoritative.

Independence and Quality Assurance on the Part of the Auditing Firm

In performing this engagement, we applied the legal provisions and professional pronouncements regarding independence and quality assurance, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (Institut der Wirtschaftsprüfer, IDW) regarding quality assurance requirements in audit practice (IDW QS 1).

Practitioner Responsibilities

It is our responsibility to express a conclusion with limited assurance on the separate consolidated non-financial report based on the audit we have performed.

We conducted our work in the form of a limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information", published by IAASB. Accordingly, we have to plan and perform the assurance engagement in such a way that we obtain limited assurance as to whether any matters have come to our attention that cause us to believe that the company's Chapters and Sections marked "Ω" (except for the disclosures marked as non-audited) in the sustainability report of AIXTRON for the reporting period from January 1, 2022 to December 31, 2022, have not been prepared, in all material respects, in accordance with the §§ 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the delegated acts issued for this purpose as well as the interpretation presented in the "EU Taxonomy" chapter of the separate consolidated non-financial report by the legal representatives.

As the assurance procedures performed during a limited assurance engagement are less comprehensive than in a reasonable assurance engagement, the level of assurance obtained is substantially lower. The determination of assurance procedures is subject to the auditor's own judgement.

Within the scope of our engagement, we performed, among others, the following assurance procedures:

- Creation of an understanding of the interdisciplinary structures for the management of sustainability aspects of the group and the involvement of stakeholders
- Inquiries of the legal representatives and relevant personnel who were involved in the preparation of the separate consolidated non-financial report about the preparation process, the internal control system related to this process and information in the separate consolidated non-financial report
- Identification of likely risks of material misstatement in the separate consolidated nonfinancial report
- Analytical assessment of selected information from the separate consolidated non-financial report
- Comparison of selected information with the corresponding data in the consolidated financial statements and group management report

- Inquiries of group-level personnel who are responsible for the materiality analysis in order to understand the processes for determining material topics and respective reporting boundaries for AIXTRON
- A risk analysis, including media research, to identify relevant information on AIXTRON's sustainability performance within the reporting period
- Evaluation of the design and the implementation of systems and processes for the collection, processing and monitoring of disclosures, including data consolidation, on environmental, employee and social matters, respect for human rights, and combating corruption and bribery
- Inquiries of group-level personnel who are responsible for determining disclosures on concepts, due diligence processes, results and risks, performing internal control functions and consolidating disclosures
- Inspection of selected internal and external documents
- Analytical procedures for the evaluation of data and of the trends in quantitative disclosures as reported at group level by all sites
- Evaluation of local data collection, validation and reporting processes as well as the reliability of reported data based on a sample basis
- Group-level interviews with responsible employees to gain an understanding of how to identify relevant economic activities according to the EU taxonomy
- Evaluation of the process for the identification of taxonomy-eligible and taxonomy-aligned economic activities and the corresponding disclosures in the report
- Assessment of the overall presentation of the disclosures

The legal representatives must interpret vague legal concepts in order to be able to compile the relevant disclosures in accordance with Article 8 of the EU Taxonomy Regulation. Due to the innate risk of diverging interpretations of vague legal concepts, the legal conformity of these interpretations and, correspondingly, our assurance thereof are subject to uncertainty.

Conclusion

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the separate consolidated non-financial report of AIXTRON SE, Herzogenrath, for the period January 1, 2022 to December 31, 2022, in the form of the sections of the sustainability report marked with an "Ω", with the exception of individual information marked as unaudited, have not been prepared, in all material respects, in accordance with §§ 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the delegated acts issued for this purpose as well as the chapter "EU Taxonomy" of the separate consolidated non-financial report has been prepared by the legal representatives.

Restriction of Use/General Engagement Terms

This assurance report is issued for purposes of the Executive Board of AIXTRON SE, Herzogenrath, only. We assume no responsibility with regard to any third parties.

Our assignment for the Executive Board of AIXTRON SE, Herzogenrath, and professional liability as described above were governed by the General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2017 (https://www.kpmg.de/bescheinigungen/lib/aab_english.pdf). By reading and using the information contained in this assurance report, each recipient confirms notice of the provisions contained therein (including the limitation of our liability for negligence to EUR 4 million as stipulated in No. 9 AAB) and accepts the validity of the General Engagement Terms with respect to us.

Düsseldorf, February 27, 2023

KPMG AG

Wirtschaftsprüfungsgesellschaft

Brandt

Wegmann

Wirtschaftsprüferin

Wirtschaftsprüferin

Imprint

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Reporting period: The reporting period is the calendar year 2022. It corresponds to the reporting period of the Annual Report. The previous report was published in February 2022.

Reporting cycle: The Sustainability Report is prepared and published annually with the company's Annual Report.

Auditor: KPMG AG Wirtschaftsprüfungsgesellschaft

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