



# Sustainability Report 2023



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 = Reference to external websites

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# Foreword

## Dear Readers,

In 2023, as we witnessed new records being set for extreme weather events, the need for consistent climate protection was brought home for us all. The semiconductor industry must and can make a significant contribution here: energy-efficient semiconductor components enable other industries to reduce their ecological footprint, thus supporting the transition to a carbon-neutral economy.

Energy-efficient optoelectronic products also contribute to solving other global challenges: special sensors in electric cars support the transport transition to e-mobility, while others improve road safety. Our products enable new, affordable applications in the health care sector and resource-saving food production through intelligent, energy-saving plant lighting.

Our aim is to develop pioneering technologies in the fields of lighting, visualization, and sensor technology. We support our customers in bringing innovative products to the market that improve the quality of life in terms of health, safety, and mobility, and thus contribute to sustainable development. At the same time, we help our customers achieve their own sustainability goals by continuously working to improve the energy efficiency of our products and to minimize their environmental footprint.

We view sustainability not only as an important pillar of our “license to operate,” but above all as an essential prerequisite for long-term success. Sustainability is therefore a key component of our corporate strategy.

In 2023, we launched the “Re-establish the Base” strategy program. As part of the realignment, the role of the sustainability function within the Company was enhanced, and the sustainability strategy was further developed. In addition to advancing sustainable solutions, the focus here is on reducing the actual and potential negative impacts of our business activities on people and the environment. The objectives for our focus topics of climate change, circular economy, integrity, labor conditions & diversity, and human rights have been expanded. We present the details of these objectives in this report, ensuring their implementation by defining measures and measuring their success.

We place particular emphasis on the issue of climate change. There is no doubt that as a manufacturing company, we contribute to climate change. We take our responsibility seriously, and in 2021, we set ourselves the goal of achieving carbon-neutral production by 2030. We have already achieved a reduction of 24% by 2023.

We launched our “Operations Sustainability Program” for our semiconductor production sites in 2023 and have set ourselves ambitious targets. By 2028, energy consumption and emissions at our own semiconductor sites are to be reduced by 20% through

efficiency measures, and our electricity supply is to be converted to 100% renewable energy.

The progress we have made in our sustainability activities is also reflected in the results of our ESG ratings from recognized agencies: we have achieved Gold status with Ecovadis and Prime status with ISS. In addition, ams OSRAM was once again included in the S&P Global Sustainability Yearbook.

Our sustainability endeavors are guided by the United Nations’ 17 Sustainable Development Goals (SDGs). As a supporter of the UN Global Compact, we align our business activities and our sustainability strategy with these universally acknowledged principles, including zero tolerance of corruption.

As a company, we aim to contribute to a sustainable future through our innovations. We believe that the most effective way to achieve this is through collaborative dialog and cooperation. Therefore, I warmly invite you to get in touch with us.

Yours sincerely,  
Rainer Irle  
Chief Financial Officer

April 24, 2024



Responsible Business Alliance  
Affiliate Member

# 1.0 Report Profile

### About this Report

This 2023 Sustainability Report provides an insight into the Company’s sustainability strategy, along with an overview of how our efforts are progressing. In doing so, we illustrate the impact of our business activity with regard to social, environmental, and economic aspects and describe the concepts we employ and action we take to mitigate negative effects on the environment and society and to reinforce positive effects.

ams OSRAM is not subject to the provisions of the EU’s Non-Financial Reporting Directive (NFRD) or the Austrian Sustainability and Diversity Improvement Act (“Nachhaltigkeits- und Diversitaetsverbesserungsgesetz,” NaDiVeG) and is therefore currently not obliged to report. Rather, we report voluntarily in the form of a Sustainability Report to inform stakeholders about our sustainability activities and to meet the increasingly stringent reporting requirements in accordance with future regulations such as the Corporate Sustainability Reporting Directive (CSRD) or the EU Taxonomy Regulation (2020/852).

The 2023 Sustainability Report was prepared in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) in their currently valid form. It also takes account of the framework of the Sustainability Accounting Standards Board (SASB), with a separate index for the SASB “Semiconductors” industry standard<sup>1</sup>. The report also contains a chapter on the EU taxonomy eligibility of our product portfolio as well as a separate chapter<sup>1</sup> in the appendix on the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).

### Reporting Parameters

Essentially, the sustainability reporting follows the approach of financial reporting.

- In keeping with the consolidated financial statements, the reporting period for the 2023 Sustainability Report is from January 1 to December 31, 2023.

- Unless otherwise stated in the report, our sustainability reporting includes all fully consolidated companies in the consolidated financial statements. Upcoming or past changes to the portfolio that impact on reporting are shown in line with the rules for financial reporting.

### Portfolio Changes

The following portfolio changes are taken into account in this sustainability report:

Unit	Part of Reporting
Sale of Clay Paky S.p.A.	no longer included from March 1, 2023
Sale of automotive lighting systems business in Italy (AMLS, Italy)	no longer included from August 1, 2023
Sale of Digital Systems (DS) business in Europe and Asia	complete, no longer included from September 1, 2023

### General Information on Reporting

- The reported content has been chosen on the basis of the results of our → [3.2.2 Materiality Analysis](#) and the requirements of the GRI Standards.
- Financial data contained in the report are taken from the ams OSRAM Consolidated Financial Statements 2023.
- Financial data are presented in the Sustainability Report in EUR millions, rounded to the closest million.
- Rounding differences may occur in tables when totaling rounded amounts and percentages.
- In principle, it should be possible to identify a trend in KPIs. Therefore, wherever possible and/or relevant, KPIs are reported over a time frame of several years<sup>2</sup>.

However, for new report content or, in some cases, due to the availability of data, shorter reporting periods are presented.

- Macroeconomic and sector-specific developments are examined in the ams OSRAM Annual Report [↗ ams OSRAM Annual Report, Management Report, 1 Overview of the Economic Environment and the Past Fiscal Year](#), and [↗ 9 Outlook](#).
- The number of employees is stated — unless shown otherwise — in employees (headcount) on the reporting date.
- The terms ESG, CSR, and sustainability are used interchangeably in the report.

This 2023 Sustainability Report was approved by the Company, represented by the Management Board, on April 24, 2024.

KPMG Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft carried out a limited assurance review of the German PDF version of the report in compliance with the International Standard on Assurance Engagement (ISAE) 3000 (revised). The disclosures for 2023 were checked for compliance with the GRI Standards.

This report is available as a professionally laid-out PDF and can be downloaded at [↗ https://ams-osram.com/about-us/sustainability](https://ams-osram.com/about-us/sustainability).

<sup>1</sup> Unaudited and therefore not part of the audit mentioned under “General Information on Reporting.”

<sup>2</sup> For KPIs relating to 2020, it should be noted that OSRAM activities for the entire 2020 calendar year have been included. The sustainability reporting therefore deviates from the financial reporting, in which the full consolidation of the OSRAM business was not completed until July 9, 2020.





# Company Profile

## 2.0

**Our Company**

**Our Portfolio**

Impact of Our Business Model

Our Products' Contribution to the SDGs

## 2.1 Our Company

ams OSRAM is a leading provider of light and sensor technologies → [2.2 Our Portfolio](#). We research technologies and develop innovative products and solutions based on these, which are marketed via a global sales network.

The operational implementation of the business primarily takes place through the two segments Semiconductors and Lamps and Systems. Our target customers are in the automotive, industrial and medical technology, and consumer markets. With the exception of the business for spare parts in the automotive segment, ams OSRAM exclusively serves business customers (B2B).

Geographically, our corporate activities are split into three regions or regional markets: “EMEA” (Europe, the Middle East, and Africa), “The Americas” (North and South America), as well as “Asia/Pacific.”

ams-OSRAM AG, headquartered in Premstaetten (Austria), is a stock corporation under Austrian law, which is listed on the SIX Swiss Exchange. As the parent company, it has active, unlisted, direct, and indirect holdings and subsidiaries. Shareholders in the Company with more than 3% of the voting rights are reported in the Annual Report [↗](#) [ams OSRAM Annual Report, Corporate Governance, Significant Shareholders](#), and can also be viewed at the [↗](#) Disclosure Office. There were no cross-shareholdings during the reporting period [↗](#) [ams OSRAM Annual Report, Corporate Governance, Cross Shareholding](#).

In the 2023 fiscal year, ams OSRAM’s business was negatively impacted by sustained geopolitical conflicts and their effects. The direct and indirect effects of these conflicts and crises are reported in various places in the 2023 Annual Report.

### ams OSRAM at a Glance<sup>1</sup>

KPI	Unit of reported KPI	2021	2022	2023
Employees (average; FTE)	Average number of employees	26,130	23,322	20,530
Employees (headcount as of December 31)	Headcount as of December 31	24,499	22,461	20,378
thereof outside Austria		23,125	21,101	19,059
thereof Austria		1,374	1,360	1,319
Revenue	Total revenue in millions of EUR	5,038	4,819	3,590
Revenue (regional split)				
thereof EMEA	Revenue by region in millions of EUR	1,413	1,455	1,053
thereof Americas	Revenue by region in millions of EUR	962	849	755
thereof Asia/Pacific	Revenue by region in millions of EUR	2,663	2,515	1,783
Revenue (segments)				
thereof Semiconductors	Revenue by segment in millions of EUR	3,279	3,167	2,425
thereof Lamps & Systems	Revenue by segment in millions of EUR	1,760	1,652	1,165
R&D expenses	in millions of EUR	692	630	480
Total assets	in millions of EUR	9,644	8,832	7,401
Equity	in millions of EUR	3,150	2,833	1,905
Equity ratio	Equity in percent of total assets	33%	32%	26%
Production site	Number of locations with own production (globally)	23	20	18
Subsidiaries	Number of subsidiaries (globally)	117	99	86
Countries with business activities	Number of countries with subsidiaries and participations consolidated in the financial statements	43	40	39

<sup>1</sup> Detailed information and explanations on the key metrics contained in the overview can be found in the ams OSRAM Annual Report, which can be downloaded from [↗](#) [the Company’s website](#).

# 2.2 Our Portfolio

The ams OSRAM technology portfolio comprises technologically complex, intelligent sensor and emitter components, including high-quality light emitters, sensors, and CMOS ICs with embedded software solutions. These are complemented by complete luminaires and complex systems, creating market-changing innovations in our end markets. One priority is the development of green tech products and solutions → [4.2.4 Green Tech Development](#).

## 2.2.1 Impact of Our Business Model

The semiconductor industry is regarded as a key to digitalization. Optical semiconductors are on the way to replacing electronic components. They enable numerous applications that are used in a multitude of sectors → [2.2 Our Portfolio](#) and [ams OSRAM Annual Report, Management Report, 3 Research and Development](#).

The products and solutions for which end customers use semiconductors often have positive effects on nature, the climate, and society in general → [2.2.2 Our Products’ Contribution to the SDGs](#). The semiconductor industry is also an important economic sector that directly and indirectly creates jobs and contributes to economic development through high levels of investment.

For technological reasons, the manufacturing processes in the semiconductor industry are very energy- and water-intensive. As an example, ultrapure water is required. In addition, gases and rare raw materials, as well as some hazardous chemicals, are needed in production. There is a risk of human rights violations in the upstream supply chain, because of the minerals processed and their origin. The topics outlined are reflected in our → [3.2.2 Materiality Analysis](#). How ams OSRAM deals with existing and potential impacts of its business activity on people and the environment and, by extension, on key stakeholders such as employees or users, and how negative effects

of business activity are to be mitigated or avoided, is described in the relevant chapters of this report.

Life cycle analyses (LCAs) have shown that our products have the biggest impact in the downstream supply chain, particularly in the use phase. For example, they are built into products and solutions as components that — as described below — have a positive impact on both the environment (in particular climate protection) and society. In 2023, we established a role dedicated to conducting LCAs. Due to the complexity of the analyses, we have developed a strategy to ensure that future LCAs cover customer requirements and the portfolio as effectively as possible. A pilot study has already been successfully completed. The first regular LCAs will be created in 2024.

ams OSRAM is guided by the 17 Sustainable Development Goals (SDGs) of the United Nations and aims to make a contribution to achieving those goals with its product portfolio. We understand the SDGs as an indicator of our added value to society. At the same time, they serve as guidance in deducing business opportunities.

With our portfolio, we address global challenges, such as climate change, the scarcity of resources, or urbanization, and want to improve quality of life in various areas, such as health, safety, and mobility. In keeping with our business model, we develop increasingly efficient, ever-smaller solutions across all technologies → [4.2.4 Green Tech Development](#), which contribute to the SDGs mentioned below.

## Positive Impact of our Portfolio on the SDGs

**Automotive & Mobility**

- LiDAR for advanced driver assistance enables safer driving, fewer accidents, etc. (SDGs 3, 7, 11)
- Intelligent multi-pixelated forward lighting for better sight and projecting warning symbols (SDGs 3, 7, 11, 12, 13)
- In-cabin sensing for driver monitoring and alert systems with fast detection, improved safety for driver and passengers (SDGs 3, 7, 11, 12, 13)
- Energy-efficient and safer solutions for a more autonomous future mobility (SDGs 7, 11, 12, 13)
- Circular LED modules for automotive lighting (SDGs 7, 11, 12, 13)

**Industrial & Medical**

- Energy-saving UV-C disinfection solution without using chemicals or mercury (conventional UV-C solution) — less harm to the environment (SDGs 3, 6, 7)
- Horticulture LEDs for a better yield, less resource and energy usage, enables vertical farming (SDGs 3, 7, 12, 13)
- High-performance medical imaging for better quality/diagnostics with lower radiation for patients and doctors (SDGs 3, 7, 12, 13)
- Cutting-edge LEDs for high-performance lighting with low energy use (SDGs 3, 7, 13)

**Consumer**

- Vital sign monitoring for several health measurements, very small and energy-saving device design (SDGs 3, 7, 13)
- UV-A sensor for sun protection, to alert the user/prevent sunburn (SDGs 3, 7, 13)
- Behind-screen applications for improved display brightness and colors (SDGs 3, 7, 13)
- Multiple energy-efficient light and sensor solutions/high convenience with low power consumption (SDGs 7, 11, 12, 13)
- Small projection units for augmented reality (AR) devices in glasses (SDGs 7, 11, 12, 13)
- Energy-efficient image sensors for sensor applications in augmented reality (AR) and virtual reality (VR) glasses (SDGs 7, 11, 12, 13)





# 3.0 Sustainable Corporate Governance and Integrity

## Sustainable Corporate Governance

Core Values

Executive Bodies of the Company

## Implementing Sustainability within the Company

Organization and Structures

Materiality Analysis

Sustainability Strategy

Dialog with Stakeholders

Risk Management and Geopolitical Risks

## Combating Corruption and Anti-Competitive Behavior

Data Protection

# 3.1 Sustainable Corporate Governance

For ams OSRAM, responsible corporate governance is an essential foundation for achieving the corporate goals and robust growth in the value of the Company in the long term. Our core values and trusting collaboration between the Executive Bodies are central to this.

## 3.1.1 Core Values

We bear responsibility throughout the world because of our global business activity and its potential and actual impact on the economy, the environment, and society. Our actions are guided by the principles of the UN Global Compact and respect for international rights and laws. These are firmly embedded in our core values and leadership principles.

We rely on strategic, ambitious thinking and actions, and encourage trust, integrity, and diversity at our Company. These values and principles form the basis of our actions and our leadership style, as well as the decisions we make. They are anchored in the [ams OSRAM Code of Conduct \(CoC\)](#). They also determine how we behave as colleagues and business partners.

The CoC also takes account of statutory provisions, rules for publicly listed companies<sup>1</sup>, and international agreements on human rights, anti-corruption, and other areas of responsible corporate governance. All employees undertake to comply with the CoC when they start working for the Company. The CoC basically summarizes how we live up to our ethical and legal responsibility as a company. We respect each individual's personal dignity, privacy, and personal rights, and do not tolerate any discrimination → [6.3 Diversity and Equality of Opportunities](#). We have also formulated our commitment to respecting human rights with regard to people affected by our business activities, our supply chain, or our products in our [Human Rights Policy](#).

<sup>1</sup> Because it is listed on the SIX Swiss Exchange, ams-OSRAM AG is subject to corporate governance requirements for listed companies in Switzerland (Swiss Corporate Governance Directive). These requirements are fully observed, as are those of Austrian stock corporation law. ams-OSRAM AG also takes account of the recommendations of the Austrian Corporate Governance Code and developments in the respective regulations applicable to international investors and advisors on voting rights.

We also oblige our suppliers to comply with the values and principles defined in our CoC via our Code of Conduct for Suppliers → [5.2 Supply Chain Management](#).

Potential risks and violations of our principles regarding human rights, labor conditions, and environmental protection, both in our own business area and at our suppliers, can be reported via the [“Tell ams OSRAM”](#) whistleblower system. We report on violations and how we deal with them in the relevant chapters, each of which are in the “Action Taken, Results, and KPIs” section: on breaches of labor conditions and human rights in → [5.1 Respect for Human Rights](#), on environmental breaches in → [4.1 Environmental Management](#), and on breaches of anti-corruption and antitrust law at → [3.3 Combating Corruption and Anti-Competitive Behavior](#).

## 3.1.2 Executive Bodies of the Company

Corporate governance at ams OSRAM is shaped by the dual management system applicable under Austrian stock corporation law, consisting of a Management Board and a Supervisory Board.

Information about the working methods of the Supervisory Board, the committees, their members, and the resumes of the members of the Management Board and Supervisory Board can be viewed on the [Company's website](#) (see “About us” in the navigation bar).

### Management Board

As the management body, the Management Board is responsible for corporate governance and decides on the fundamental issues of business policy and corporate strategy. Furthermore, individual areas of responsibility are assigned to each member of the Management Board, based on the rules of procedure. Within the Management Board, the Chief Financial Officer (CFO) is responsible for sustainability, and the head

of the Sustainability Department reports directly to him. Responsibility for the topics defined as “material” is explained in the relevant chapters of this report.

When filling management positions in the Company, the Management Board takes diversity and inclusion into account. Among other things, it aims to increase the proportion of women in management positions to at least 25% by 2026 → [6.3 Diversity and Equality of Opportunities](#).

In its regular reporting to the Supervisory Board, the Management Board also comments on sustainability issues.

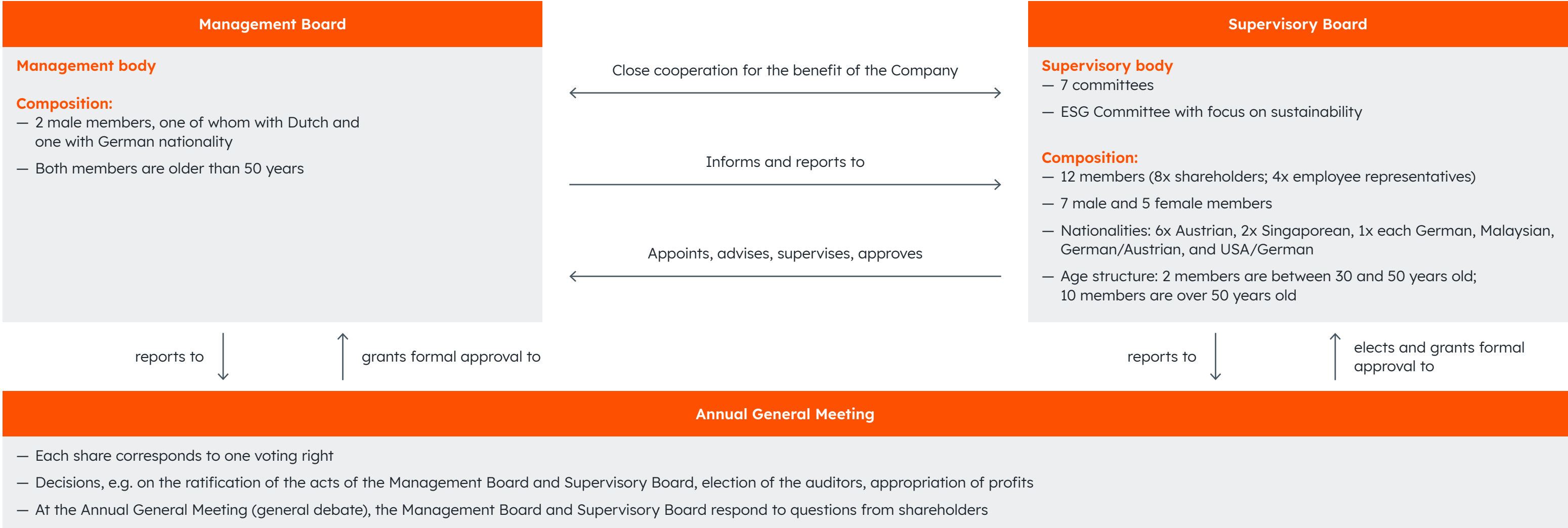
### Supervisory Board

The Supervisory Board monitors the work of the Management Board and regularly discusses — with or without the members of the Management Board — latest business developments and planning as well as the Company's long-term strategy and its implementation. Another of the Supervisory Board's tasks is to decide on appointments to, and the remuneration of the Management Board.

Within the Supervisory Board, various Committees are dedicated to specific topics. The Chairs of the Committees report on their work at the Supervisory Board meetings. The ESG Committee deals extensively with ESG requirements, strategic targets, and the associated action, and prepares any decisions to be made by the Supervisory Board. It works closely with the Audit Committee, which also deals with sustainability-related regulatory requirements and the future EU-wide mandatory sustainability reporting in accordance with the CSRD. The ESG Committee also coordinates with the Supervisory Board's Remuneration Committee to set ESG targets for Management Board remuneration and determine to what extent those targets are met each year. This structure ensures that the Supervisory Board reflects the various dimensions of sustainability in its work and oversees the Company's progress in those areas [Charter of the ESG Committee](#).



Two-Tier Board Structure of ams-OSRAM AG<sup>1</sup>



<sup>1</sup> Status quo at the time of report release by the Management Board.

The Supervisory Board regularly assesses the effectiveness of its work, as it did in 2023, and incorporates its findings in its future working methods. The next self-assessment is planned for 2024. In the 2023 fiscal year, too, the new members of the Supervisory Board attended compliance training, focusing on capital market compliance, as part of the onboarding process. In addition, individual Supervisory Board members took part in individual training measures, such as further training in the ESG environment. The members of the Supervisory Board also completed training on current developments in the area of corporate governance in the 2023 fiscal year.

The attendance rates of Supervisory Board members at plenary and committee meetings are reported individually in the Annual Report [ams OSRAM Annual Report, Corporate Governance, Supervisory Board](#).

Composition of the Supervisory Board

The composition of the Board should be characterized by a broad mix of professional qualifications as well as diverse personal characteristics of its members such as age, gender, and cultural background. Details are outlined in a skills profile based on three pillars, developed by the Supervisory Board, which is published in the principles for the Composition and Diversity of the Supervisory Board [Board Composition and Diversity Policy](#).

Independence of the Supervisory Board

As part of the elections of shareholder representatives to the Supervisory Board by the 2023 Annual General Meeting on June 23, 2023, and the Extraordinary General Meeting on October 20, 2023, all candidates standing for election submitted a declaration in accordance with Section 87 (2) of the Austrian Stock Corporation Act prior to their election, in which they also declared their independence with regard to the exercise of their mandate.



The Supervisory Board has also defined principles for its composition, which detail specific requirements regarding the independence of Supervisory Board members. Generally speaking, a member of the Supervisory Board is deemed to be independent if they have no business or personal relationships with the Company or its Management Board that would constitute a material conflict of interest and therefore be capable of influencing the member’s behavior. This requirement must be fulfilled at all times by every member of the Supervisory Board. Details of the independence criteria can be found in the policy mentioned in “Composition and Diversity of the Supervisory Board.”

The employee representatives on the Supervisory Board have an employment relationship with ams OSRAM, but no further restrictions of their independence are known. Should any conflicts of interest arise for members of the Supervisory Board, they must be disclosed to the Chair of the Supervisory Board. If these turn out not to be temporary, the Supervisory Board member in question should resign their seat. No such conflicts of interest were registered in the 2023 fiscal year.

Business relationships with related parties (members of the Management Board and Supervisory Board) are reported on in the latest [ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, 28 Related Parties](#).

Remuneration for the Management Board and Supervisory Board

The Supervisory Board decides on the remuneration system for the Management Board by determining appropriate remuneration policies. These are then presented to the Annual General Meeting for a vote. This procedure ensures that the Management Board’s remuneration is commensurate with the Company’s financial performance and with remuneration in similar positions in the semiconductor and technology sector. It must also support business strategy and the Company’s long-term development. In principle, the remuneration policy must be presented to the Annual General Meeting for a vote at least once every four fiscal years and each time there is a sig-

nificant change. At the Annual General Meeting on June 23, 2023, a fundamentally revised version of the Management Board’s remuneration policy was presented to the shareholders and approved by the Annual General Meeting. In particular, the feedback from ams OSRAM shareholders was taken into account. The Supervisory Board’s Remuneration Committee, supported by an external independent consultant, conducted the review. This new remuneration policy came into force retrospectively from January 1, 2023, for all new Management Board service contracts to be concluded and extended (“new contracts”) [Remuneration Policy](#). In the 2023 fiscal year, the remuneration policy approved by the Annual General Meeting on June 2, 2021, continued to apply to existing Management Board service contracts (“old contracts”).

The remuneration of the Management Board of ams-OSRAM AG consists of fixed and variable remuneration components. The fixed components comprise a basic salary as well as benefits in kind and fringe benefits, while the variable remuneration components consist of a performance bonus and the LTIP (Long Term Incentive Plan). In addition, malus and clawback regulations and a share ownership guideline are key components of the Management Board’s remuneration policy. The ratio of remuneration between the Management Board and the workforce is disclosed in the Annual Report [ams OSRAM Annual Report, Remuneration Report, Change in Remuneration of the Management Board Compared to the Workforce](#).

As already announced in the 2022 Sustainability Report, the new remuneration policy also includes the anchoring of an ESG-related target in the newly defined long-term remuneration component (LTIP). ESG-related targets are taken into account with a weighting of 20%. The Remuneration Committee has the option of setting ESG targets for each tranche of the LTIP based on a catalog of criteria, taking into account the current priorities of the sustainability strategy. For the 2023 fiscal year, a Scope 1 and Scope 2 CO<sub>2</sub> emissions reduction target in line with the Company’s sustainability and climate strategy was included in the LTIP program, with a weighting of 20%.

In principle, under the current remuneration policy the members of the Management Board do not receive any sign-on bonuses. Regulations on payments in connection with the termination of Management Board contracts are contained in the current remuneration policy.

The remuneration of the Supervisory Board is regulated in the aforementioned remuneration policy for the Supervisory Board. It consists of a standardized basic remuneration; annual bonuses and share options are not granted. In view of the broader scope of activities and greater responsibility, the Chair of the Supervisory Board, the Deputy Chairperson, and members who chair a committee receive a higher basic remuneration than other Supervisory Board members. The employee representatives on the Supervisory Board perform their function on an honorary basis in accordance with Section 110 (3) of the Labor Constitution Act (ArbVG) and do not receive any remuneration.

Key Topics of the Board regarding Sustainability in 2023

Following its inaugural meeting, the ESG Committee met a further three times in 2023. In particular, the committee dealt with the sustainability strategy, the integration of ESG targets into Management Board remuneration, the results of sustainability ratings, sustainability reporting for the 2022 fiscal year, the further development of sustainability reporting, and the key sustainability topics for ams OSRAM. The Supervisory Board was regularly informed about the work of the ESG Committee.

Sustainability-related topics were regularly discussed at Management Board meetings, focusing in particular on the implementation of the sustainability strategy and the challenges of future reporting obligations in accordance with the CSRD.

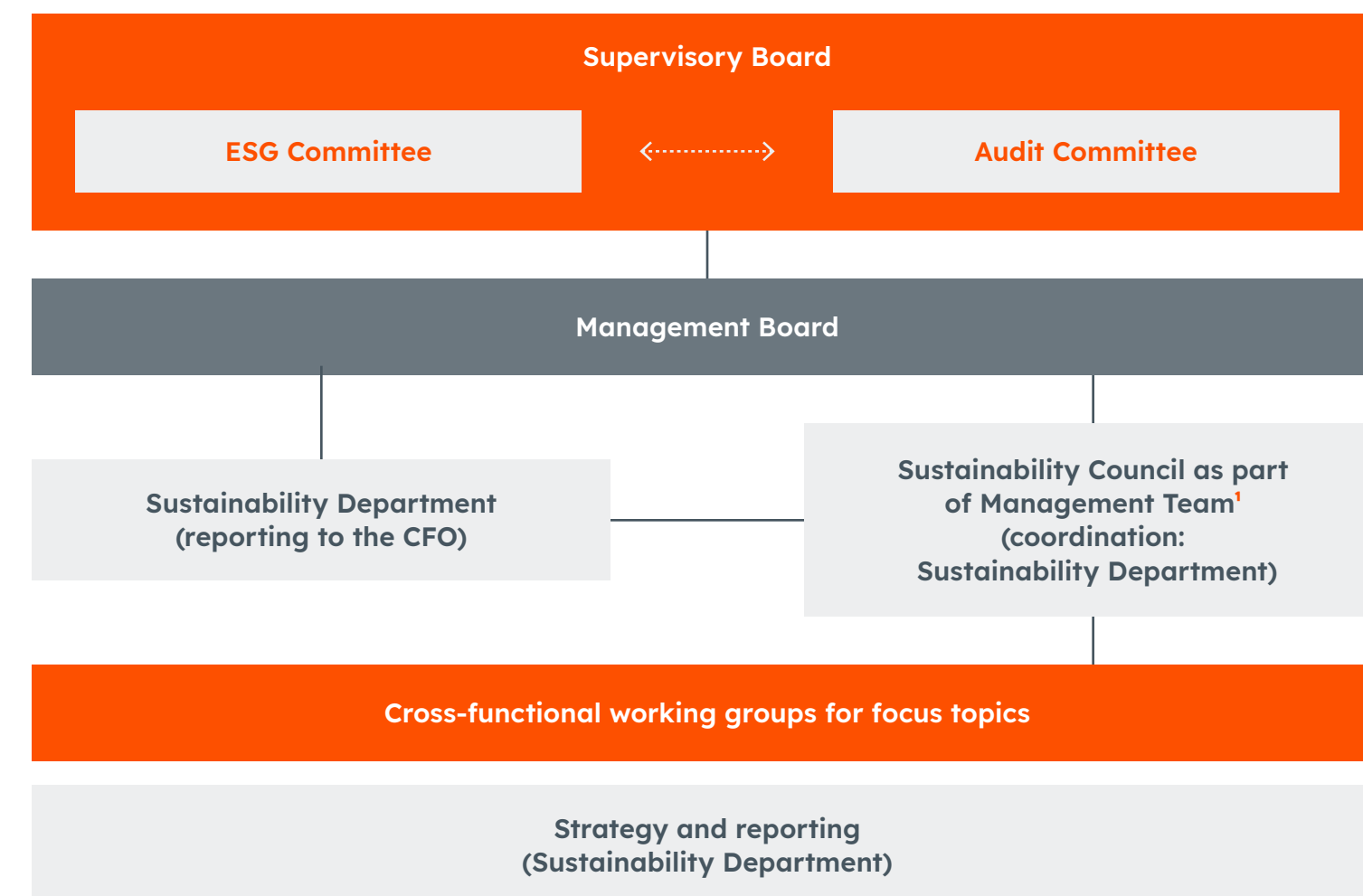
The Sustainability Council<sup>1</sup> met twice in 2023 and dealt with the sustainability strategy and the future reporting obligation in accordance with the CSRD.

<sup>1</sup> The composition and involvement of the Board in sustainability management are shown in the “Governance Framework for Sustainability” (→ 3.2.1 Organization and Structures) diagram.

## 3.2 Implementing Sustainability within the Company

### 3.2.1 Organization and Structures

#### Governance Structure of Sustainability



<sup>1</sup> The ams OSRAM Management Team consists of two Management Board members, the business unit heads, and the heads of certain corporate functions.

The topic of sustainability and the associated requirements from our key stakeholders such as customers, the capital market, or legislators are evolving at a very dynamic pace. A special governance framework is in place to manage company-wide sustainability activities. This includes all relevant functions and business areas and covers the implementation of the sustainability strategy → [3.2.3 Sustainability Strategy](#) as well as progress updates. Proposals for decisions are prepared by the individual working groups and are presented to the Management Board by the Sustainability Council for approval. The Management Board reports significant decisions to the Supervisory Board and its Committees responsible for sustainability → [3.1.2 Executive Bodies of the Company, Supervisory Board](#).

The Sustainability Department is involved in all aspects of our sustainability activities. Together with the Sustainability Council, it also supports and advises other departments in integrating sustainability into their areas of responsibility. The sustainability team also works to raise awareness of sustainability issues throughout the organization.

Responsibilities and processes for sustainability were documented in 2022 in a Sustainability guideline. To summarize the key principles, a Sustainability Policy was also published [Sustainability Policy](#).

### 3.2.2 Materiality Analysis

In 2021, a materiality analysis was undertaken as the basis for reporting and for developing the sustainability strategy. This analysis rated individual topics for their relevance to stakeholders of ams OSRAM and their potential and actual positive or negative effects on the environment, people, and society. The significance of the topics for the course of business was also included as a third dimension. Therefore, the materiality analysis covers not just the requirements of the GRI Standards, but also takes into account the future European reporting obligation in accordance with CSRD. Further information is provided in Chapter → [3.2.4 Dialog with Stakeholders](#).

The process of the materiality analysis carried out in 2021 was subdivided into four phases and was designed in such a way that it meets the requirements described above.

- **Phase 1:** Potential topics including their potential impacts were identified within ams OSRAM's area of responsibility. The basis for this was provided by an analysis of competitors, customer and capital market requirements, relevant global standards, and foreseeable regulatory projects. Sector-specific topics were taken into account for every value creation stage.
- **Phase 2:** These identified topics were then divided by the Sustainability Council into focus topics in accordance with their ESG relevance (see diagram "Material Topics and Contents of the Report").
- **Phase 3:** By means of a questionnaire, these topic areas were assessed by internal experts (representatives of relevant central functions, operations, and the business units) at the Company with regard to their potential and actual positive and negative impact as well as opportunities and risks.
- Various perspectives were included in the assessment: stakeholder relevance, the Company's impact on the environment and society (inside-out), and the impact on the Company (outside-in). The internal experts included the perspectives relevant to their respective topics in the questionnaires.
- **Phase 4:** The results of the questionnaire were then discussed with the experts in two workshops and prioritized based on their significance and potential impact.

The results of the materiality analysis were presented to the Management Board and approved by it. The Supervisory Board was also informed about this. The key issues are presented to both bodies again each year. Both bodies are informed of any significant changes that arise during the annual review. The material topics are shown in the diagram on the following page.

The matrix presentation provides an overview of the prioritization<sup>1</sup> of the material topics based on the three dimensions of stakeholder relevance, impact of the Company on the environment and society (inside-out), and impact on the company (outside-in).

### Results of the Materiality Analysis



<sup>1</sup> Some topics were prioritized equally, resulting in the following rankings being awarded twice: water and climate protection, labor conditions, and resource consumption and circular economy.  
<sup>2</sup> Integrated in the chapters of → 6.0 Responsibility to Employees  
<sup>3</sup> Integrated in the chapter → 4.3.1 Resource Efficiency

All the topics defined as material are covered by this Sustainability Report. In some instances, they have been summarized, producing the following classification of the material topics:

### Material Topics and Contents of the Report

01 MATERIAL TOPICS	02 CONTENTS OF THE REPORT	03 FOCUS TOPICS (→ 3.2.3 Sustainability Strategy)	04 STRATEGIC ADDED VALUE FOR STAKEHOLDER GROUPS (see Company strategy → 3.2.3 Sustainability Strategy)
Climate change	Greenhouse gas emissions, climate strategy, and climate protection	Climate	Shareholders Customers Society
Energy	Energy efficiency, green tech development, use of renewable and non-renewable energies		
Resource use and circular economy	Handling of critical substances, resource use and efficiency	Circularity	Customers Society
Water	Water use/consumption		
Waste	Waste for recycling/disposal		
Labor conditions	Diversity, compliance with corporate principles such as right to freedom of association and collective agreements or anti-discrimination, occupational health and safety, fair remuneration, other benefits granted by the employer, people development	Labor conditions & diversity	Employees
Human rights	Duty of care regarding human rights, dealing with conflict minerals	Human rights (supply chain)	Society
Product stewardship	Customer satisfaction, quality, and product safety		
Integrity and accountability	Avoiding corruption and bribery, fair competition	Integrity	Shareholders Customers Society
Geopolitics	Geopolitical risks and their management		



These material topics were also reviewed in 2023. Consideration was given to whether, due to significant changes in external and internal influencing factors, an update or adjustment of the materiality analysis was necessary. Ultimately, this was not deemed necessary.

This Sustainability Report also tackles other topics that could be of relevance for our stakeholders or contribute to an overarching understanding of sustainability at ams OSRAM. For topics that are not included in the GRI Standards, we generally defined our own indicators, or used indicators from other frameworks such as SASB.

In all areas we work towards contributing to steadily reducing negative impact and reinforcing positive impact using suitable guidelines, some of which are already implemented, and management systems as well as appropriate action. We describe how we do this in detail in the following chapters.

### 3.2.3 Sustainability Strategy

Sustainability is a key component of our corporate strategy. Besides commercial success, the requirements of our stakeholders such as customers, shareholders, employees, and society are also addressed.

Our sustainability strategy aims to overcome environmental, social, and economic challenges; the latter, in particular by incorporating responsible corporate governance. This also includes topics such as increasing efficiency by reducing resource consumption, employee satisfaction, attractiveness to potential employees, investor and customer expectations, and legal requirements.

A comprehensive sustainability strategy was developed in 2022. This is based on the focus topics defined in the materiality analysis: climate, circularity, labor conditions & diversity, human rights, and integrity. The following “Sustainability Strategy” diagram depicts targets and progress in the year 2023.

ams OSRAM’s sustainability strategy encompasses the entire value chain — from our supply chain and our own production facilities to our portfolio and added value for our customers. It aims for sustainable business practices, with which we hope to meet our responsibility and minimize risks. The strategy is founded on deeply embedded values and principles, clear structures, and defined processes.

For us, sustainability means minimizing our negative impact on the environment, using resources responsibly, contributing to climate protection, offering attractive labor conditions, protecting health and safety at work, and ensuring respect for human rights. We have summarized our ambition in our Sustainability Vision. It reads: “We create sustainable added value with innovative lighting and sensor solutions and have a positive impact on the environment and society,” aligning with the Company’s mission: “We pioneer differentiating lighting and sensing technologies. Customers trust our innovation power and manufacturing capabilities. Together, we create long-term value while making our world safer, smarter, and more sustainable.” → [2.2.2 Our Products’ Contribution to the SDGs](#).

## Sustainability Strategy:

“Creating sustainable value and positive impact with innovative light and sensor solutions”

Our portfolio contributes to:



UN Sustainable Development Goals



### Integrity

Ethical business practices and sustainable governance

- 20% of long-term incentive plan of **Management Board remuneration** tied to climate target
- Coverage of **code of conduct training** extended to all direct employees until end of 2024
- **ESG Committee's** skills extended via training in 2023
- **Cyber Security** ISO 27001 **certification**

### Human rights

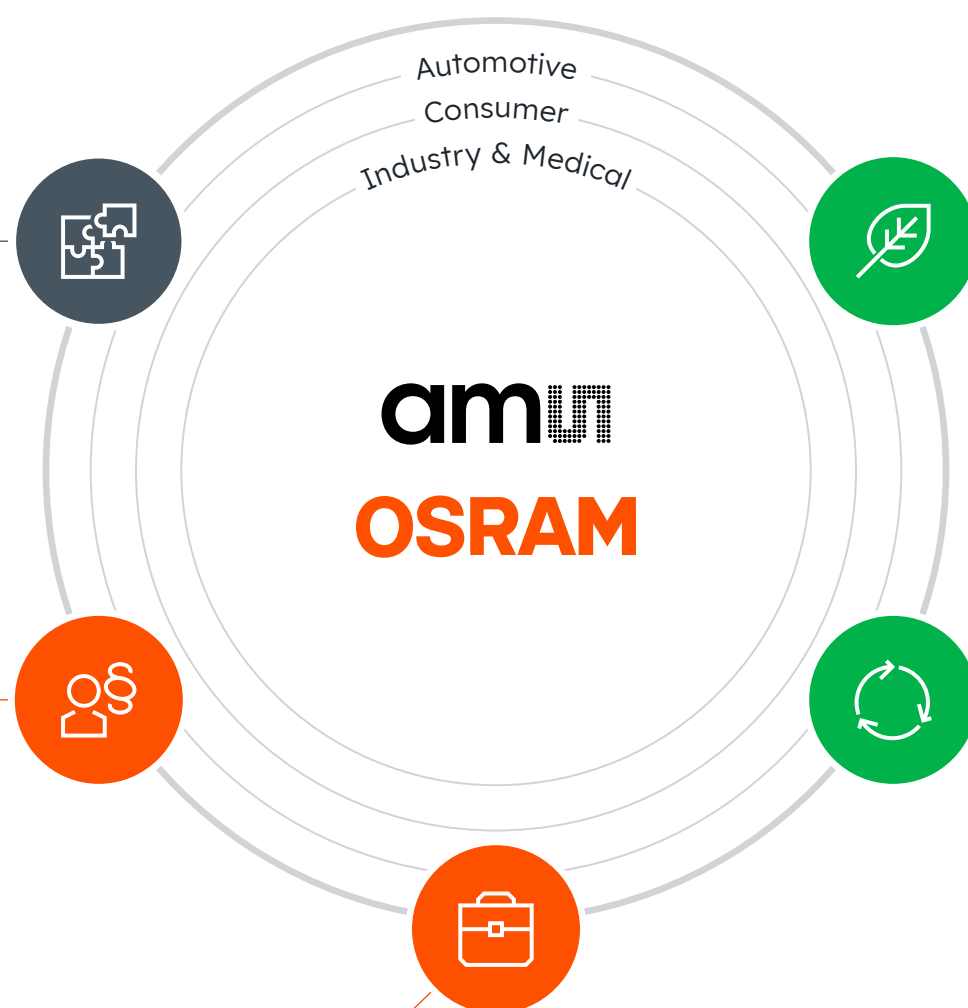
Due diligence

- **Human rights training** for all employees until 2024
- Annual **human rights risk assessments** of own sites
- Annual **risk classification** of the entire purchasing volume

### Labor & Diversity

Responsible people management

- 25% **women in management** by 2026
- All major **production sites RBA-audited** by 2030



### Climate

Low carbon value chain

- **Carbon neutrality** of **own operations** until 2030
  - 100% **renewable energy** for electricity until 2028
  - Implemented **energy efficiency measures** for 20% CO<sub>2</sub>e reduction until 2028
- Near- and long-term targets for science-based **reductions** of **Scope 3 emissions** (purchased goods/services)

### Circularity

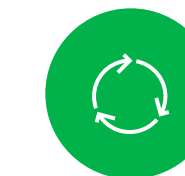
Responsible resource use

- **Water** and **waste reduction program** to be further developed
- Regular **water risk assessment**
- Expand wafer **substrate recycling**
- **Reduction of plastic** by 200 t until 2026 within our **plastic-free packaging** strategy for aftermarket
- Expansion of the **circular portfolio** of LED modules for automotive lighting
- Start **LCA approach**, first analysis in 2024

## Key Outcomes of the Individual Focus Topics in Fiscal Year 2023



- Own business activities, Scope 3: → [4.2.3 Greenhouse Gas Emissions](#) (action taken, KPIs)
- Emission reduction path: → [4.2.3 Greenhouse Gas Emissions](#) (diagram)



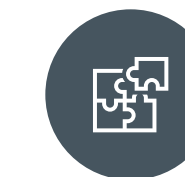
- Substrate recycling/plastic-free packaging: → [4.3.1 Resource Efficiency](#) (action taken)
- Circular Automotive portfolio: → [2.2.2 Our Products' Contribution to the SDGs](#) (diagram)
- LCA approach: → [2.2.1 Impact of our Business Model](#)



- Human rights risk assessments: → [5.1 Respect for Human Rights](#) (action taken)
- Human rights training: → [3.3. Combating Corruption and Anti-Competitive Behavior](#) (action taken, KPIs)
- Risk classification: → [5.2 Supply Chain Management](#)



- RBA audits: → [5.1 Respect for Human Rights](#)
- Women in managerial roles: → [6.3 Diversity and Equality of Opportunities](#) (results)



- Climate-related management board incentivization: → [3.1.2 Executive Bodies of the Company, Remuneration for Management Board and Supervisory Board](#)
- Code of conduct training: → [3.3 Combating Corruption and Anti-Competitive Behavior](#) (action taken, KPIs)
- ESG Committee's skills and topics 2023: → [3.1.2 Executive Bodies of the Company, Supervisory Board](#)
- Cyber security: ISO 27001 certification status: → [Company's website](#) (paragraph “Cyber security”)

## 3.2.4 Dialog with Stakeholders

Within the current materiality analysis → [3.2.2 Materiality Analysis](#), we checked which stakeholders are relevant for ams OSRAM. In this process, potential impacts on stakeholders were individually assessed for each topic to determine their significance. We look to improve our activities for more sustainability by engaging in dialog with our stakeholders. Therefore, the feedback obtained from talking to our stakeholders was incorporated in the strategy development process and decisions regarding action, for example. By engaging in dialog with our stakeholders, we help at the same time to spread the word about proven practices and solutions.

We regularly talk to the following stakeholder groups throughout the world: employees, investors, customers, suppliers, analysts, journalists, scientists, neighbors, politicians and representatives of non-governmental organizations, authorities, and associations. We hold dialog with people at various management levels, in different locations, and through various departments. The interests of key stakeholders, such as employees, customers, and suppliers, as well as investors are also taken into consideration by the Supervisory Board, since its members possess relevant expertise and experience, and it is also composed of employee representatives. The frequency of exchange varies depending on the format (see adjacent diagram “Key Communication Formats”) and can be regular, annual, or event-driven.

The impact of topics for stakeholders is assessed once a year by the Sustainability Department. This department also examines the composition of our stakeholders, identifies which channels exist for communicating with each group, and documents the specific action to be taken. The Management Board and the Management Team are informed of any significant changes.

We also share information for stakeholders in this report and in our communications.

## Key Communication Formats

### Community

#### Chapter in the report:

→ [5.4 Social Engagement](#)

#### Communication channels:

- Exchange with local management
- Cooperation with local authorities

### Owners and investors

🔗 <https://ams-osram.com/about-us/investor-relations>

#### Communication channels:

- Annual General Meeting
- Investor conferences/roadshows
- Regular analyst calls

### Journalists

🔗 <https://ams-osram.com/news>

#### Communication channels:

- Press events
- Response to press inquiries
- Interviews

### Suppliers

#### Chapter in the report:

→ [5.2 Supply Chain Management](#)

#### Communication channels:

- IT tool-based communication with inventory suppliers
- Direct exchange with suppliers

### Associations and initiatives

#### Chapter in the report:

→ [3.2.4 Dialog with stakeholders](#)

#### Communication channels:

- Exchange at events
- Meetings with direct exchange

### Employees

#### Chapter in the report:

→ [6.5 Attractiveness as an Employer, Employee Satisfaction, and Remuneration](#)

#### Communication channels:

- Interactive townhall meetings
- Webchats/round table with board/management
- Performance management process between management and employees
- Tech Talks

### Customers

#### Chapter in the report:

→ [5.3.1 Customer Satisfaction](#)

#### Communication channels:

- Key account management system
- CRM system
- Participation in trade fairs and direct exchange
- Tech Days



### Political Engagement and Memberships

In line with our principles, we are committed not to give donations or other contributions, either directly or indirectly, to politicians, political parties, or organizations. Rules to this effect are fixed in the Code of Conduct. ams OSRAM does not maintain its own offices for the political representation of the Company’s interests or corresponding agencies.

Sponsorship agreements, contributions to trade associations, and membership fees for organizations that serve the Company’s interests do not count as donations.

Our political involvement is limited to memberships in industry associations. In terms of contributions, the following associations are most relevant: the German Electro and Digital Industry Association (ZVEI), LightingEurope, and Semiconductor Climate Consortium (SCC), a trade association within the semiconductor association Semiconductor Equipment and Materials International (SEMI), as well as compulsory memberships in employer and business associations or chambers of industry and commerce.

As part of its association work, ams OSRAM works towards ensuring that, in addition to the overarching objectives of energy-efficient, resource-friendly, high-quality light and sensor solutions, new specifications satisfy users’ requirements and can also be implemented by the industry, through standardization or fair trading conditions, for example.

Our commitment in various associations and organizations also includes collaborating in various sector-specific working groups on issues such as the circular economy, the European Commission’s Green Deal, and sustainability in the electronics industry. Besides exchanging our experiences, proposed solutions and plans for joint implementation are developed with these groups.

ams OSRAM is also a voluntary member of organizations that are directly associated with our material topics. These include the UN Global Compact, the Responsible Business Alliance (RBA), the Responsible Minerals Initiative (RMI), the “Charta der Vielfalt” (Diversity Charter) Association, and the PROUT AT WORK Foundation.

In 2023, membership fees came to around EUR 1.0 million (previous year: EUR 2.2 million). The decrease is related to portfolio changes → [1.0 Report Profile](#).

## 3.2.5 Risk Management and Geopolitical Risks

ams OSRAM is exposed to a multiplicity of risks in the context of its global activities, which are inextricably linked to its corporate activity. Due, among other things, to advanced globalization and the attendant, increasing interlinking of social, economic, and political interests (including financial), geopolitical risks and opportunities are increasingly coming to the fore.

### Guidelines, Responsibilities, Structures, and Processes

To identify, assess, and manage risks, ams OSRAM undertakes systematic risk management (enterprise risk management, ERM). Risks that could jeopardize the Company’s continuity or the achievement of its strategic, operational, financial, and compliance-related goals must be identified at the earliest possible opportunity and risk-mitigating measures taken. As part of the ERM process, non-financial risks such as transition and physical climate risks are also taken into account. We are continually refining our risk management system to satisfy changing internal and external requirements.

The central risk management function is part of the Audit, Compliance, and Risk Management Department and coordinates the ERM process and ERM reporting. The head of department reports directly to the Chief Financial Officer (CFO), and has a direct reporting line to the Supervisory Board’s Audit Committee, which monitors the effectiveness of the risk management system. Internal audits are also carried out by the Audit Department to check the effectiveness of the system.

At ams OSRAM, the ERM system is one component of interlocked processes and systems for corporate management. The focus of ERM is a systematic approach to the Company’s material risks. Arising business opportunities and their realization are at the heart of the strategy, planning, and controlling process.

Identifying, assessing, reporting, and managing material risks are the responsibility of the management of the respective corporate departments and business units. Reported risks are assessed on the basis of their effects on business activity and the probability of their occurring. Sensitivity analyses are also carried out for individual risks, such as foreign currency and interest rate risks → [ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, 19. Interest-bearing Loans and Borrowings](#) and [25. Financial Instruments and Financial Risk Management](#). Risks are reported to the Management Board and the Audit Committee of the Supervisory Board every six months, and if required also on an ad hoc basis. This ensures that the Management Board and Supervisory Board are fully and promptly informed about the material risks for the Group. The Management Board determines whether individual risks or the risks as a whole present a going concern risk, and whether there is a substantial threat to the Company’s continuity.

### Objectives and Action Taken

The overarching objective of ams OSRAM’s risk management is to recognize existing and potential risks at an early stage, to assess them, and to manage them in such a way that, ideally, they do not occur, or negative impacts are kept to a minimum.

As part of the materiality analysis carried out in 2021 and confirmed in 2023 → [3.2.2 Materiality Analysis](#), non-financial risks were reflected on with respect to their impact on the Company, society, and the environment. Climate risks and their assessment can be found under → [7.4 TCFD Recommendations, 3. Risk Management](#) and → [ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, 1 General Principles — Contingencies and Main Judgments](#).

Risks are recorded and assessed using a Company-wide IT tool. The risk report also includes reports on environmental, compliance, and quality risks with regard to their potential impact on the Company.

Geopolitical risks and conflicts were identified as a material issue within the materiality analysis for the Company and also as a material risk in the risk management process for the 2023 reporting year. Geopolitical impacts on our business have become

## 3.3 Combating Corruption and Anti-Competitive Behavior

particularly apparent in recent years as a result of the Covid-19 pandemic and its effects. The current geopolitical situation continues to be dominated by the ongoing war in Ukraine. There could also be a further escalation in China's claims of sovereignty over Taiwan and therefore an increased decoupling of the relationship between the USA and China. The Middle East conflict, which escalated in the second half of the year, also carries indirect risks to ams OSRAM's business. These risks could have direct effects on ams OSRAM's existing procurement and sales markets, as well as indirect consequences due to changing macroeconomic conditions.

ams OSRAM is monitoring developments very closely, so that it is well prepared and can respond in a rapid manner to any changes in business conditions. In addition, the resources in the divisions and units involved have been and continue to be reviewed and are adjusted where necessary. As the identified geopolitical risks also impact on other types of risk, such as macroeconomic risks, business interruption risks, or financial risks, they are observed and assessed by the Company from various angles, and this is reflected in multi-layered defensive strategies and action [ams OSRAM Annual Report, Management Report, 8 Risk Management](#). In addition, geopolitical developments are also playing an increasingly important role in upcoming investment decisions.

Corruption and anti-competitive behavior by individual actors impact negatively on the market in general as well as the capital markets, jeopardize the commercial success even of market participants that are not involved, weaken institutions and, ultimately, trigger negative developments in society. ams OSRAM is committed to fair competition and to preventing corruption and bribery. We strongly believe that these efforts also impact positively on the satisfaction of our employees and business partners and are a key prerequisite for the success of our company.

### Guidelines, Responsibilities, Structures, and Processes

Our compliance management system is based on the elements prevent, detect, and respond. It includes regulations (guidelines and policies), measures, and processes to prevent legal violations in areas such as anti-corruption, competition and antitrust law, money laundering prevention, data protection, and export control, as well as to detect any violations that have already occurred and to take necessary actions if required.

From an organizational perspective, the compliance management system consists of experts at various locations throughout the world. The Head of Compliance, Audit, and Risk Management reports directly to the Chief Financial Officer (CFO), who is responsible for compliance within the Management Board. Reports on relevant compliance issues are presented to the Management Board every quarter and whenever appropriate. As part of its monitoring of the Management Board's role, the Supervisory Board also monitors the efficient functioning and appropriateness and effectiveness of the compliance management system. Within the Supervisory Board, this is handled by the Audit Committee, to which the Head of Compliance, Audit, and Risk Management reports on current issues and potential risks on a quarterly and an ad hoc basis.

Our [Code of Conduct](#), which is available in various languages, contains mandatory requirements for employees to comply with the aforementioned regulations. The Group Compliance Policy specifies the conduct requirements set out in the Code of Conduct and contains specific guidelines and process requirements on a number of points, including:

- Anti-corruption
- Antitrust and competition law

- Conflicts of interest
- Reporting and handling compliance cases
- Prevention of money laundering

Internal compliance rules are supplemented by guidelines on data protection and export controls.

In order to identify potential compliance risks at an early stage and counter them appropriately, annual risk assessments are carried out at selected entities on all compliance issues. After categorizing the Group companies into risk groups, the companies to be audited are selected according to a risk-based approach and then subjected to a risk analysis. Significant compliance risks are also the subject of risk management at Group level [ams OSRAM Annual Report, Management Report, 8 Risk Management](#).

ams OSRAM has various tool-based processes for dealing with corruption-relevant behavior. For example, the tool-based business partner process requires due diligence for certain risk-related business partners before concluding a contract, and the appropriate approvals to be obtained in the dedicated business partner compliance tool. We also require our suppliers to sign the Code of Conduct for Suppliers which, among other things, contains a ban on corruption and bribery [→ 5.2 Supply Chain Management](#). To strengthen our compliance responsibility towards our suppliers, as a member we also use the tools of the Responsible Business Alliance (RBA), an industry organization dedicated to socially responsible entrepreneurship in global supply chains [→ 5.1 Respect for Human Rights](#).

There are also tools that support our employees with assessing the legality of benefits such as gifts, hospitality, and invitations to entertainment events, or guide them through the approval process.

The whistleblowing system “Tell ams OSRAM” is a central feature of the compliance management system, and is available in various languages. Employees and third parties can report information on potential violations of anti-corruption, competition, and antitrust law, money laundering prevention, data protection, and export controls, as well as risks and violations relating to human rights, working conditions, and environ-

mental protection in our own business areas and those of our suppliers, anonymously if desired → [3.1.1 Core Values](#). Reports can also be made via the usual internal Company channels: the compliance, HR, procurement, or EHS organization as well as the respective manager.

All reports of potential compliance violations will be investigated and possible retaliation against whistleblowers will not be tolerated. If there are concrete indications of a violation, the Company will conduct internal investigations. If an internal investigation reveals a violation, the compliance organization recommends measures to remedy any deficits identified and will monitor their implementation. In the event of misconduct on the part of our employees, ams OSRAM may take disciplinary action in accordance with labor law. There is a Corporate Disciplinary Committee at ams OSRAM to ensure the appropriateness of proposed disciplinary action. It is this committee’s task to apply documented standards and consistent decision-making criteria in order to safeguard a fair process that treats all employees equally. Its decisions are binding for the whole Group.

Our multi-stage, target group-oriented training concept is another elementary component of the compliance management system. The aim of compliance training is to sensitize all employees<sup>1</sup> to key compliance topics (see table on the left) and to help them recognize compliance risks and behave correctly in critical situations.

The “Code of Conduct” online training is mandatory for all employees throughout the Group (i.e. for salaried and/or indirect employees — including the Management Board — as well as for direct employees). The training must be completed annually and aims to guide employees through all key topics of our Code of Conduct. In line with a risk-based approach, there is also additional standard online training on anti-corruption and data protection, which is mandatory for all indirect employees. In addition, spe-

cial online training courses are offered in the areas of antitrust law, export control, and money laundering prevention for selected target groups. The training cycle for these courses is three years. In order to further strengthen the compliance culture within the Company, management will also be offered personal “Compliance Leadership” training in the future.

Regular local and multi-location communication activities on current compliance developments are also carried out to raise awareness among employees and to strengthen the compliance culture.

Objectives, Action Taken, Results, and KPIs

Our objective is to promote a corporate culture that prevents breaches of criminal and civil laws to avoid sanctions, financial losses, and reputational damage to the Company and its employees and prevent damage to society as a result of corruption and other forms of white-collar crime. In doing so, we pursue the objective of consistently fighting corruption and bribery, clarifying any suspected cases without exception, and enforcing appropriate corrective actions if a suspected case is confirmed.

In 2023, the compliance management system was further developed in order to respond appropriately to growing global regulatory and customer requirements. Against a backdrop of the Company’s increasing focus on the semiconductor business, the export control team within the compliance organization was strengthened and a reorientation of content was implemented due to relevant changes in legislation and trade restrictions resulting from the trade conflict between the USA and China.

Another focus in 2023 was on fulfilling the duty of care obligations arising from the German Act on Corporate Due Diligence Obligations in Supply Chains (“Lieferkettensorgfaltspflichtengesetz,” LkSG), the EU Whistleblower Directive and its national

implementation in the EU, as well as preparing for the planned EU Corporate Sustainability Due Diligence Directive (CSDDD). For example, the central whistleblower system “Tell ams OSRAM” was adapted in line with the new statutory supply chain and whistleblower protection requirements.

Relevant employees received ongoing training on compliance topics, tailored to specific target groups and risks. Measured against our defined training cycle, the individual training courses achieved the following coverage rates at the end of 2022 and 2023:

Training on Compliance and Ethical Standards

2022	Compliance Basic <sup>1</sup>		Anti-Corruption	Data Privacy	Antitrust
Target group <sup>2</sup>	10,191		10,191	10,191	10,191
Coverage rate according to training cycle (status “on target”)	96.9%		98.8%	98.6%	98.3%
Employees trained in 2022	3,847		1,734	1,934	1,720
2023	Compliance Basic <sup>1</sup>	Code of Conduct <sup>1</sup>	Anti-Corruption	Data Privacy	Antitrust
Target group <sup>2</sup>	9,181	11,456	11,456	11,456	3,310
Coverage rate according to training cycle (status “on target”)	97.8%	100.0%	94.1%	95.0%	97.6%
Employees trained in 2023	1,634	5,714	4,489	3,129	1,198

<sup>1</sup> Compliance Basic training was replaced in October 2023 by the newly introduced Code of Conduct training, which covers topics such as anti-corruption, antitrust, and conflicts of interest, as well as human rights, environmental protection, and whistleblower protection; at the same time the target group was expanded; the data for the Compliance Basic training in 2023 covers the period until August 1, 2023.

<sup>2</sup> The target group for the “Code of Conduct”, “Anti-Corruption”, and “Data Privacy” training courses includes all indirect employees; the target group for the special Antitrust training course includes all employees in sensitive functions.

<sup>1</sup> Includes salaried employees, indirect employees, as well as direct employees who work full- or part-time. In previous years’ reporting, the term “white collar” was also used as a synonym in connection with indirect employees. The terminology was standardized in the 2023 fiscal year. The term “direct employees” refers to employees whose work is directly related to production, while the term “indirect employees” refers to employees whose work is not directly related to production (e.g. administration, sales, and research and development).



The table below contains information about compliance processes at the Company as well as legal actions due to anti-competitive behavior and legal actions due to breaches of antitrust law or monopolistic practices. Proven violations are analyzed on an ongoing basis and the resulting insights are taken into account in the continual process of refining the compliance management system.

Compliance Incidents<sup>1</sup>

	2021	2022	2023
Inventory of (unclosed) compliance incidents as of January 1	22	25	22
New compliance incidents	38	39	27
Compliance incidents closed during the year	35	42	35
therein number of compliance incidents with proven violations <sup>2</sup>	13	14	12
therein number of consequences under labor law in the event of proven violations	3	6	2
Inventory of (unclosed) compliance incidents as of December 31	25	22	14
Number of antitrust or monopoly lawsuits	0	0	0
Number of legal actions for other anti-competitive behavior	0	0	0

<sup>1</sup> A compliance incident is in particular any conclusive allegation of a violation of legal provisions under criminal law or the law on the imposition of fines with reference to the business activities of ams OSRAM.  
<sup>2</sup> Therein number of compliance incidents in 2023 with proven violations in the following fields: corruption or bribery: 0; money-laundering or insider trading: 2; conflicts of interest: 0; offences against customs regulations: 2; offences against foreign trade regulations: 1; asset/property crimes: 4.

3.3.1 Data Protection

Guidelines, Responsibilities, Structures, and Processes

In organizational terms, data protection is part of the Compliance organization, and the Company-wide data protection management system is a component of the compliance management system. Fundamental principles, regulations, and processes to protect the personal data of our employees, customers, suppliers, and business partners are enshrined in the Group-wide data protection guideline.

The Head of Data Privacy coordinates and supports the implementation and monitoring of data protection provisions in the Group companies. They are a member of the Information Security Operation Board (ISOB) established at ams OSRAM and report directly to the Management Board on current developments. Data Protection Officers or Data Protection Coordinators are designated, as required by the relevant legislation, within the individual Group companies.

Data protection as a topic is covered by in-person compliance training and integrated into the regular compliance risk assessments.

All processes relating to personal data are documented in a so-called index of procedures. It is used for the risk assessment of internal processes with regard to the protection of the rights and freedoms of individuals.

Objectives, Action Taken, Results, and KPIs

Our objective is to protect the personal data of our employees, customers, suppliers, and business partners in all our products and processes and to avoid possible data protection breaches. Our employees are required to treat personal data confidentially.

In 2023, a new cookie management solution (cookie banner) was introduced on most ams OSRAM websites (including online stores) to create more transparency for visitors to our sites and to meet regulatory requirements. In addition, a centralized and digital or automated solution was introduced for the process of employees signing confidentiality declarations. The harmonization of the indexes of procedures of ams and OSRAM was also successfully completed.

In addition, as described in → 3.3 Objectives, Action Taken, Results, and KPIs, training measures in the area of data protection were continued in 2023. The training courses were offered in both face-to-face and online formats. They covered essential general content on data protection as well as target group-specific topics, such as new data protection requirements in certain countries (e.g. China), and video surveillance. In 2023, the focus of target group-specific training was on the ams OSRAM companies in China (due to changes in legislation) and at manager level.

Protection and Security of Personal Data

	2021	2022	2023
Governmental data protection requests	2	–	2
Customer complaints	–	2	–
Requests for information <sup>1</sup>			
in time	15	53	25
not in time	–	–	–
Privacy incidents			
without sanctions	7	1	7
with sanctions	–	–	–

<sup>1</sup> Requests for information are based on data subjects’ right to be informed (GDPR). This right allows natural persons (data subjects) to ask the entity responsible for data processing (here ams OSRAM) for information about which data has been collected about them and how they are used.

# 4.0 Environment and Climate Protection

## Environmental Management

### Climate Protection

Energy Efficiency at the Group’s Own Locations

Renewable Energies

Greenhouse Gas Emissions

Green Tech Development

## Circular Economy

Resource Efficiency

Conflict Minerals

Waste

Water

## EU Taxonomy



# 4.1 Environmental Management

Protecting the climate and the environment safeguards our livelihood and is essential to sustainable business management. Therefore, at ams OSRAM we are committed to complying with stringent environmental standards and responsible environmental management. The objective is to make efficient use of resources and abide by statutory rules on environmental protection. Through our activities and by using a certified environmental management system, we seek to meet the rising expectations of our employees and customers as well as the capital market and society at large. In doing so, we not only want to fulfill legal requirements, but also to help maintain ams OSRAM’s social “license to operate.”

## Guidelines, Responsibilities, Structures, and Processes

Overall responsibility for environmental protection and occupational health and safety → [6.2 Occupational Health and Safety](#) within the ams OSRAM Group lies with the Chief Executive Officer (CEO), who has delegated tasks and managerial authority to the head of the corporate Environmental Protection, Health, and Safety (EHS) Department. At regular intervals, the EHS Department reports directly to the Management Board on significant developments.

The EHS Department coordinates environmental protection requirements, monitors their local implementation, and develops the environmental management system on an ongoing basis. To this end, it issues the Group-wide EHS Manual (regulations including [EHS Policy](#)) and defines supporting EHS processes in order to comply with environmentally relevant regulations and laws at local and regional level as well as global internal requirements. The manual takes into account industrial and product-related environmental protection, the transportation of hazardous goods, occupational safety, and occupational health and fire protection. Appropriate reviews are carried out on these topics prior to mergers and acquisitions.

Our processes also take into account the relevant legislation that regulates the use and declaration of specified hazardous substances in semiconductor components, and in electrical and electronic equipment. Our requirements regulate the use and handling of raw materials and substances at our locations and therefore protect people’s health and the environment both inside and outside the Company → [4.3.1 Resource Efficiency](#). The central EHS requirements are implemented by the Business Units. The latter are also responsible for designing products to be environmentally compatible and ensuring that both their manufacture and use are energy-efficient.

All production facilities and the headquarters in Premstaetten (Austria) have an environmental management system that is certified to the international standard ISO 14001. The locations in Regensburg, Berlin, Schwabmuenchen, Herbrechtingen, and Munich (Germany) and, for the first time this year, the Ang Mo Kio (Singapore) site are also using an ISO 50001-certified energy management system.

All ams OSRAM employees are trained upon joining the Company on EHS-related issues and are then given further training at regular intervals. The aim is not just to raise awareness of such issues but also to point out the consequences for ams OSRAM of any regulatory breaches.

The corporate EHS Department cooperates with government agencies and industrial associations on a variety of topics. It also regularly reviews implementation of the regulations defined in the EHS Manual and further processes at the locations by carrying out site visits, inspections, and internal audits.

In our supply chain we use contractual regulations and the Code of Conduct for Suppliers to convey our expectations in terms of environmental and climate protection, and demand that they are implemented → [5.2 Supply Chain Management](#).

Our environmental reporting covers data on energy consumption, greenhouse gas emissions, emissions of volatile organic compounds (VOC), water withdrawal, the amount of wastewater produced, and waste generation. The data published in this report covers more than 99% of our own environmental impact<sup>1</sup> and the locations where 89% of all employees work.

The data and target figures reported in chapters → [4.2.1 Energy Efficiency at the Group’s Own Locations](#), → [4.2.3 Greenhouse Gas Emissions](#), → [4.3.3 Waste](#), and → [4.3.4 Water](#) comprise both absolute and relative KPIs. The latter relate environmental performance to the operating output.

ams OSRAM tracks the data collected and the attainment of relative targets at Group level, as part of its quarterly EHS reporting. These relative KPIs express an absolute target or actual figure in relation to generated or planned operating output<sup>2</sup> (operating output in EUR millions). The procedure permits us to define relative environmental parameters from our own operational activity, regardless of contract manufacturing.

## Objectives, Action Taken, Results, and KPIs

Each year, ams OSRAM sets itself targets for energy consumption, greenhouse gas emissions, water withdrawal, and waste generation. These are documented for each location and aggregated into overall global targets. Managers implement the actions specified in the individual manufacturing locations. We present the results in the respective section of Chapter 4.

In 2023, seven locations underwent successful external audits, five of them with ISO 14001 and three with ISO 50001 certifications. The corporate EHS Department carried out a further eight EHS audits to check that the EHS management system is imple-

<sup>1</sup> Estimates are made on the basis of energy consumption which, in the context of ams OSRAM’s environmental impact, is seen as the most relevant metric.  
<sup>2</sup> Operating output is production output valued at standard costs, chiefly comprising material and personnel expenses, depreciation, and value creation.

## 4.2 Climate Protection

mented permanently worldwide. These combined audits are based on the ISO 14001 and ISO 45001 standards (occupational health and safety) and in Germany and Singapore also on ISO 50001.

Capacity utilization remained low at some sites, notably at the semiconductor sites, especially in the first half of the year. This had a positive impact on the environmental KPIs. Details on economic development can be found in the [ams OSRAM Annual Report, Management Report, 2.2 Earnings](#). In Singapore, production at one site was relocated at the beginning of 2023 and subsequently discontinued. In Italy, a site with two operating units was sold. Another sale included two smaller R&D sites in China and Germany, which are therefore also no longer included in EHS reporting. In contrast, a second production module was put into operation in Kulim (Malaysia), which made a relevant contribution to our environmental KPIs in 2023.

No relevant penalties or fines of over EUR 10,000 were imposed on ams OSRAM because of breaches of environmental protection rules in the reporting period.

To combat human-driven climate change, the international community has committed to limiting the global temperature increase to 1.5 degrees Celsius if possible but, in any event, to well below two degrees Celsius compared with the pre-industrial age, as part of the 2015 Paris Climate Agreement. In Europe, the European Commission's Green Deal is the most notable action. However, the capital market, customers, and the general public also place demands on companies.

ams OSRAM takes its corporate responsibility seriously and is striving to reduce emissions of polluting greenhouse gases in its own activities. In 2021, the decision was made to aim for carbon-neutral operations by 2030 with regard to Scope 1 and Scope 2 (in accordance with the Greenhouse Gas Protocol). As part of the climate strategy, a reduction scenario was agreed for achieving our targets for Scope 1 and Scope 2, which is consistent with maximum warming of 1.5 °C. In 2023, we consistently pursued the climate strategy developed to achieve this target in 2022 → [4.2.3 Greenhouse Gas Emissions](#). Additionally, ams OSRAM is committed to reducing emissions from the upstream Scope 3 category "Purchased goods and services" by 47.5% per EUR of value added by 2030 and lowering them further to -97% by 2050 → [5.2 Supply Chain Management](#).

The Operations Sustainability Program was launched in 2023 for the semiconductor sites, where 91% of our greenhouse gas emissions are generated. A separate function was created to coordinate this. One focus is on implementing the climate strategy at the semiconductor sites.

### 4.2.1 Energy Efficiency at the Group's Own Locations

As an industrial company, ams OSRAM consumes primary and secondary energy, with electricity and natural gas playing a dominant role as energy sources. The production sites are particularly relevant here. These use electricity in all areas, from production to administration, whereas natural gas is used primarily for heating and

in post-combustion during gas treatment at the semiconductor locations. The production of lamps, such as halogen lamps (automotive), whose glass bodies are not made of quartz glass, fundamentally depends on natural or liquefied gas. Furthermore, natural gas has always been used in Germany for several cogeneration units.

The climate strategy takes into account the increase in our own energy efficiency as well as the use of green energy sources through direct purchasing and unbundled Energy Attribute Certificates. We are investigating alternatives to fossil fuels for heating. We see offsetting through CO<sub>2</sub> emission credits (carbon credits) as a subordinate option for remaining unavoidable emissions from fuels and non-decomposed process gases.

It is the use phase of our products that is most relevant in terms of impact across our value chain. Improving energy efficiency is therefore a key criterion in our customers' purchasing decisions and satisfaction, particularly in the area of light sources → [4.2.4 Green Tech Development](#).

#### Processes, Objectives, Action Taken, Results, and KPIs

All production sites that constantly exceed the threshold of annual consumption of 1,400 megawatt-hours (MWh) are certified to ISO 14001 and thus also pursue energy efficiency programs and measures. The assessment of regulatory requirements and of potential improvement measures is also compulsory for these locations. This will reduce the burden on the environment and make production costs more competitive.

The relative target for energy consumption set for 2023 and the expected total greenhouse gas emissions are compatible with the reduction path defined in 2022 to achieve our climate target.

Energy Consumption

in MWh	2020	2021	2022	2023
Primary energy	173,900	175,500	162,100	137,300
Natural gas	149,000	149,200	136,300	118,500
Liquefied petroleum gas, diesel for on-site use, heating oil, hydrogen	24,900	26,300	25,800	18,800
Secondary energy	725,400	716,900	668,300	648,100
Electricity	697,800	689,500	645,100	628,700
thereof share of renewable energy in %	30	32	39	49
District heating and steam	27,200	27,000	22,800	18,600
Renewable energy generated in-house (solar)	400	400	400	800
Total (primary and secondary energy)	899,300	892,400	830,400	785,400
Specific energy consumption per EUR 1 million operating output		425	418	473
Energy consumption (primary and secondary energy) per EUR 1 million operating output			412	452
Purchased I-RECs (International Renewable Energy Certificates) or any similar instruments			31,500	92,000
Savings through energy efficiency measures (significant projects, see “Energy Efficiency Measures 2023” table)		8,700	3,600	14,700

In 2023, energy consumption in absolute terms fell by 5.4%, while the relative target scaled to operating output was missed by 4.6% (see influence of economic development on the KPIs in → [4.1 Environmental Management](#)). The closure of sites in 2022 and 2023 was largely responsible for the reduction. The new production module in Kulim (Malaysia) mentioned above accounted for 4.7% of total energy consumption in 2023.

The following selected efficiency measures also contributed to the reduction:

Energy Efficiency Measures 2023

Selected key projects		
Plant/location	Measure/result	Saving
Regensburg (Germany)	Installation of a combined heat pump/cooling unit powered by just 1,000 MWh of green electricity	5,500 MWh
Kulim (Malaysia)	Optimization of the cooling water supply and the procedure for shutting down production processes, known as the “warm-down”	3,600 MWh
Premstaetten (Austria)	Conversion of room humidification from gas-generated steam to an electrically operated system; also the installation of a heat recovery system on two compressors for compressed air generation	2,500 MWh
Penang (Malaysia)	Energy efficiency measures to optimize the utilization of technical laboratory equipment and adjust the room temperature in non-critical areas	1,200 MWh
Other selected projects		
— Optimization and streamlining of selected high-temperature processes at the Berlin plant (Germany)		
— Various measures to save electricity and natural gas at the Foshan plant (China), including the replacement of two screw compressors with a modern, frequency-controlled solution, and the reduction of burn-in time in the production of LEDs		
— Saving electricity and natural gas at the Exeter site (New Hampshire, USA) through a special energy efficiency mode for clean room air conditioning		
— Savings in natural gas and electricity at the Bruntál plant (Czech Republic) through a semi-automatic system for heating and ventilation control; also savings in electricity and hydrogen by switching the heat treatment of the coils (annealing) to a different type of furnace		
— Saving electricity at the Nové Zámky plant (Slovakia) due to the reduction in pressure during nitrogen production		

4.2.2 Renewable Energies

In order to achieve our climate target by 2030, we are prioritizing energy efficiency measures as well as green electricity, the use of which we intend to expand. However, the use of renewable energy does not currently make economic sense at all locations, for example in Singapore. Therefore, we are also using the option of Renewable Energy Certificates (unbundled EACs) there to offset emissions.

Action Taken, Results, and KPIs

In 2023, ams OSRAM purchased 306,700 MWh (previous year: 249,100 MWh) of electricity from renewable energy sources. This equates to a 49% share of the entire electricity consumption (previous year: 39%). This breaks down as follows:

- The Premstaetten location in Austria has been supplied with carbon-neutral electricity from hydroelectric power since 2011.
- In Germany, the locations in Munich, Berlin, Regensburg, Herbrechtingen, and Schwabmuenchen were switched to renewable energy sources at the start of 2020. The Regensburg location has also adopted the policy of ensuring that electricity is generated with the lowest possible negative impact on the environment (low-impact hydro) through guarantees of origin since the beginning of 2021.
- At the Calamba location in the Philippines, 5,000 MWh of electricity was generated from solar power in the third and fourth quarters, which corresponds to around 30% of the electricity consumed.
- The Exeter and Hillsboro facilities are located in the state of New Hampshire in the USA, in which electricity suppliers are obliged under the “Electric Renewable Portfolio Standard” to provide a minimum share of 23.4% of the electricity mix from renewable energies.
- At the Wuxi site in China, an electricity mix with a 7% renewable share was purchased for the first time in 2023. This corresponds to 5,000 MWh of green energy. The proportion is to be gradually increased over the next few years.



In addition to the Wuxi and Premstaetten sites, the Regensburg and Nové Zámky (Slovakia) sites also contributed to the Company's own generation of renewable energy for the first time in 2023, bringing the total volume to around 800 MWh. We see further potential in the in-house generation of renewable energy.

In addition, we partially offset the consumption of the Calamba and Ang Mo Kio (Singapore) sites and fully offset the consumption of the new module at the Kulim (Malaysia) site with a total of 92,000 green electricity certificates (unbundled EACs).

### 4.2.3 Greenhouse Gas Emissions

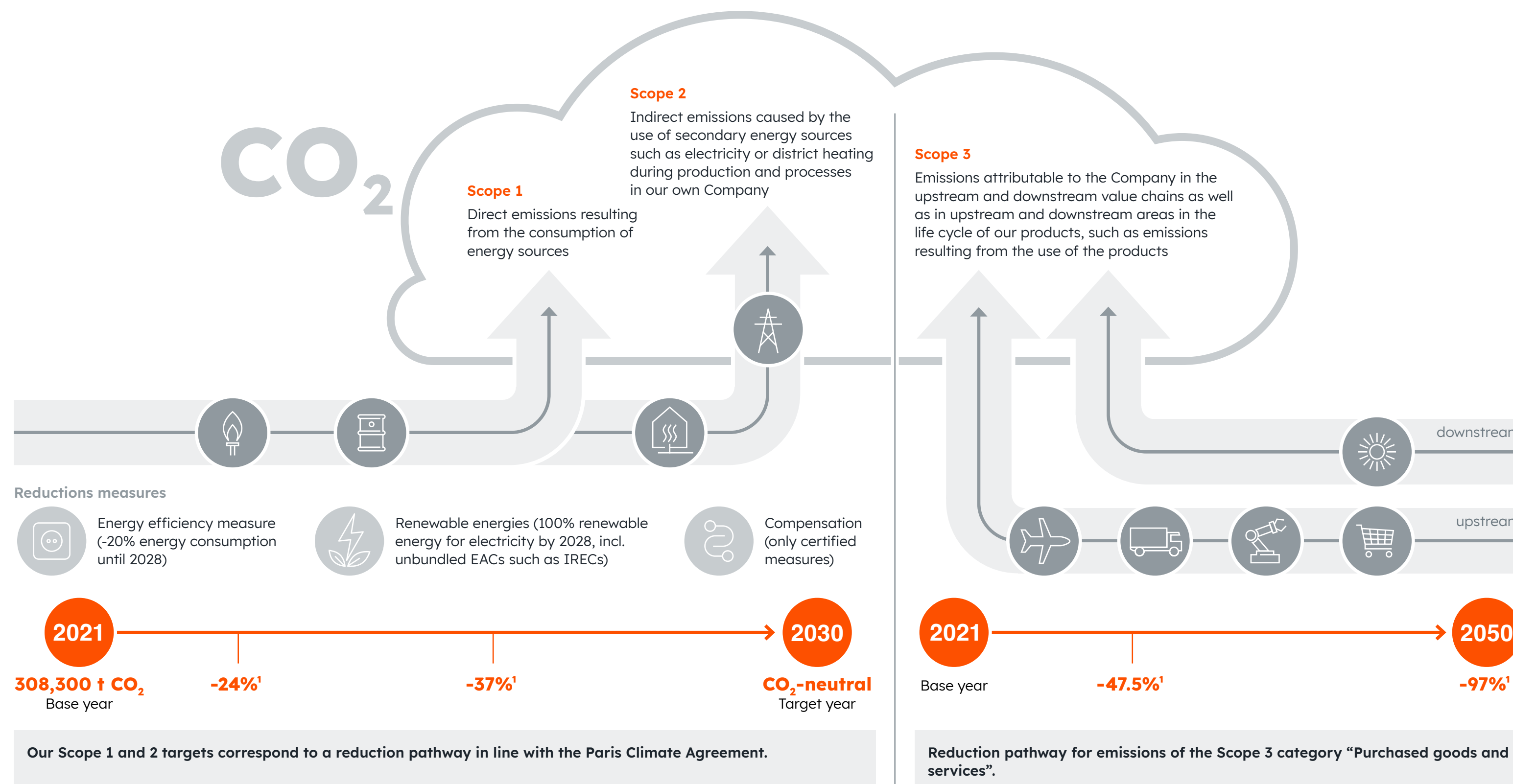
The direct and indirect greenhouse gas emissions that result largely from our use of energy contribute to climate change. Climate-relevant emissions also occur in our upstream and downstream value chains. Therefore, ams OSRAM is committed to reducing its emissions as part of its climate strategy (see the Objectives paragraph).

#### Guidelines, Structures, and Processes

ams OSRAM records and reports its greenhouse gas emissions in accordance with the recognized standard of the Greenhouse Gas (GHG) Protocol and the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) → [7.4 TCFD Recommendations](#). We therefore divide our emissions into:

- **Scope 1:** direct emissions from the use of energy sources and of gases with climate-relevant characteristics that are used in production processes and cannot be completely broken down in the exhaust gas flow,
- **Scope 2:** indirect emissions resulting from the use of secondary energy sources such as electricity or district heating, and
- **Scope 3:** emissions that occur further up or down the value chain that are attributable to the Company.

## Climate Strategy



<sup>1</sup> In comparison to base year

We report our Scope 2 emissions using both market-based accounting, i.e. on the basis of the vendor-specific emission factor, and location-based accounting, i.e. using the regional and national specific emission factor in the electricity mix.

Scope 1 and Scope 2 emissions are recorded on the basis of energy consumption. Absolute figures are recorded at location level and converted using the corresponding conversion factors. Emissions resulting from residues of climate-relevant process gases are estimated from the quantities used, the operating period, and the efficiency of the waste gas treatment facilities at our locations in Premstaetten (Austria), Kulim (Malaysia), and Regensburg (Germany). We are working on refining and consolidating these estimates through current measurements on our exhaust systems and comparisons with data published elsewhere in the semiconductor industry.

Objectives, Action Taken, Results, and KPIs

Our annual greenhouse gas emissions and energy efficiency targets are closely linked in terms of Scope 1 and Scope 2. We calculate the overall global target in metric tons of CO<sub>2</sub> equivalents (t CO<sub>2</sub>e) in relation to operational output → [4.1 Environmental Management](#).

We have prepared figures for individual Scope 3 categories for the entire ams OSRAM Group for 2023. Goods and services purchased as well as capital goods were included here. An approximation model<sup>1</sup> recognized in the industry was used for this purpose. To calculate greenhouse gas emissions from upstream transport and distribution as well as business travel, we obtained data<sup>2</sup> from our business partners and service providers.

For Scope 1 and Scope 2 as well as Scope 3 (“Purchased goods and services” category), 2021 has been set as the base year for the climate strategy. Following the completion of ams’ acquisition of OSRAM in March 2021, this reporting year represents the

<sup>1</sup> estell 6, Systain  
<sup>2</sup> The data are based in part on estimates

CO<sub>2</sub> Emissions

in metric tons CO <sub>2</sub> e	2020	2021	2022	2023
GHG Scope 1 emissions	51,700	46,600	65,500	51,700
Natural gas	29,900	29,600	27,100	23,600
Liquefied petroleum gas, diesel for on-site use, heating oil	2,800	2,600	2,600	1,800
Process gas emissions	19,000	14,400	35,800	26,300
GHG Scope 2 emissions (market-based)	264,100	261,700	230,500	229,400
Electricity	258,000	256,000	225,300	225,900
District heating and steam	6,100	5,700	5,200	3,500
GHG Scope 2 emissions (location-based)	332,300	321,400	291,000	292,900
Total GHG Scope 1 and 2 emissions (market-based)	315,800	308,300	296,000	281,100
Metric tons of CO <sub>2</sub> e emissions from own activities (Scope 1 and 2) per EUR 1 million operating output		146	149	169
Target for metric tons of CO <sub>2</sub> e emissions from own activities (Scope 1 and 2) per EUR 1 million operating output			140	168
Avoidance of CO <sub>2</sub> e emissions by I-RECs (International Renewable Energy Certificates) or similar instruments			15,100	46,700
Net GHG Scope 1 and Scope 2 emissions (market-based)	315,800	308,300	280,900	234,400
Absolute GHG reduction compared to base year 2021 (308,300 t CO <sub>2</sub> e)			27,400	73,900
GHG reduction compared to base year 2021 in %			9	24
Avoidance of CO <sub>2</sub> e emissions due to the use of renewable energies, incl. I-RECs	62,800	60,500	70,500	108,900
Prevention of GHG emissions through energy efficiency projects (major projects)		4,600	1,800	5,200
GHG Scope 3 emissions				
Purchased goods and services	1,071,300	1,106,400	1,119,800	718,300
Capital goods	54,100	76,800	199,100	301,200
Upstream transport and distribution	54,500	59,700	47,400	42,200
Business travel	4,000	2,600	7,200	5,400
VOC emissions	29	30	34	26

first period in which ams OSRAM operated as a joint company for the majority of the year, undergoing harmonization and adjustment of processes and reporting. Since only a few locations emit volatile organic compounds (VOCs) and only in small amounts, we are striving to achieve a general reduction for these without any specific targets.

We were able to significantly reduce our greenhouse gas emissions in the reporting period, partly by purchasing more green energy and certificates than planned. As a result, we even exceeded our internally communicated interim target for 2023 on our Climate Roadmap. The relative target scaled to operational output was missed by just 0.6%, which is a significantly lower deviation than the corresponding energy KPI.

So that our efforts can be externally assessed, we take part in the CDP annual survey, the world’s biggest ranking platform for climate protection. We were able to take another step forward this year and improve by one level.

CDP Climate Change

	2020	2021	2022	2023
Score	C	B-	C	B

4.2.4 Green Tech Development

At ams OSRAM we see green tech as the combination of environmentally friendly technology and innovation supporting carbon reduction, clean water, and a sustainable lifestyle. Our research and development (R&D) experts develop products and solutions that contribute to solving these global challenges and open up new business opportunities for us. Our green tech products are designed to make a positive contribution throughout their life cycle.

### Responsibilities, Structures, and Processes

On the Management Board, the Chief Executive Officer (CEO) is responsible for research and development. The Corporate Quality and R&D Department under the CEO's responsibility is in charge of innovation management within the Group, communicates with the operational units, and regularly reports to the Supervisory Board's Technology Committee. Tech and product development are chiefly the responsibility of the business units. The active management of the portfolio and focus on innovation and growth are the core elements of our strategic business model.

Corporate Development is responsible for the development and execution of this model, and reports to the CEO. The team prepares business portfolio scenarios for decision-making by the Management Board. Portfolio decisions are primarily based on market outlook, business profitability, and the strength of ams OSRAM's competitive position. Sustainability criteria usually consider extended periods and are typically reflected separately in the evaluation.

Publicly available R&D funding is secured by means of globally coordinated subsidy management and a strong associated network of research and development organizations as well as universities. Public investment projects exceeding the scope of pure R&D projects are secured by cooperation models via a strongly established, global network beyond the R&D organizations. This network consists of internal and external stakeholders, academia, and public authorities.

### Action Taken and Results

Many funded projects in which ams OSRAM is involved have a positive impact on the ecological footprint both in the manufacturing process and in the application of future products. These projects include the "Efficient Optoelectronics for a Sustainable and Resilient European Semiconductor Ecosystem" (OptoSuRe), financed by

"Important Project of Common European Interest" (IPCEI ME/KT), and the collaborative projects "Energy ECS" (Electronics, Components, Systems) and "Intelligent Reliability 4.0" (iRel40). The cooperation projects EdgeAI and SmartMan aim to use modern data analysis and artificial intelligence methods to make products and production processes more energy and resource efficient. They reduce negative influences on the environment both along the entire value chain as well as throughout the product's life cycle. Activities as part of the SILHOUETTE and Poly-Chrome projects support research into photonic, integrated circuits as a basis, in the medium term, for energy-saving computers and data processing. In many of ams OSRAM's research and development projects, components are being developed that enable a better energy balance in end devices (tablets, smartphones, or AR/VR glasses) by reducing their power consumption. In addition, ams OSRAM is researching materials and devices to replace mercury-containing UV lamps in UV-C projects. Further information on the projects can be found on our [Company website](#).

With the EU Green Deal and its associated programs and regulation, green tech development will become even more important in the future. In addition to new funding opportunities, this also means extensive reporting requirements for companies → [4.4 EU Taxonomy](#).

The R&D activities of ams OSRAM primarily comprise light and sensor technologies for applications in the areas of sensor technology, lighting, and visualization. In 2023, ams OSRAM launched a large number of new LED and laser products that increase customer benefits, enhance product performance, and lead to efficiency gains in use.

For example, ams OSRAM introduced ALIYOS™ technology (LED-on-film technology) in the automotive sector in 2023. In addition to standard lighting functions such as brake lights or indicators, individual, customer-specific shapes and animation effects

can also be created. It is also possible to display symbols, words, or images as well as information or warnings. The use of this technology can therefore also contribute to increasing road safety.

EVIYOS 2.0 technology also contributes to increasing road safety. Products with this technology can selectively illuminate the road to maximize the driver's visibility in high beam mode without dazzling other road users. High-resolution images can also be projected onto the road to display warning symbols for the driver or other road users or to guide the driver past obstacles.













In the area of plant cultivation and greenhouse lighting (horticulture), ams OSRAM introduced the fifth generation of OSLON® Square Hyper Red LEDs for plant lighting during the 2023 fiscal year. The new generation enables faster plant growth while optimizing system costs and reducing the use of resources, thus contributing to the sustainable development of agriculture (Controlled Environment Agriculture).

New, highly innovative image sensors with industry-leading high performance and low energy consumption are being used in the healthcare sector. In medical imaging, fast and low-noise solutions from ams OSRAM provide unprecedented image quality with reduced radiation dose. In addition, these new image sensors can be used in future photon counting technology, which will enable even higher resolution computed tomography.

Also in the healthcare sector, the SFH 7018 LED developed by ams OSRAM enables more precise heart rate and blood oxygen measurements for wearables compared to the previous product.



# Key Societal Megatrends Drive Demand for our Light and Sensor Solutions

	Automotive and mobility	Industrial	Medical	Consumer
Digitalization	 <p>Advanced displays, smart surfaces, head-up displays, projected lighting</p>	 <p>Industrial automation, robotics &amp; drones</p>	 <p>Medical imaging</p>	 <p>Consumer 3D sensing, camera enhancement</p>
Smart living, health, and wellbeing	 <p>ADAS/AD (LIDAR), in-cabin sensing, dynamic forward &amp; signal lighting</p>	 <p>HABA, outdoor &amp; industry lighting</p>	 <p>Home diagnostics</p>	 <p>AR/VR glasses sensing &amp; visualization, vital signs monitoring</p>
Energy efficiency	 <p>Ambient lighting, UV-C disinfection</p>	 <p>Horticulture, UV-C disinfection, LED &amp; laser projection</p>	 <p>UV-C disinfection</p>	 <p>BOLED ALS/spectral display management, microLED displays</p>

One focus of development in the reporting period was microLED technology. It is characterized by microscopically small LEDs and enables, among other things, stronger colors, a high contrast ratio, an improved display in unfavorable lighting conditions, and lower energy consumption. Looking ahead, the use of this technology could have a positive impact on SDGs 9, 12, and 13. The microLED strategy is currently being reassessed due to the unexpected cancellation of a key customer-specific project relating to microLED technology at the end of February 2024.

An up-to-date overview of R&D processes with details of expenditure and innovative new products can be found in the [ams OSRAM Annual Report, Management Report, 3 Research and Development](#) or can be accessed via the [Company website](#). The technologies that contribute to the SDGs are listed in [→ 2.0 Company Profile](#), and the extent to which these save resources can be found in [→ 4.3.1 Resource Efficiency](#).



## 4.3 Circular Economy

A functioning circular economy is one of the keys to counteracting global challenges such as the scarcity of resources or high volumes of waste. Raw materials should be recycled wherever possible, recycling should be expanded, and resource efficiency should be promoted.

For these reasons, it is important for ams OSRAM to deal with materials and substances in a way that conserves resources. It has a positive impact on the environmental balance and also on the cost position of our products, while at the same time it increases the acceptance of our products among our customers.

### 4.3.1 Resource Efficiency

In particular, ams OSRAM concentrates on controlling and reducing hazardous and critical substances that are used in product manufacture and, in part, also remain within the products. In the same vein, the ams OSRAM product portfolio requires the use of minerals which, potentially, could be classed as conflict minerals → [4.3.2 Conflict Minerals](#).

As we market our products around the world, the raw and other materials used in production and remaining within products must satisfy increasingly stringent requirements and laws. Many of our customers set further demands on us that are more rigorous than the legal requirements. Therefore, at ams OSRAM resource efficiency begins at the R&D stage for new processes, technologies, and products. Implementation is the responsibility of the business units.

#### Guidelines, Responsibilities, Structures, and Processes

The corporate Environmental Protection, Health, and Safety (EHS) Department issues specifications for the environmentally compatible design of products in terms of materials used in manufacture and materials remaining in the product during the use phase. The specified processes safeguard compliance with legal requirements and customer demands regarding environmental compliance, in particular the constituent substances, for new products and for ongoing product optimization. EHS advises and informs all business units on the relevant statutory requirements and monitors compliance with them.

Our involvement in a number of industry associations enables us to anticipate new and likely regulations early on → [3.2.4 Dialog with Stakeholders, Political Engagement, and Memberships](#). In accordance with current legislation, the recycling of products should be facilitated and the use of harmful substances avoided or declared wherever possible. This serves to protect customers, users, and the environment → [5.3.2 Product Safety and Quality](#).

The statutory requirements concerning prohibited, restricted, and declarable substances are continually monitored with regard to the development, acquisition, and manufacture of our products. In order to fulfill our responsibility along the supply chain, we also involve our suppliers. They are required to promptly provide the necessary declarations, measured values and information for the qualification of new materials and new parts as well as for changes in the relevant laws → [5.2 Supply Chain Management](#).

In terms of operational implementation, we distinguish between the Opto Semiconductors (OS) and CMOS Sensors & ASICs (CSA) business units in the Semiconductor segment on the one hand, and the Automotive and Special Lamps (AMSP) business unit in the Lamps and Systems segment on the other. For the Semiconductors business units, we provide new and existing suppliers for direct materials and external manufacture with our requirements when relevant changes occur, such as prohibited substances → [Company website](#) (see ams OSRAM product responsibility and list of critical substances). Suppliers must confirm receipt of those requirements and provide evidence of compliance, for example in the form of the results of analytical investigations. The business units provide a material declaration for all semiconductor products. In the case of the Lamps and Systems segment, we monitor the use of critical substances at component level. Before these are used, the suppliers must confirm their compliance with our requirements. Against a backdrop of ever stricter requirements, we use a special IT application to ensure that our electric and electronic devices are compliant. We obtain compliance documents from suppliers when there are relevant changes to the law. Cross-industry databases such as IMDS and BOM-check<sup>1</sup> provide a framework for this.

<sup>1</sup> IMDS is the materials data sharing and management system for the automotive industry. BOMcheck is a database for material declarations in the electronics industry. BOM stands for “bill of materials.”

#### Objectives, Action Taken, Results, and KPIs

Our objective is to reduce the resources used by our products across their various life cycle phases. We describe our R&D approach and how portfolio decisions are reached in → [4.2.4 Green Tech Development](#). These are implemented via technology roadmaps. We invest in resource-efficient processes and technologies as well as the corresponding production technologies.

We are continually seeking ways to reduce our resource consumption through new approaches to recycling and reuse. We have been recycling germanium since 2021. By the end of 2023, 63,000 new 6-inch wafers had been produced from the pure germanium obtained. Wastewater filtration and collection have already been upgraded to enable future recycling of gallium. Initial studies and discussions with recycling companies are underway.

At the beginning of 2023, we launched our “Eco-Friendly Packaging” project and from mid-2024, we will switch all OSRAM brand automotive aftermarket packaging to a plastic-free cardboard packaging variant for the ELAMEA regions (Latin America, Europe, and the Middle East). The aim is to have fully eco-friendly packaging for the automotive aftermarket in those regions by 2025. We expect to be able to reduce the amount of plastic by at least 200 tons by 2026.

At the same time, we are working on fundamentally new technologies → [2.2.2 Our Products’ Contribution to the SDGs](#). One of our fundamental development goals is to make our products increasingly smaller.

Where required by law, we inform customers and the public via our Company website, where the relevant declarations on the conformity of our products with essential legal requirements can be found. Products in the Lamps and Systems segment are subject to specific legal requirements: customers must be given information about the substances used. This information has been provided in the product catalog, which is also published on the → [Company’s website](#).

### 4.3.2 Conflict Minerals

The ams OSRAM product portfolio also requires the use of materials that could potentially be classed as conflict minerals due to their origin. This is particularly true of the Democratic Republic of the Congo and neighboring countries, as well as for conflict-affected and high-risk areas (CAHRAs) as defined in EU Regulation 2017/821. We are aware of the associated risks and are mitigating them as follows.

**Guidelines, Responsibilities, Structures, and Processes**

In order to fulfill our human rights responsibilities in the area of conflict minerals, we have put in place appropriate due diligence processes for procurement → [5.1 Respect for Human Rights](#) and → [5.2 Supply Chain Management](#).

For the Semiconductors segment, responsibility for conflict minerals rests with EHS and for the Lamps and Systems segment, with Procurement. Globally, a joint Conflict Minerals Policy applies, which can be accessed online [↗ Conflict Minerals Policy](#).

ams OSRAM is a member of the Responsible Minerals Initiative (RMI). The information that can be accessed via the RMI and the sharing of data within the RMI help us permanently monitor our supply chains with regard to conflict minerals as well as mica and cobalt. If necessary, we influence our suppliers to restore the conformity of the deliveries with the specifications. RMI training materials are available to our suppliers via an online training portal. When purchasing raw materials, ams OSRAM makes sure it uses qualified sources. For example, all our directly commissioned smelters for conflict minerals are RMI-certified.

**Objectives, Action Taken, and Results**

We strive for full transparency with regard to conflict minerals, including mica and cobalt, for everything we purchase. We are committed to the OECD “Due Diligence Guidance for Responsible Mineral Supply Chains.” To fulfill its requirements in regard

to conflict minerals in our supply chain, we use specialized tools to verify compliance by our suppliers: missing declarations are automatically requested and the feedback is verified. Non-compliant smelters are identified in this way and can be phased out if necessary. We report on the achievement of transparency targets via the coverage rate of our purchasing volume with the Conflict Mineral Reporting Template (CMRT) and the Extended Mineral Reporting Template (EMRT) in → [5.2 Supply Chain Management](#).

In the 2023 reporting period, OSRAM GmbH, as an EU importer (“Union importer” in accordance with EU/2017/821), exceeded the volume threshold for tungsten, while ams OSRAM International GmbH exceeded the value for gold. Associated measures to comply with due diligence obligations have been initiated.

We update our Conflict Mineral Reporting Templates for the Lamps and Systems and Semiconductor segments annually on our [↗ Company website](#). In addition, we have been publishing a monthly due diligence report on the two segments for our customers and the public since 2023.

### 4.3.3 Waste

ams OSRAM uses numerous substances in production that have an impact on people and the environment as a result of their procurement, transport, usage, and disposal. In semiconductor production, various chemicals and gases are used whose by-products then require special treatment. In some of our traditional lamp manufacturing sites and at the Schwabmuenchen plant (Germany) we also use low-level radioactive and mercury-containing materials. The associated waste is also subject to special due diligence and documentary evidence requirements. Our environmental management system is the basis for our waste management → [4.1 Environmental Management](#).

We pursue the aim at all our locations of avoiding waste in production or reusing the waste, or — if neither is possible — ensuring its professional disposal. In this way, we ensure that valuable materials are recycled and negative effects on the environment are minimized or avoided entirely.

**Structures and Processes**

We record locally the amounts of waste that are recycled<sup>1</sup> or sent away for disposal, drawing a distinction in these categories between hazardous and non-hazardous waste. Reduction of waste requiring disposal is a priority. In most cases, the quantities are calculated on the basis of quantified receipts from waste disposal providers.

Waste that is sent for recycling includes glass, metals, and paper/card as well as solutions containing gold and contaminated N-Methyl-2-pyrrolidone (NMP) that are used in the semiconductor industry. These are primarily separated on-site or, if not technically feasible, by a service provider. The recovery of these valuable resources is always carried out by specialists.

In the case of waste for disposal, we use both the option of incineration and landfill. The decisive factors are the local regulations and the technical and economic possibilities. For this reason, we do not record this information by disposal method, but distinguish between hazardous and non-hazardous waste for disposal. The sites in Singapore already distinguish quantities of waste for incineration from those to be sent to landfill. Employees who work with waste are trained in the locally applicable regulations.

Waste is also generated in the upstream supply chain. To ensure that waste is handled appropriately and in a way that conserves resources, we check that suppliers maintain an environmental management system certified to ISO 14001 → [5.2 Supply Chain Management](#).

<sup>1</sup> ams OSRAM does not reuse such waste, but sends it directly and exclusively for recycling.



Objectives, Action Taken, Results, and KPIs

Waste

in metric tons	2020	2021	2022	2023
Waste for disposal	6,800	7,200	6,000	5,700
thereof hazardous	4,600	4,400	3,900	4,000
thereof non-hazardous	2,200	2,800	2,100	1,700
Specific waste for disposal per EUR 1 million operating output		3.37	3.04	3.41
Target for waste for disposal in metric tons per EUR 1 million operating output			3.53	3.25
Waste for recycling	8,600	8,500	7,200	6,100
thereof hazardous	2,900	2,300	2,200	2,200
thereof non-hazardous	5,700	6,200	5,000	3,900

As described in Chapter → [4.1 Environmental Management](#), economic developments influenced the KPIs and the amounts of waste generated in 2023. The absolute quantities both for disposal and for reuse were significantly lower than in the previous year. The target scaled to operating output was missed by 4.9%. Waste management at the sites is supported by the local EHS programs, for example:

- At our semiconductor plant in Premstaetten (Austria), used chemicals such as potassium hydroxide solution and sulphuric acid are used to neutralize acidic or alkaline wastewater. This saves several cubic meters of chemicals in the neutralization plant.
- At the same site, the installation of a new cleaning station for special wafer boxes will also save 80,000 m³ liters of nitrogen per year.
- At the plant in Exeter (New Hampshire, USA), the use of a solvent recycling system saves around 2,200 l of solvent per year.
- In addition, process optimization has reduced hazardous waste there by around 3 t per year.

Hazardous waste is recycled and disposed of carefully by specialists in compliance with local regulations. We are not aware of any breaches of the relevant legal provisions and requirements in the 2023 reporting period.

4.3.4 Water

Water is an important resource that, due to climate change, is becoming increasingly scarce around the world. Water is also important to ams OSRAM: as a process medium in the manufacture of semiconductors, for cooling in production, and for sanitary purposes. Rationing water at our locations would compromise our productivity. Therefore, we focus on the efficient and careful use of water.

At all our locations, we are careful to withdraw water sparingly. We ensure wastewater is treated chemically and physically in accordance with the requirements specified, or that it is properly disposed of. ams OSRAM uses only fresh water with less than 1,000 mg/l total dissolved solids and takes the majority of it from public drinking water supplies (third-party water) and from groundwater. We are aware of sensitive sources and reservoirs that are close to our production sites, and these are not used.

Structures and Processes

In order to proactively identify potential issues with the availability of water, we review the water requirements at our locations every year using the [WRI World Resources Institute’s Aqueduct Water Risk Atlas](#)<sup>†</sup>. The analysis looks at the levels of water withdrawal as well as the type and amount of wastewater discharges at the locations. Data on the amount of wastewater produced at the individual locations are collected every year. Most of this is discharged as industrial or sanitary wastewater into the sewage system or into surface water.

Where the quality of the withdrawn water has been compromised by our production processes, we purify the water before it is discharged. This process is in com-

pliance with the relevant legislation in the countries concerned. Such legislation is in force in all countries where ams OSRAM has production facilities and it provides the basis upon which government authorities grant environmental permits. All our sites have permits to discharge wastewater or, where applicable, to operate neutralization plants. These generally contain very specific requirements concerning permitted quantities, temperature, and chemical composition of the wastewater and the tests to be carried out. Part of the groundwater we use for cooling purposes is returned in chemically unchanged form. Periodic checks are also required here. In all cases, the water is returned as fresh water in accordance with the above definition. Some of the wastewater is hazardous and therefore has to be professionally treated by external companies. The rest is released into the atmosphere via evaporative coolers.

Objectives, Action Taken, Results, and KPIs

Water Withdrawal

in cubic meters	2020	2021	2022	2023
Municipal water supply	3,497,000	3,407,000	3,283,000	3,312,000
Groundwater from own supply	706,000	701,000	697,000	650,000
Other water	2,000	2,000	0	0
Total	4,205,000	4,110,000	3,980,000	3,962,000
Specific water withdrawal per EUR 1 million operating output		1,965	2,005	2,386
Target for water withdrawal in cubic meters per EUR 1 million operating output			2,057	2,152
Ultrapure water (UPW) consumption	877,000	1,053,000	1,010,000	1,193,000

Absolute water withdrawal in 2023 was at the previous year’s level. The target, scaled to operating output, was missed by 11% (see influence of economic developments on KPIs in → [4.1 Environmental Management](#)). Other influencing factors included signif-

<sup>†</sup> The “business as usual” scenario (SSP2 RCP8.5) applied by the WRI Aqueduct tool assumes a rise in average global temperatures of 2.6-4.8 °C compared with figures recorded between 1986 and 2005.

icant reductions due to the closure and sale of production facilities in Singapore and Italy. On the other hand, the new production module in Kulim (Malaysia) was responsible for a relevant increase.

ams OSRAM does not currently consider the availability of water to be very critical at any of its locations. The aforementioned risk analysis revealed that, in the “business as usual” scenario in the regions in China, Singapore, and Malaysia, where our semiconductor plants are based, water demand will at times increase greatly by 2030, which could lead to increased water stress. We will continue to monitor developments. Climate-related physical risks can be found in Chapter → [7.4 TCFD Recommendations](#).

We do not pursue any specific targets for the discharge of wastewater. However, volumes are recorded and monitored within the framework of our EHS management. Around 18% of total water withdrawal in 2023 was attributable to losses in waste value streams or evaporation into the atmosphere.

In the year under review, action taken to reduce water withdrawal included the following:

- From 2023 onwards, around 1,100 m³ of demineralized (DI) water will be saved each year at the plant in Penang (Malaysia) in the ultrapure water preparation process through various optimization measures.
- At the plant in Schwabmuenchen (Germany), production changeovers have reduced annual freshwater consumption by around 15,000 m³.
- At the Exeter plant (New Hampshire, USA), various water-saving measures, including in the area of clean room humidification, resulted in a reduction of 1,300 m³ of water.

The quality of the data on wastewater discharges from our neutralization plants is very high. For other wastewater paths, however, data have to be estimated in some cases. The official monitoring values for water quality were mostly met. Containment measures are taken immediately when these are exceeded and corrective actions to prevent future incidents are agreed with the authorities.

Wastewater by Destination

in cubic meters	2020	2021	2022	2023
Into public sewers as industrial wastewater	2,507,000	2,282,000	2,274,000	2,411,000
Into public sewers as sanitary wastewater	564,000	595,000	473,000	413,000
Into saline surface water as industrial wastewater	389,000	391,000	337,000	333,000
Into non-saline surface water as industrial wastewater	30,000	30,000	22,000	17,000
Into the groundwater as chemically unchanged wastewater from cooling processes	100,000	113,000	101,000	61,000
Total	3,590,000	3,411,000	3,208,000	3,235,000
Consumption — through evaporation, disposal as waste, other losses	615,000	699,000	772,000	727,000

So that our efforts can be externally assessed, we take part in the annual survey by the CDP Water Security Initiative for reporting relevant data.

CDP Water Security

	2021	2022	2023
Score	B-	B-	C

# 4.4 EU Taxonomy

One of the key aims of the EU Action Plan on Sustainable Finance is to redirect capital flows into sustainable investments.

Against this backdrop, in July 2020 the EU Taxonomy Regulation (EU) 2020/852 entered into force. As a standardized and legally binding classification system, the Regulation stipulates which economic activities are considered “environmentally sustainable” in the EU. The Regulation requires companies to annually disclose the results of this classification in the form of revenues, investments, and operating expenses in connection with sustainable activities.

ams OSRAM supports the EU agenda for redirecting capital flows into sustainable investments and believes that the reports required by the Taxonomy Regulation are a key tool in realizing the EU’s decarbonization and environmental objectives for 2030 and 2050. Being keen to achieve the necessary transparency in its own portfolio, ams OSRAM is hereby publishing its second voluntary EU Taxonomy Report for 2023. The obligation to report in accordance with the Taxonomy Regulation does not begin for ams OSRAM until the 2025 fiscal year.

Article 9 of the Taxonomy Regulation lists the following six environmental objectives to which a business activity must substantially contribute in order to be classified as sustainable:

- 1. Climate change mitigation
- 2. Climate change adaptation
- 3. Sustainable use and protection of water and marine resources
- 4. Transition to a circular economy
- 5. Pollution prevention and control
- 6. Protection and restoration of biodiversity and ecosystems

To classify an activity as “environmentally sustainable” for EU Taxonomy purposes, a distinction must be made between eligibility and alignment. Firstly, this entails investigating whether an activity is described in the Delegated Act and, as such, is eligible.

The next step is to establish whether an eligible economic activity fulfills the stipulated criteria for making a significant contribution to one of the six environmental objectives, does no significant harm to any other environmental objective, and complies with the minimum social safeguards. Only if all criteria are met is an activity considered as aligned and, therefore, “environmentally sustainable.”

As in the previous year’s reporting, only information on taxonomy eligibility is reported here. Pursuant to the Delegated Act on Article 8 of the EU Taxonomy Regulation 2020/852, the following KPIs must be reported: revenues, capital expenditure (CapEx), and operating expenditure (OpEx).

## EU Taxonomy KPIs

In accordance with Section 245a (1) of the Austrian Companies Code, the consolidated financial statements of ams OSRAM were drawn up on the reporting date in accordance with IFRS. The amounts used to calculate the revenues, CapEx, and OpEx KPIs are based on the figures reported in the consolidated financial statements. The EU Taxonomy Report takes account of the effect on the portfolio of the disposal of companies. Therefore, in the report for EU Taxonomy purposes, the scope of consolidation includes all Group companies that have not been disposed of or are not being made ready for disposal.

A project team of product and technical experts at ams OSRAM assessed the portfolio’s eligibility, recorded KPIs, and drew up the report according to EU Taxonomy rules. In line with their areas of expertise, these experts reviewed the portfolio by carrying out a detailed investigation of the areas of application — comprising individual product families — and finalized the processes for accurate data collection. To avoid double counting, figures were only assigned to one activity.

## Revenues

This KPI is based on net revenues as reported in the Consolidated Statement of Income disclosed in the Annual Report 2023 ([ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, Note 2](#), EUR 3,590 million). These revenues

comprise revenues from contracts with customers pursuant to IFRS 15, from which the Group companies not covered in the EU Taxonomy Report are deducted (EUR 113 million). The revenue denominator for Taxonomy purposes for the 2023 reporting year is therefore EUR 3,477 million.

The KPI for sustainable revenues as defined by the EU Taxonomy Regulation is calculated based on net revenues in connection with eligible activities (numerator), divided by total net revenues (denominator).

Revenues of the consolidated Group companies were investigated by ams OSRAM to ascertain whether they were made from eligible activities as per Annexes I and II of Delegated Regulation (EU) 2021/2139 and Annexes I to IV of Delegated Regulation (EU) 2023/2486. The detailed analysis of the portfolio based on technology and product application fields enables the allocation of the respective revenue to eligible economic activities at the level of product families per technology and application field. The numerator is total revenues from eligible activities for 2023, which total EUR 1,879 million. They are generated from the activities 3.4 “Manufacture of batteries,” 3.5 “Manufacture of energy efficiency equipment for buildings,” 3.6 “Manufacture of other low carbon technologies,” 1.2 “Manufacture of electrical and electronic equipment,” and 5.2 “Sale of spare parts.”

When calculating the KPIs for CapEx and OpEx, allocation formulas based on the revenues from defined eligible activities were used. To ensure these allocations are as accurate as possible, the allocation formulas were assigned to, and calculated for, the lowest consolidation level in each case (Group, segment, business line, application, product family level) based on their population.

## CapEx

The population for the CapEx KPI is comprised of additions to property, plant, and equipment ([ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, Note 11](#)), intangible assets ([ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, Note 12](#)), and right-of-use assets ([ams OSRAM](#)



[Annual Report, Notes to the Consolidated Financial Statements, Note 13](#)), as well as additions from business combinations ([ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, Notes 11-13](#)) in the explanatory notes to the balance sheet in the Annual Report (in all: EUR 790 million). For the 2023 reporting year, the Taxonomy CapEx denominator amounts to EUR 790 million.

The CapEx KPI reflects the share of capital expenditure either directly connected with an eligible activity, connected with a plan to expand or establish a sustainable activity, or relating to the production or acquisition of products and services from an eligible activity or individual measures to reduce greenhouse gas emissions.

Having considered investment expenditure in relation to its profit center per area of application as well as in light of the project description of additions, eligibility was then analyzed based on Annexes I and II of Delegated Regulation 2021/2139 as well as Annexes I to IV of Delegated Regulation (EU) 2023/2486. Eligible investments were then assigned using allocation formulas for each lowest consolidation level and by selecting individual, specific project descriptions for overarching, cross-cutting activities and for individual measures.

The sum of eligible investments yields the numerator for the CapEx KPI which, for the year under review, is EUR 422 million.

**OpEx**

Operating expenditure (denominator) is based on direct, non-capitalized costs of research and development, building renovation work, additions to short-term leasing, maintenance and repairs, and all other direct expenditure on regular maintenance of property, plant, and equipment by the Company or third parties that is essential to ensure their continuous, efficient functioning. These expenses were adjusted to

disregard the Group companies not covered by the EU Taxonomy Report. In order to ensure the required level of detail of the OpEx components of the Taxonomy Regulation with regard to building renovation measures and maintenance and repair expenses, including other direct expenses for the ongoing maintenance of property, plant, and equipment, a data query was carried out at the Group companies consolidated in the EU Taxonomy reporting. For the 2023 reporting year, the Taxonomy OpEx denominator is EUR 661 million.

The OpEx KPI reflects the share of operating expenditure for EU Taxonomy purposes that relates to eligible activities, a described CapEx plan, or the production or acquisition of products and services from an eligible activity, or individual measures to reduce greenhouse gas emissions.

The numerator is obtained by analyzing the eligibility of the expenditure recorded in the aforementioned accounts and query data, based on Annexes I and II of Delegated Regulation (EU) 2021/2139 as well as Annexes I to IV of Delegated Regulation (EU) 2023/2486. Eligible costs were calculated using assigned allocation formulas per lowest consolidation level and by selecting individual, specific project descriptions for overarching, cross-cutting activities and for individual measures.

The total eligible operating expenditure yields the numerator for the OpEx KPI which, for the year under review, is EUR 218 million.

**Overview**

The revenue, CapEx, and OpEx analyzed are classified by the economic activities described in Delegated Regulation (EU) 2021/2139 Annex I and Delegated Regulation (EU) 2023/2486 Annex II. Products in the ams OSRAM portfolio contribute to the environmental goal “Climate change mitigation” with the activities described in 3.4 “Man-

ufacture of batteries,” 3.5 “Manufacture of energy efficiency equipment for buildings,” and 3.6 “Manufacture of other low-carbon technologies.” The products also contribute to the environmental goal “Circular economy” with the activities 1.2 “Manufacture of electrical and electronic equipment” and 5.2 “Sale of spare parts.” They can thus be identified as eligible. Activities in the areas of new construction, building energy efficiency, transport, and IT were identified as overarching, eligible activities. No activities were identified as being listed in Delegated Regulation (EU) 2021/2139 Annex II and Delegated Regulation (EU) 2023/2486 Annex I, III, and IV.

**Eligible Activities in the Context of the ams OSRAM Portfolio**

As a leading provider of light and sensor technologies, we offer our customers a diverse product portfolio. Further information can be found in → [2.2.1 Our Portfolio](#).

Product portfolios based on light emitting diode (LED) technology and sensor solutions are most relevant to the activities currently published in the Taxonomy Regulation. Eligible shares originate both from the semiconductor portfolio of ams OSRAM and from the Automotive and Specialty Lamps Business Unit, including the automotive aftermarket and automotive and specialty lamps. The portfolio thus covers various applications, such as vehicle lighting, (vehicle) drive and building management, as well as LED retrofit lamps and vehicle battery chargers.

In the field of energy-efficient design of buildings and rooms (activity 3.5 “Manufacture of energy efficiency equipment for buildings”), ams OSRAM offers LEDs, spectral, and ambient light sensors. These enable not only the modulation of lighting scenes, but also the implementation of presence detection and distance measurements. These technologies help to reduce overall energy consumption and increase building efficiency — whether in workplaces, educational institutions, hospitals, or living spaces.

Our solutions for the automotive industry support battery management and contribute directly or indirectly to reducing greenhouse gas emissions. These products can be allocated to activities 3.4 “Manufacture of batteries” and 3.6 “Manufacture of other low-carbon technologies.” ams OSRAM also produces spare parts for the automotive industry, which can be allocated to activity 5.2 “Sale of spare parts.” We also manufacture automotive accessories, which can be allocated to activity 1.2 “Manufacture of electrical and electronic equipment.”

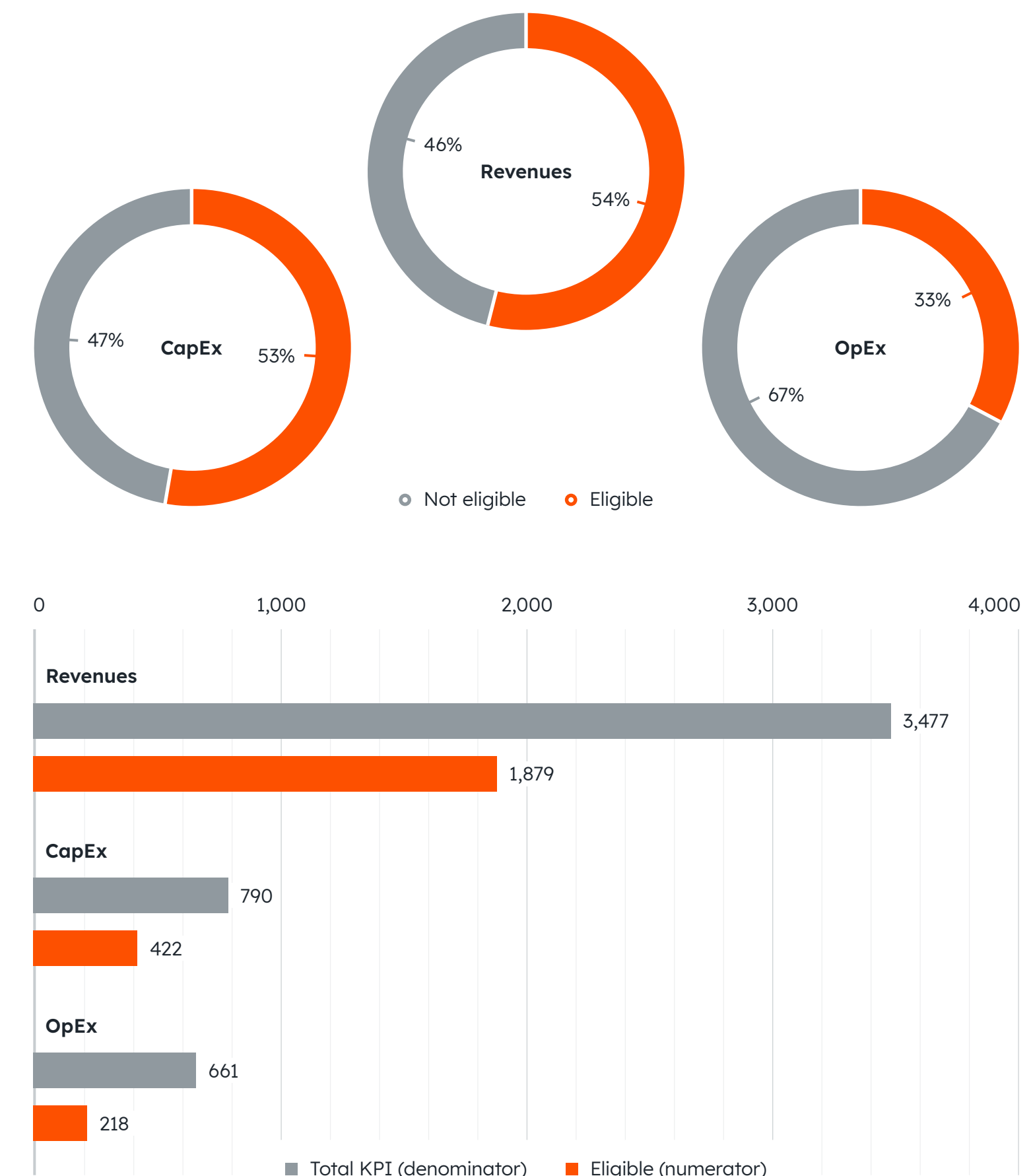
#### Other Activities of ams OSRAM

In conclusion, we would like to point out that not all technologies that support and may be capable of accelerating the EU’s decarbonization and environmental objectives are classified in the current EU Taxonomy. Enabling activities, in particular, can often be identified as making an indirect contribution to decarbonization. Therefore, ams OSRAM supports the addition of these enabling activities to the EU Taxonomy, such as electrical components, which are a key feature of our portfolio. The various areas in which electrical components can be applied offer many industries the opportunity to design more energy-efficient applications and make a direct and indirect contribution to reducing greenhouse gases, particularly during the use phase of the end product. Some examples are:

- Agriculture and horticulture lighting — today, precision LED lighting and modern sensor solutions enable the more intelligent, simple, and sustainable cultivation of crop plants. This opens up innovative opportunities to transfer cultivation to controlled environments and, irrespective of the natural surroundings, to the vicinity of large centers of consumption. Not only does this reduce the use of natural resources, it also enables a reduction in greenhouse gases caused by long transport routes.

- Visualization — A strong sense of immersion will be crucial to the success of augmented reality/virtual reality, whether for virtual or mixed reality with pass-through or see-through experiences. The photorealistic blending of digital and real-life content makes it possible to reduce private or professional travel, thus helping to lower emissions. ams OSRAM is a world leader in near-to-eye projection systems that display vivid, razor-sharp content for maximum realism.

## Summary EU Taxonomy KPIs





5.0

Society

Respect for Human Rights

Supply Chain Management

Product Responsibility

Customer Satisfaction

Product Safety and Quality

Social Engagement



## 5.1 Respect for Human Rights

According to the United Nations, human rights are under greater threat today than they have been for many years. Companies too must step up and do whatever is within the scope of their influence to help protect human rights — both voluntarily as well as in compliance with government regulations on aspects such as supply chains.

We are also increasingly being called upon by our investors and customers to identify and, where applicable, prevent any adverse impact that our business activities and business relationships may have on human rights. We fulfill these requirements not only in our own business area, but also as part of our procurement strategy which, among other things, strives to continually increase transparency in our supply chain → [5.2 Supply Chain Management](#).

As an international company with diverse products and complex global value chains, we are aware that our business relationships present the risk of human rights violations, especially for groups such as migrant, temporary, and subcontract workers.

The ams OSRAM product portfolio also requires the use of materials that could potentially be classed as conflict minerals due to their origin. To a very small extent, for example in a traditional automotive product line, cobalt is also used, the mining of which entails social risks → [4.3.2 Conflict Minerals](#).

### Guidelines, Responsibilities, Structures, and Processes

At ams OSRAM we do not tolerate any form of modern slavery, child and forced labor, or human trafficking — either within our own business activities or involving our suppliers or business partners.

Our Group-wide [Policy for Human Rights](#) sets out our position on respecting human rights. It applies to all employees, i.e. permanent employees, temporary, and migrant workers and students. We acknowledge and support internationally recognized human rights at all our locations and are committed to the principles of the United Nations Human Rights Charter, which we actively support as a member of the UN Global Compact. This is based on the Universal Declaration of Human Rights

and the UN Guiding Principles for Business and Human Rights, the fundamental conventions of the International Labour Organization (ILO), and the principles of the UN Global Compact. We require all employees to comply with this policy in their area of responsibility.

The ams-OSRAM AG Management Board has appointed the Head of Compliance, Audit, and Risk Management as the central human rights officer for the ams OSRAM Group. They are responsible for monitoring the fulfillment of all due diligence obligations, including the risk management system under the German Act on Corporate Due Diligence Obligations in Supply Chains (“Lieferkettensorgfaltspflichtengesetz,” LkSG), throughout the ams OSRAM Group. They regularly inform the Management Board, the Supervisory Board, and the management of the German Group companies that fall under the scope of the LkSG, at least once a year.

Various central departments at ams OSRAM work closely together to continuously fulfill our human rights and environmental due diligence obligations. The Environmental Protection, Health, and Safety (EHS) Department of the ams OSRAM Group is responsible for the operational fulfillment of the corresponding activities assigned to them at their own locations, including the subsidiaries. The Procurement Department is responsible for implementing our due diligence obligations for the entire supply chain. The Compliance Department is responsible for the “Tell ams OSRAM” whistleblower system, which is a key element of our complaints management → [3.3 Combating Corruption and Anti-Competitive Behavior](#). Furthermore, the internal Audit Department continuously reviews the compliance, effectiveness, and efficiency of the risk management system throughout the Group.

Risks or violations of human rights, such as violations of the principle of fair working conditions or the principle of mutual respect, in particular through discrimination, bullying, and sexual or other harassment of any kind, can be reported to the relevant manager, the Compliance Department, or other internal departments such as the responsible local HR department, the Procurement Department, or the EHS Department via the “Tell ams OSRAM” whistleblower system. All reports are treated con-

fidentially and investigated in detail, and findings are derived and documented. If reports prove to be justified, we take the necessary measures such as conflict mediation, improving working conditions, or legal consequences to stop, or prevent, or minimize the violation.

### Objectives, Action Taken, Results, and KPIs

Our aim is to make the organization even more aware of this important issue in order to avoid risks or violations in the areas of human rights, fair working conditions, and the principle of mutual respect.<sup>1</sup> To this end, we use various preventive measures such as providing regular training to our employees to raise awareness and ensure compliance with our Code of Conduct. Adjustments to our prevention measures may result from audits as well as from regional and country-specific requirements (e.g. changes in legislation).

In 2022, a methodology for identifying and evaluating potential human rights risks in our own business area was developed in order to carry out standardized risk analyses at our locations and companies in Germany and abroad on an annual and ad hoc basis in future. In 2023, we carried out this methodology for the first time at a location in a high-risk country in Asia and examined another location or subsidiary in Germany. The risks identified were assessed and prioritized. Based on this, a concrete action plan was drawn up to prevent or minimize the identified and prioritized risks in the future. Implementation is continuously monitored. Indications of potential risks or violations in the areas of human rights, fair working conditions, and the principle of mutual respect that were received via the “Tell ams OSRAM” whistleblower system or other reporting channels were recorded, analyzed, and followed up. In the case of proven and justified risks or violations, we have taken the necessary remedial measures (including possible compensation or consequences under labor law) to eliminate, minimize, or prevent the grievances.

Prevention also includes training. As part of the annual training on the Code of Conduct → [3.3 Combating Corruption and Anti-Competitive Behavior](#), all employees have also received training on human rights and fair working conditions since October

<sup>1</sup> See → [3.2.3 Sustainability Strategy](#), diagram with targets: performance of RBA audits at our own locations and human rights training planned.

2023. Previously, this topic was part of the personal “Compliance Basic” training course.

Overview of Violations of Human Rights and Fair Working Conditions

	2023
Incidents during the reporting period	33
Incidents closed during the reporting period	28
thereof number of incidents with proven violations <sup>1</sup>	7
thereof number of consequences under labor law in the event of proven violations	6
Inventory of (unclosed) incidents as of December 31st	5

<sup>1</sup> Among the incidents with proven violations is no case of serious human rights violations such as child or forced labor or modern slavery. Rather, these are cases of discrimination, harassment, and non-serious work-related incidents.

Our specialist departments continuously monitor and review relevant national and international frameworks on human rights in order to implement any necessary changes in a timely manner. As part of this, in 2023 we placed a significant focus on fulfilling the requirements of the LkSG, such as expanding our risk management to include compliance with human rights due diligence obligations and the associated regular risk analyses in our companies that fall under the law, regulating internal responsibilities, and publishing a declaration of principles for the German Group companies that fall under the scope of the LkSG. The existing Group-wide human rights policy was also updated in 2023.

5.2 Supply Chain Management

Our value chain includes the purchase of materials and services → [2.1 Our Company](#). The main sourcing countries are Germany, Malaysia, Singapore, China, and the USA. The largest material fields by volume are investments in construction, systems, and primary materials for optical semiconductors.

For Tier 1 suppliers, social and environmental topics are the main source of potential risk of negative effects arising from supply chain management, some examples being possible breaches of fair labor conditions and non-compliance with environmental regulations. As regards the wider supply chain (beyond Tier 1), raw material extraction presents the greatest risk of potential human rights breaches.

Guidelines, Responsibilities, Structures, and Processes

The objective of our procurement strategy is to create resilient supply chains founded on long-term cooperation with reliable partners. To fulfill our responsibility we also need partners who share our values. Therefore, we have defined clear ethical rules and incorporate social and environmental criteria in our procurement strategy, processes, and decisions. Implementation is carried out according to our Roadmap for Responsible Sourcing.

The following requirements are pivotal to responsible sourcing:

- Neither humans nor the environment must be harmed in our upstream value chain. Legal requirements, particularly those protecting human rights and the environment, must be fulfilled. We implement up-to-date regulatory requirements in processes and activities.
- Decarbonization of our supply chain is to be accelerated.

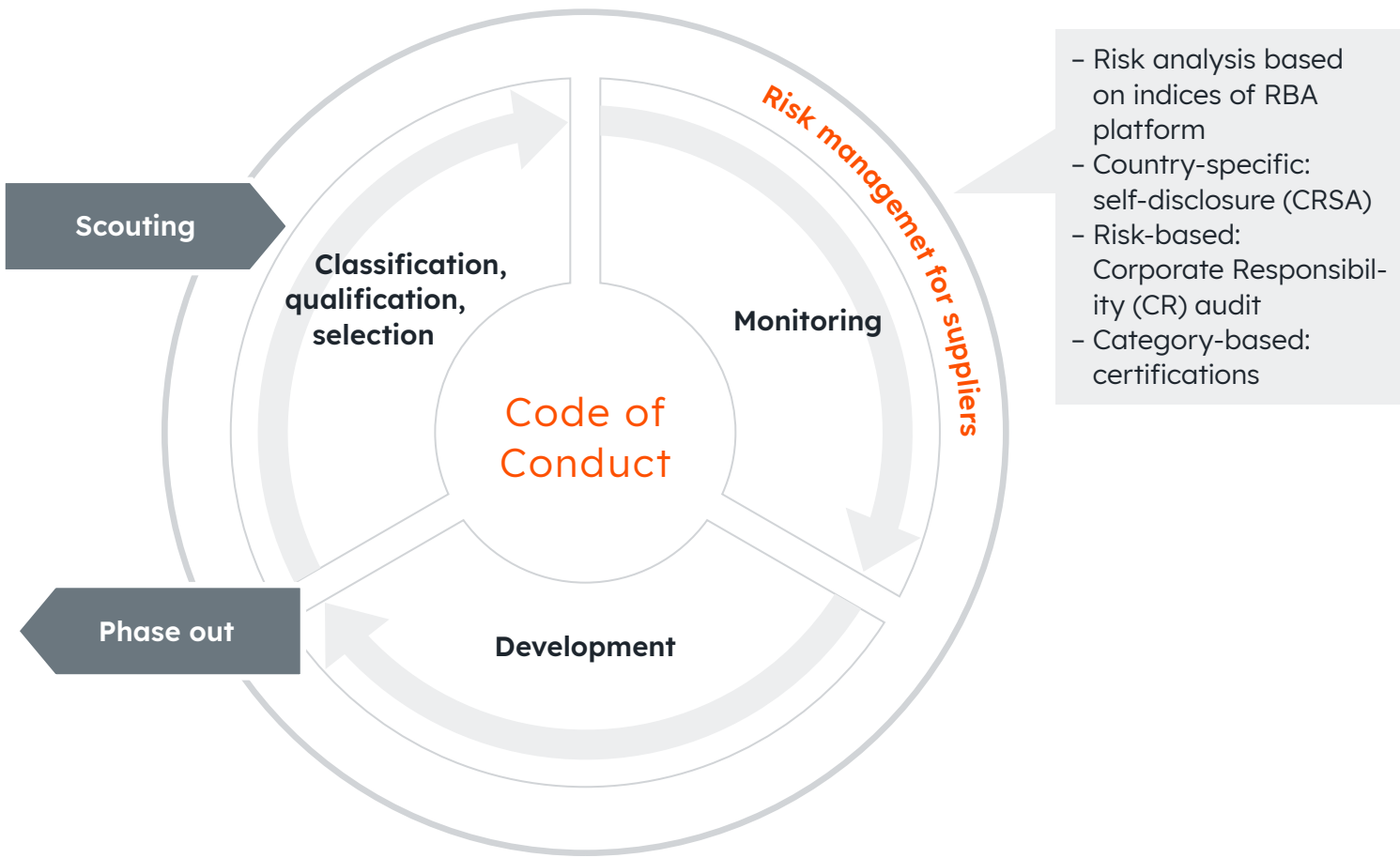
The procurement function of ams OSRAM operates on a global scale. Depending on the business unit concerned and the procurement markets for specific materials and services, procurement activities take place either globally or regionally. The responsibility for semiconductor business procurement lies with the CFO. Responsibility for procurement in Lamps and Systems rests with the segment’s Controlling unit, for which the CFO is responsible. The head of Procurement oversees the ESG program in the supply chain.

Supplier Management

The importance of sustainability in procurement at ams OSRAM is reflected in defined rules, processes, and tools. The Procurement Excellence Department is responsible for supplier management processes. Implementation takes place in the local procurement organizations.

The Group Procurement Guideline, our procurement policy, the [Code of Conduct for Suppliers](#), and the supplier management process form the framework for cooperation with our suppliers.

Supplier Management Process



## Code of Conduct

The Code of Conduct for Suppliers is the foundation of our cooperation with our suppliers. It takes into account international standards such as the UN Global Compact, the Code of Conduct of the Responsible Business Alliance (RBA), and the conventions of the International Labour Organization (ILO). The commitment to the Code of Conduct is mandatory for all suppliers with a procurement volume of EUR 50,000 or more. It is also part of the qualification process for new suppliers.

## Risk Management

Ongoing reviews of the procurement process to identify possible risks are a core element of supplier management. The handling of supply chain risks specific to procurement and sustainability is also embedded in the Company-wide risk management system [ams OSRAM Annual Report, Management Report, 8 Risk Management](#).

Risks in the supply chain are very complex. Firstly, there are procurement risks, which are bound up with a supplier's financial stability, the criticality of the material, or the geopolitical situation. Continuous monitoring of these risks is carried out for suppliers of direct materials. The results of this, together with the purchasing volume and the strategic relevance of the suppliers, are used to define critical suppliers.

Secondly, there are risks where the actions of a supplier could cause potential harm to people, the environment, or society. We use the risk assessment platform of the Responsible Business Alliance (RBA) for the initial analysis of our procurement volume with regard to governance-related (business ethics and human rights), social (labor, health, and safety), and environmental risks. The risk assessment is based on a large number of indices, which are used to carry out a geographical and product-related risk classification. The result is an overall risk rating. The result is presented in a risk mapping and serves as the basis for the further concrete review of the potential high-risk suppliers identified.

After analyzing existing certificates, self-assessments (Corporate Responsibility Self-Assessment, CRSA), and sustainability assessments, these high-risk suppliers can be requested to undergo a supplier audit (Corporate Responsibility Audit) — e.g. according to the RBA standard.

## Foundation of Responsible Procurement

### Supply Chain

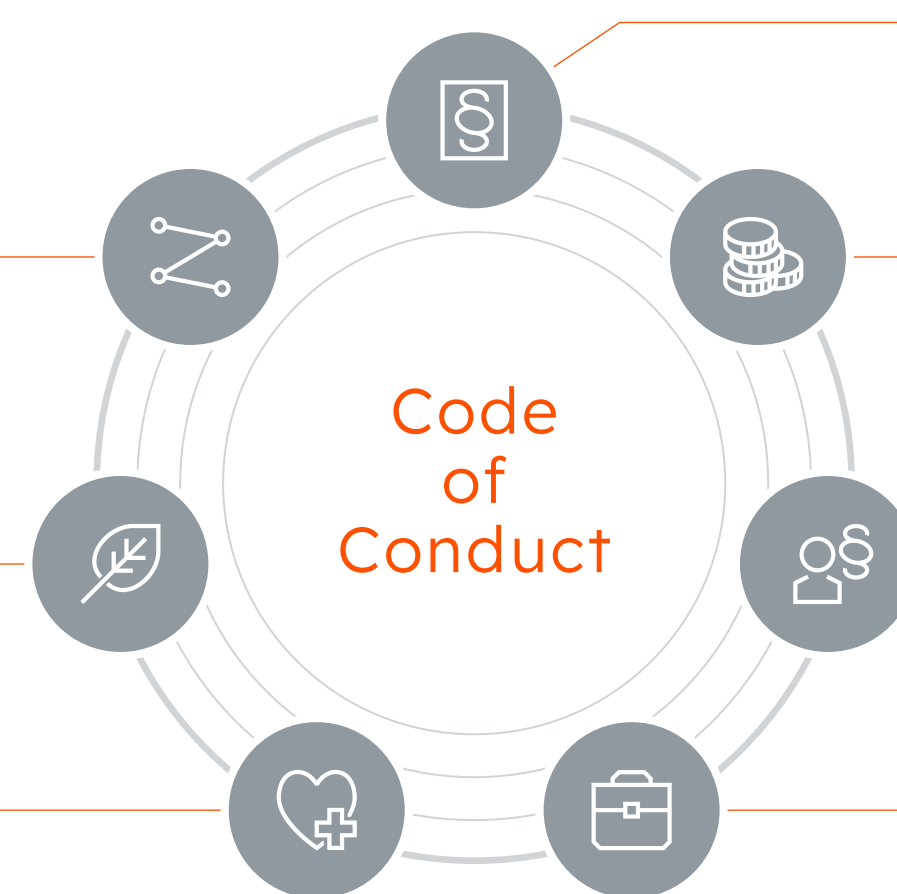
The express demand that these principles are implemented and complied with in the supplier's own supply chain

### Environmental Protection

Compliance with the relevant national laws and international standards on environmental protection, establishment of a functioning environmental management system, and continuous improvement of environmental protection

### Health and Safety

Responsibility for employee health and safety



### Laws

Compliance with all applicable laws

### Corruption

Combating corruption

### Human Rights

Respect for the human rights of their employees; compliance with laws against child labor; prohibition of all forms of modern slavery, forced labor, and human trafficking

### Fair Labor Conditions

Compliance with minimum wages and maximum permissible working hours; freedom of association; and right to collective agreements

## Supplier Classification, Qualification, and Selection

To begin with, supplier classification and qualification involves identifying potential suppliers. In the ensuing selection phase, the foundations are laid for deciding whether to add the vendor to ams OSRAM's global supplier network. As well as business-related, product-specific, and formal decision-making criteria, sustainability-related requirements relating to human rights due diligence, environmental protection, and governance are also taken into account as part of supplier classification and qualification. These requirements depend on the material sourced, the country in which it is sourced (see → [3.2.5 Risk Management and Geopolitical Risks](#)), and the volume purchased from the suppliers. Some of the requirements are as follows:

- Mandatory self-declaration of corporate responsibility by suppliers from countries with increased social risks
- Mandatory certification in accordance with ISO 14001 and compliance with RoHS (Restriction of Hazardous Substances in Electrical and Electronic Equipment) and REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals) by suppliers of production materials
- Mandatory auditing in accordance with VDA 6.3 (German Association of the Automotive Industry) for automotive suppliers in direct material purchasing (including social and ecological criteria)



- Checking all new suppliers against international sanctions lists. These also include suppliers flagged for human rights violations, such as those on the U.S. Department of Homeland Security’s entity list in connection with the Uyghur Forced Labor Prevention Act (UFLPA). Existing suppliers are checked with every order and before every payment run.
- Inclusion of the expected energy consumption or CO<sub>2</sub> emissions for energy-intensive equipment in the total cost of ownership calculation. This means that cost savings, for example through lower energy consumption over the entire service life, are also taken into account.

If a potential supplier successfully makes it through this selection process, it is added to ams OSRAM’s supplier network and, as such, continues to undergo regular monitoring as a member.

Supplier Monitoring and Development

The supplier monitoring process contains mechanisms that systematically check compliance with the requirements. This includes, for example, carrying out sustainability ratings for strategically relevant suppliers. Depending on the results, the strategic purchasers work with the relevant suppliers to define measures for a set period as part of the development process. If the review reveals excessive gaps compared to ams OSRAM’s requirements, these suppliers will no longer be considered in the procurement process until further notice.

Training for our Employees

We rely on motivated and properly trained employees to enable us to implement and keep developing the supplier management process. We regularly provide information and training to our global procurement teams on overarching topics, such as on human rights, responsible sourcing, and specific changes. We regularly publish information and training documents in our [Procurement Portal](#) in order to pass on sustainability-specific expertise to our suppliers.

Objectives, Action Taken, Results, and KPIs

We have set ourselves various goals for responsible procurement, and we made good headway with them in 2023:

Targets and Progress in Supply Chain Management

STRATEGIC FOCUS	GOAL	PROGRESS/RESULTS 2023
Governance and Integrity	— Purchasing volume fully covered by Code of Conduct for Suppliers.	— → <a href="#">“Procurement Key Figures” table</a>
	— Entire purchasing volume fully covered by risk classification.	— All ams OSRAM suppliers have undergone risk classification via RBA tool. The suppliers identified as high risk (sector and country risk) have been further investigated.
	— Improved protection of employees of on-site service providers.	— A mandatory supplement to our Code of Conduct was developed for on-site service providers in 2023. This obliges suppliers to comply with requirements regarding working hours, the prohibition of forced labor, and the correct handling of migrant labor. The roll-out is planned for 2024.
Decarbonization	— Science-based reduction in Scope 3 emissions (purchased goods and services).	— → <a href="#">4.2.3 Greenhouse Gas Emissions</a>
	— Transparency regarding our suppliers’ carbon footprint.	— In the sustainability assessment of relevant <sup>1</sup> suppliers, their CO <sub>2</sub> emissions were taken into account. A process to create transparency regarding the carbon footprint (Scope 1, Scope 2, and Scope 3) of relevant <sup>1</sup> suppliers was implemented in 2023 by means of a mandatory questionnaire.
Environmental Protection	— Increase of the ISO 14001 certification coverage rate of suppliers of direct materials.	— → <a href="#">“Procurement Key Figures” table</a>
Society	— Increase of the coverage rate of high-risk suppliers with self-disclosure on the topics of combating corruption and bribery, human rights, health and safety, working conditions, and the wider supply chain.	— As of December 31, 2023, 98% of the purchasing volume from suppliers in high-risk countries was covered by self-certification (CRSA).
	— Higher coverage of Corporate Responsibility (CR) audits.	— A series of CR audits were performed in 2023 by independent auditing firms. They covered our fulfillment of our duty of care with regard to human rights and compliance with our Code of Conduct for Suppliers. The audit findings were evaluated: Shortcomings were found in adherence to working hours and occupational safety. In the area of the environment, there were a few shortcomings with regard to adequate or effective guidelines for environmental protection and control processes. Measures have been initiated; the implementation is still ongoing.
	— Conflict minerals: increase of the Conflict Minerals Reporting Template (CMRT)/Extended Mineral Reporting Template (EMRT) coverage rates.	— → <a href="#">“Procurement Key Figures” table</a>
	— Conflict minerals: design and implementation of a process for a conflict-free supply chain.	— In 2023, the yearly evaluation was switched to a monthly evaluation. Defined due diligence activities apply to non-compliant suppliers. The monthly report is published on our <a href="#">website</a> .
	— Design and implementation of a scheme for monitoring on-site service providers in high-risk countries to protect the human rights of employees.	— On-site service providers in high-risk countries are evaluated annually using a defined set of criteria on the topics of migrant labor, forced labor, and working hours. A pilot took place in 2023; the roll-out is planned for 2024.
Structures and Processes	— Building and improving expertise on sustainability-related topics in the purchasing organization.	— In 2023, we provided both on-site and online training on the topic of sustainability for purchasing employees.
	— Building and improving expertise on sustainability-related topics in our supplier network.	— We provided self-learning and online training courses for suppliers on topics such as human rights, decarbonization, and the ams OSRAM sustainability strategy and Code of Conduct.

<sup>1</sup> Relevant here means suppliers with the highest impact on our purchasing volume.

## 5.3 Product Responsibility

### Procurement Key Figures

	2021	2022	2023
Number of suppliers	14,654	12,714	11,041
Procurement volume (goods and services purchased from third parties)	2.9	3.1	2.9
thereof accounted for by local suppliers <sup>1</sup>	51%	53%	52%
Supplier Codes of Conduct			
Newly signed codes of conduct	266 <sup>2</sup>	430	550
Coverage of procurement volume with Supplier Code of Conducts in total	97% <sup>2</sup>	92%	98%
Proportion of direct procurement volume covered by ISO 14001	89% <sup>2</sup>	94%	95%
Conflict Minerals Reporting Template (CMRT) coverage	97% <sup>2</sup>	99%	99%
Extended Mineral Reporting Template (EMRT) coverage		81%	97%
Corporate Responsibility Self Assessment (CRSA) coverage		92%	98%

<sup>1</sup> Local suppliers are defined as those that are based in the same country as the purchasing ams OSRAM location.

<sup>2</sup> Only data on OSRAM activities were considered here. The information on OSRAM for 2020 and 2021 represents around two-thirds of the Group-wide procurement volume. The coverage rate of the relevant procurement volumes with regard to the respective criteria is shown.

We take responsibility for products throughout their entire life cycle — from the design → [4.2.4 Green Tech Development](#) and the materials used → [4.3.1 Resource Efficiency](#), → [4.3.2 Conflict Minerals](#) to the customer → [5.3.1 Customer Satisfaction](#) and → [5.3.2 Product Safety and Quality](#). The possible negative effects and how we strive to avoid them are described below. The positive effects of our products are explained in → [2.2.2 Our Products’ Contribution to the SDGs](#).

### 5.3.1 Customer Satisfaction

Our customers’ satisfaction is critical to our commercial success and constitutes an essential component of our customer-focused approach. Our aim with our portfolio is to support them in their commercial and sustainability-related goals. This relies not only on innovation, but also on the enduring and trusting partnerships we nurture with our customers in order to fulfill their expectations.

#### Responsibilities, Structures, and Processes

Our customer relationships are developed via a key account management model using processes applicable worldwide. These were defined in accordance with our business model → [2.1 Our Company](#) for the segments Semiconductors and Lamps and Systems as part of our market to business strategy. A regionally positioned, global sales and marketing team is responsible for the entire semiconductors business, and this team’s management reports to the CEO. The sales organization is working on an online customer platform for the whole Group. There are separate sales organizations for the traditional automotive business and the entertainment/industry segment.

Our customers are looked after by dedicated account managers, working with technical experts who also assist with quality issues. They liaise closely with customers, ensuring they stay abreast of customer satisfaction. Key accounts (major customers who are defined by share in revenues and growth potential) each have a designated contact who handles their current and future concerns. This “one face to the customer” principle is designed to ensure customer satisfaction.

The Customer Service team was integrated into the global sales team for the semiconductor business in 2023 in order to better serve both our direct customers and our mass market customers. ams OSRAM values feedback on the satisfaction and loyalty of its customers and continuously incorporates this feedback into the improvement of processes and structures.

Defined processes are in place for customer feedback of any kind: for instance, the product or process manager within the business units is involved to work on a solution when negative feedback is received. This also applies in the event that general communication to customers is necessary, for example in the form of a customer letter.

#### Action Taken and Results

We hold “Tech Days” to meet with customers, discuss joint roadmaps, and receive their feedback on what we are doing. We also support our customers throughout the entire purchase decision-making process (customer journey) with various digital and non-digital contact points. Here, company websites play a crucial role, as do social media channels, newsletters, blogs, and digital communication, which we implement with our distribution partners. As well as attending trade fairs, we also rely on digital platforms and formats, including a digital event platform and a [showroom](#) that serves as a direct point of contact with customers.

### 5.3.2 Product Safety and Quality

ams OSRAM strives to offer high levels of quality, safety, and reliability in its products and solutions. In order to fulfill this promise to our customers and thus contribute to the long-term success of our business, we have established corresponding guidelines within the Company. Our automotive customers in particular set high standards that must be maintained to retain their business.

**Guidelines, Responsibilities, Structures, and Processes**

Product safety at ams OSRAM starts with product development; it plays a role in the procurement and production process and is a key aspect for customers over the entire product life cycle.

At Management Board level, responsibility for product safety and quality lies with the Chief Executive Officer (CEO), who has delegated tasks and authority to the Head of R&D and Corporate Quality. In addition to being responsible for technical and product-related quality, they are also responsible for ensuring the proper functioning of the quality management system.

The central Quality Management Department issues rules applicable to the whole Group and regularly reviews compliance with them. Our core practices are described in our [Quality Policy](#), which is available publicly. The guidelines and processes cover, for example, product safety and how this is taken into account in product development, and how we deal with any defective products and any necessary escalation measures. Operational responsibility for implementing legislation and internal rules regarding product safety and quality lies with the managers of the business units. At regular intervals, the Quality Management Department reports to the CEO on significant developments. The CEO is also informed immediately of any incident classified as a critical quality issue by the business unit responsible.

Product safety and quality play a key role at the product design stage. Certain methods designed to safeguard quality must therefore be applied to meet specific development milestones. Product approval is subject to standardized checklists that are used to identify risks. In addition, we regularly review the current product portfolio with regard to its impact on health and safety.

Customers can return defective products at any time and will find the relevant information online. Employees can also report potential incidents, for example via easily accessible structures that are established in production. By involving employees, potential quality issues can be identified in good time and, if necessary, escalated.

When a matter relevant to product safety is reported, we immediately check and assess the risks using a risk assessment matrix. The EU General Product Safety Directive (GPSD) 2001/95/EC, which sets out a structured framework for risk assessment, provides the global basis for our evaluation of potential product safety violations and of action plans to remedy such violations. As soon as any product safety risks are identified, appropriate processes are triggered to contain and eliminate these risks as quickly as possible. The corresponding internal and customer-oriented measures are defined. They range from simple customer information to product recalls.

Our processes and management systems are regularly certified to quality management standard ISO 9001 and, for automotive customers, also to standard IATF 16949 of the International Automotive Task Force (IATF). In addition, ams OSRAM regularly conducts internal audits of its factories, processes, and suppliers so that deficiencies can be identified and corrected at an early stage. Most new suppliers from whom products are purchased directly are audited before placing the first order, as prescribed by VDA 6.3 (Process audit in the automotive sector) → [5.2 Supply Chain Management](#).

All products for the automotive sector are tested in accordance with defined schedules in our environmental simulation laboratories, which are accredited to ISO/IEC 17025. Accreditation of the laboratories allows us to achieve compliance with global standards. By testing product performance through accelerated aging processes and environmental simulations, we can identify how long the products should last as well as shortcomings in their design or components, and then initiate improvements before failures occur in actual use. For us, considering safety requirements and evaluating the expected product quality in environmental simulations in the early development phase is the cornerstone for high-quality products.

**Objectives, Action Taken, Results, and KPIs**

ams OSRAM markets its products worldwide. Our key product safety objectives are, firstly, compliance with official requirements and, secondly, the safety of the users of our products. Therefore, we follow up on possible indicators of breaches that may affect our customers’ health or safety.

We are committed to complying with all legal requirements, standards, and norms relating to products and their safety, including labeling, which apply in the individual regions and markets in which we operate, and to implementing changes in good time. We are vigilant in identifying new legal requirements, standards, and norms that are relevant to our business in a timely and routine manner and in applying them to our internal product safety specifications.

We have implemented a zero defects strategy in line with our quality policy. Accordingly, the effectiveness and efficiency of our processes are checked and improved continuously to reduce costs and to conserve resources.



## 5.4 Social Engagement

The end-to-end processes in quality management are harmonized. The processes are optimized Group-wide in such a way that the chronologically and logically sequential sub-processes required to meet specific customer needs are transparent for all departments and functions involved. All certification-related checks went well and support our zero defects strategy. A total of 33 locations are certified to ISO 9001 and 13 to IATF 16949.

### Quality and Product Safety

	2022	2023
Reduction in the failure rate of products within the warranty period compared to prior year <sup>1</sup>	12%	4%
Reduction in the proportion of quality costs (non-conformance costs) in sales compared to prior year	9%	6%
Number of indications of possible violations regarding adverse effects of products on the health or safety of customers or product recalls	0	1

<sup>1</sup> Based on reports from business customers.

In 2023, we recalled the OSRAM BATTERYstart 360/260 and the RING Fast Charge Jump Starter 360/260 RPPL360/260<sup>1</sup> from the market. This was triggered by two customer complaints about overheated devices. No individuals or material assets were harmed. The matter was reported to the relevant authorities in the countries concerned and the EU (RAPEX/Safety Gate). Customer information was disseminated several times over a period of more than six months via online sales channels, stationary retail, print media, and social media. As a result,<sup>2</sup> 59% of the products sold have been successfully recalled so far. We have removed the product from our product range. Because of this action, we consider our goal of supplying our customers with safe products to have been achieved.

<sup>1</sup> This concerns two model series of a product that was on the market under two brand names — OSRAM and Ring. The recall rate relates to OSRAM BATTERYstart 360. For the OSRAM BATTERYstart 260 model, the recall was not initiated until 2024.

<sup>2</sup> As of 12.31.2023. Recalls are generally not time-limited.

Wherever ams OSRAM is active, we are also committed to sustainable development outside our business. We therefore engage at local level across the globe in initiatives that foster sustainable development and a prosperous society (corporate citizenship). Our social engagement activities follow a clear strategy and are aligned with our corporate principles.

ams OSRAM is committed to many different forms of social engagement. As well as making cash donations and donations in kind, we sponsor or otherwise provide support for events in the fields of culture, society, education, and sports, and we are members of associations, organizations, and clubs. Rules relating to corporate citizenship are integrated into our Code of Conduct and are supported by guidelines covering the specific topics → [3.2.4 Dialog with Stakeholders, Political Engagement, and Memberships](#) and → [3.3 Combating Corruption and Anti-Competitive Behavior](#). Volunteering activities qualify as a citizenship activity if they contribute to an improved social environment and if society as well as employees, customers, and suppliers and the Company itself benefit from them. The criteria of the “Business for Societal Impact” (B4SI) network define the framework for this. Sponsorship agreements must be free of political contributions of any form, must meet transparency requirements, be recorded as a written agreement, and be intended for a reputable business purpose and be appropriate to the quid pro quo.

We use an online tool to measure the costs and successes of our projects. This tool is also used to approve projects, which may in some cases require clarification of the intended social impact or other such changes prior to approval.

### Action Taken and Results

In 2023, as part of its social engagement activities, ams OSRAM provided a total of around EUR 1.1 million (previous year: EUR 2.7 million) in donations, sponsorships, and membership fees to projects, initiatives, organizations, and events.

### Social Contribution by Category

in EUR millions	2022		2023	
Cash contributions	2.1	79%	0.9	84%
In-kind giving product or services donations, projects/partnerships, or similar	0.4	17%	0.1	6%
Time employee volunteering during paid working hours	0.0	0%	0.0	0%
Management overhead	0.1	4%	0.1	11%
Total	2.7	100%	1.1	100%

In the Social category, the largest contribution in 2023 went to the German Red Cross in support of earthquake victims in Syria and Turkey. Almost EUR 43,500 was collected through an employee donation campaign. This amount was topped up to EUR 100,000 by ams OSRAM. The donation was used to finance emergency shelters, medical care, and the provision of essential goods such as water, food, and blankets.

In the area of education, ams OSRAM supported a number of local universities with a donation in kind via the Malaysian organization Collaborative Research in Engineering, Science, and Technology (CREST) in the form of special gloves. A scholarship program also took place in Malaysia in 2023, in collaboration with the Penang Skills Development Center (PSDC). ams OSRAM covered part of the costs. The program enables Malaysian students to take part in a bachelor’s degree course in mechanical engineering at a German university.



# Responsibility to Employees

## 6.0

**Our Human Resources Work**

**Occupational Health and Safety**

**Diversity and Equality of Opportunities**

**People Development**

**Attractiveness as an Employer, Employee Satisfaction, and Remuneration**

# 6.1 Our Human Resources Work

Our human resources (HR) work plays a key role in our efforts to drive sustainability. We believe that employees who are satisfied, successful, and healthy provide the necessary foundation for achieving long-term business success.

We are currently facing two major challenges: internally, the integration process between the former ams and OSRAM companies continues to lead to changes in work processes. For example, a new system for data management in the HR area was introduced worldwide in 2023. At the same time, the tense economic situation has led to cost-cutting measures, which have also had an impact on HR work.

The objective of our human resources work is to be an attractive employer for current and future employees. This means offering a safe workplace → [6.2 Occupational Health and Safety](#) with fair working conditions in a work atmosphere that is free from discrimination and sees diversity as an opportunity → [6.3 Diversity and Equality of Opportunities](#). It also means offering attractive benefits along with development opportunities and prospects → [6.4 People Development](#), thereby enhancing satisfaction and raising the retention rate → [6.5 Attractiveness as an Employer, Employee Satisfaction, and Remuneration](#).

## Guidelines and Responsibilities

Human Resources (HR) is responsible for all personnel matters. The Head of Global HR assumes overall global responsibility for HR matters. They report directly to the CEO and, as a member of the management team, have an influence on strategic decisions. As well as the central HR functions, there are also local teams.

Our human resources work is based on longstanding, tried-and-tested rules and processes for employees and managers, covering such topics as recruitment, diversity and inclusion, talent acquisition, development, training, remuneration, and benefits. Mandatory requirements were documented in a Group-wide HR guideline to define and communicate standards for human resources work worldwide as part of the integration process.

## Merger and Integration

In 2023, the necessary reduction in personnel due to the merger and integration of ams and OSRAM was completed. The provisions from the works agreements of the Group, established in 2021, remained in effect. Staff reduction was carried out without resorting to layoffs for operational reasons, opting instead for voluntary measures such as severance and partial retirement agreements, ensuring social compatibility.

Staff turnover (see following table) was lower in 2023 than in the previous year, despite the nonrecurring effects from the disposal of parts of the Company → [1.0 Report Profile, Portfolio Changes](#). We monitor the turnover rate at short intervals. In summer 2022, we carried out a global employee survey to make sure that the mood at each location is reflected → [6.5 Attractiveness as an Employer, Employee Satisfaction, and Remuneration](#). The number of temporary workers, most of whom are employed in manufacturing, fell by 21% to 287 as of December 31, 2023 (previous year: 364).

Overall, at the end of 2023, ams OSRAM employed 20,378 employees (previous year: 22,461).



Employees by Contract Type

	EMEA			Americas			Asia/Pacific			Total		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Employees with permanent contracts	9,183	9,010	7,905	1,478	1,008	1,023	9,974	9,085	10,643	20,635	19,103	19,571
thereof female	2,963	2,951	2,639	447	299	314	5,113	4,616	5,420	8,523	7,866	8,373
Employees with temporary contracts	201	247	142	0	1	-	3,663	3,110	665	3,864	3,358	807
thereof female	92	115	75	0	1	-	2,168	1,803	512	2,260	1,919	587
Total	9,384	9,257	8,047	1,478	1,009	1,023	13,637	12,195	11,308	24,499	22,461	20,378
thereof female	3,055	3,066	2,714	447	300	314	7,281	6,419	5,932	10,783	9,785	8,960
Workers outside the Company												
Temporary workers		271	240		2	-		91	47	357	364	287
thereof female		95	84		1	-		45	23		141	107

Employees by Age Category, Gender, and Region

	EMEA						Americas						Asia/Pacific						Total					
	2021		2022		2023		2021		2022		2023		2021		2022		2023		2021		2022		2023	
absolute figure and proportion of workforce																								
Male (total)	6,329	67%	6,191	67%	5,333	66%	1,031	70%	709	70%	709	69%	6,356	47%	5,776	47%	5,376	48%	13,716	56%	12,676	56%	11,418	56%
<30 years	499	5%	487	5%	510	6%	134	9%	76	8%	111	11%	984	7%	870	7%	989	9%	1,617	7%	1,433	6%	1,610	8%
30–49 years	3,534	38%	3,382	37%	2,966	37%	413	28%	257	25%	271	26%	4,646	34%	4,120	34%	3,754	33%	8,593	35%	7,759	35%	6,991	34%
>49 years	2,296	24%	2,322	25%	1,857	23%	484	33%	376	37%	327	32%	726	5%	786	6%	633	6%	3,506	14%	3,484	16%	2,817	14%
Female (total)	3,055	33%	3,066	33%	2,714	34%	447	30%	300	30%	314	31%	7,281	53%	6,419	53%	5,932	52%	10,783	44%	9,785	44%	8,960	44%
<30 years	237	3%	244	3%	258	3%	54	4%	34	3%	56	5%	1,815	13%	1,479	12%	1,430	13%	2,106	9%	1,757	8%	1,744	9%
30–49 years	1,712	18%	1,700	18%	1,546	19%	184	12%	118	12%	123	12%	4,832	35%	4,321	35%	3,952	35%	6,728	27%	6,139	27%	5,621	28%
>49 years	1,106	12%	1,122	12%	910	11%	209	14%	148	15%	135	13%	634	5%	619	5%	550	5%	1,949	8%	1,889	8%	1,595	8%
Total	9,384	100%	9,257	100%	8,047	100%	1,478	100%	1,009	100%	1,023	100%	13,637	100%	12,195	100%	11,308	100%	24,499	100%	22,461	100%	20,378	100%



New Hires by Age Category, Gender, and Region

absolute figure and proportion of workforce	EMEA						Americas						Asia/Pacific						Total					
	2021		2022		2023		2021		2022		2023		2021		2022		2023		2021		2022		2023	
Male (total)	365	61%	350	65%	178	59%	295	56%	108	68%	125	64%	670	47%	955	53%	523	56%	1,330	52%	1,413	57%	826	58%
<30 years	124	21%	85	16%	57	19%	119	23%	40	25%	57	29%	316	22%	378	21%	274	30%	559	22%	503	20%	388	27%
30–49 years	202	34%	227	42%	101	34%	125	24%	42	27%	46	23%	325	23%	538	30%	242	26%	652	26%	807	32%	389	27%
>49 years	39	7%	38	7%	20	7%	51	10%	26	16%	22	11%	29	2%	39	2%	7	1%	119	5%	103	4%	49	3%
Female (total)	231	39%	188	35%	123	41%	228	44%	50	32%	71	36%	759	53%	841	47%	404	44%	1,218	48%	1,079	43%	598	42%
<30 years	72	12%	62	12%	45	15%	98	19%	12	8%	31	16%	393	28%	445	25%	235	25%	563	22%	519	21%	311	22%
30–49 years	129	22%	107	20%	64	21%	92	18%	24	15%	27	14%	351	25%	379	21%	166	18%	572	22%	510	20%	257	18%
>49 years	30	5%	19	4%	14	5%	38	7%	14	9%	13	7%	15	1%	17	1%	3	0%	83	3%	50	2%	30	2%
Total	596	100%	538	100%	301	100%	523	100%	158	100%	196	100%	1,429	100%	1,796	100%	927	100%	2,548	100%	2,492	100%	1,424	100%

Employee Turnover by Age Category, Gender, and Region

absolute figure and proportion of workforce	EMEA						Americas						Asia/Pacific						Total					
	2021		2022		2023		2021		2022		2023		2021		2022		2023		2021		2022		2023	
Male (total)	1,047	17%	474	8%	1,124	21%	583	57%	327	46%	157	22%	1,764	28%	1,319	23%	986	18%	3,394	25%	2,120	17%	2,267	20%
<30 years	161	32%	76	16%	92	18%	121	90%	63	83%	40	36%	567	58%	333	38%	183	19%	849	53%	472	33%	315	20%
30–49 years	580	16%	266	8%	502	17%	294	71%	141	55%	68	25%	1,050	23%	883	21%	162	4%	1,924	22%	1,290	17%	732	10%
>49 years	306	13%	132	6%	530	29%	168	35%	123	33%	49	15%	147	20%	103	13%	641	101%	621	18%	358	10%	1,220	43%
Female (total)	965	32%	222	7%	512	19%	270	60%	131	44%	72	23%	2,277	31%	1,493	23%	896	15%	3,512	33%	1,846	19%	1,480	17%
<30 years	129	54%	30	12%	47	18%	74	137%	14	41%	15	27%	944	52%	531	36%	264	18%	1,147	54%	575	33%	326	19%
30–49 years	423	25%	129	8%	231	15%	103	56%	58	49%	29	24%	1,235	26%	832	19%	65	2%	1,761	26%	1,019	17%	325	6%
>49 years	413	37%	63	6%	234	26%	93	44%	59	40%	28	21%	98	15%	130	21%	567	103%	604	31%	252	13%	829	52%
Total	2,012	21%	696	8%	1,636	20%	853	58%	458	45%	229	22%	4,041	30%	2,812	23%	1,882	17%	6,906	28%	3,966	18%	3,747	18%

## 6.2 Occupational Health and Safety

As part of its EHS policy, ams OSRAM is committed to offering its employees a safe and healthy working environment. Minimizing the risk of occupational illnesses and accidents at work is part of this. Thus, we fulfill our social responsibility and also reduce economic damage.

### Responsibilities, Structures, and Processes

Overall responsibility for environmental protection and occupational health and safety within the Group lies with the CEO, who has delegated tasks and managerial authority to the head of the corporate Environmental Protection, Health, and Safety (EHS) Department. The corporate EHS head regularly reports directly to the Management Board on significant developments.

The corporate EHS Department has the power at ams OSRAM to issue guidelines in the area of occupational health and safety → [4.1 Environmental Management](#).

### Regional Implementation and Certifications

The production sites in Ang Mo Kio (Singapore); Wuxi, Kunshan DO, and Foshan (China); Penang and Kulim (Malaysia); Calamba (Philippines); and the headquarters in Premstaetten (Austria) are certified in accordance with ISO 45001, the standard for occupational health and safety management systems. During the reporting period, four locations passed external audits as part of the matrix certification that now applies to both parts of the Company. Our internal requirements also oblige the other production facilities to maintain a management system for occupational health and safety in accordance with the ISO 45001 standard. The central EHS Department carried out seven additional corporate EHS audits to verify this requirement. The plant in Foshan was again additionally certified to amfori BSCI, an internationally recognized standard for social accountability.

Development and sales locations with more than 50 employees operate a reduced management system but also contribute data to the health and safety KPIs. The EHS Department also includes in its reporting a selection of locations that do not

quite reach this headcount but might do so in future. Therefore, our reporting covers 95% of employees. Our responsibility for occupational health and safety also encompasses employees of external companies who are working at our locations. However, because we do not specifically record how many of them there are or how many hours they work, the aforementioned figure only includes our own permanent employees.

At the locations mentioned, the responsible managers must carry out a risk assessment for each area of activity in accordance with internal requirements. Managers are also provided with regular training on these matters. The quality and completeness of the risk assessments are audited internally and externally. Risks at ams OSRAM can be of an ergonomic, mechanical, radiation-related, or chemical nature. Specific measures are then adopted in line with the risk assessment. These may include the use of safety barriers and rails, floor markings, or extraction and ventilation systems. Where necessary, individual protective equipment is provided. To support managers, the local medical personnel (Company doctors and nurses) and, in some instances, employee representatives are also involved in this risk assessment.

The quality assurance of the medical services starts with procurement or, at larger locations where we have our own medical personnel, with the recruitment process. Company doctors provide all reports required by law, always subject to doctor-patient confidentiality. Access to medical services for employees is regulated at location level and the consulting hours are communicated to staff.

We have also formed committees for occupational health and safety, either in line with local legal requirements or on a voluntary basis. The committees also incorporate environmental issues in their work and hold regular meetings in accordance with local requirements. Besides accident prevention experts (such as safety officers or safety representatives), these committees also consist of local managers, employees, and medical staff. Their resolutions are recorded in corresponding minutes and adopted measures are followed up.

### Employees' Responsibilities and Obligations

Furthermore, each and every ams OSRAM employee has an obligation and a responsibility to be mindful of safety at their place of work. In accordance with the requirements of ISO 45001, employees are encouraged to report hazardous situations (without fear of reprisals) and shall take themselves out of harm's way at all times without having to ask for permission. They are also included in the process of creating or updating risk assessments and determining the causes of incidents.

ams OSRAM employees are informed of potential hazards at their workplace when they join the Company and then regularly thereafter. If they change jobs internally, they can only commence their new activities once they have been retrained with regard to the new hazards to which they may be exposed. This applies increasingly to employees who work remotely. Managers are asked to draw attention to the possible ergonomic risks of working from home and/or provide recommendations for mitigating these risks.

ams OSRAM also attaches importance to the health and medical care of its employees outside of work. For this reason, in most of the countries in which we operate and where there is no mandatory health insurance, we purchase such cover for our employees on a voluntary basis.

### Requirements for our Supply Chain

We oblige our suppliers to accept and sign our Code of Conduct for Suppliers, which sets out occupational safety requirements. Depending on their country of origin, new suppliers must also fill out an online questionnaire on aspects of sustainability, including occupational health and safety, which is evaluated by Procurement, if necessary with the involvement of the EHS Department. Selected suppliers are also asked to undergo Corporate Responsibility audits → [5.2 Supply Chain Management](#). We place great focus on outsourced processes and their impact on environmental protection and occupational health and safety, which are the subject of a special Appendix to the Procurement Policy.



Objectives, Action Taken, Results, and KPIs

Our goal is to offer our employees a safe and healthy workplace. We therefore aim to continually improve the parameters that impact on occupational health and safety, including recording work-related injury data at our locations as a basis for calculating the internationally recognized KPIs Lost Time Injury Frequency Rate (LTIFR) and Severity Rate (SR). Each accident involving lost time is analyzed to determine the causes. This analysis, which at least involves using the “5-Why method,” serves as a basis for corrective and preventive measures and for updating the risk assessment.

In each case, objectives are set on a site-specific basis. For the LTIFR, the target is based on achieving a reduction relative to the average figure for the past three years. The SR target factors in the regional average duration of absence per injury. The regional and global targets are then aggregated from the individual values. We already expect a zero injury rate at non-production locations.

Numerous occupational health and safety measures were continued at a local and global level in 2023. Local examples of these measures include the following:

- Various EHS activities such as drills, safety talks, and workshops were carried out at the An Mo Kio site (Singapore), where employees were informed in detail about potential sources of danger.
- The EHS team at the Kulim site (Malaysia) has introduced regular communications to all employees to raise awareness of EHS.
- At the Bruntál location (Czech Republic), six workplaces were identified where employees work alone. They have now been equipped with a system (smart watch) that they can use to request help if necessary or in the event of a fall.

- Workshops were held at the Schwabmuenchen and Munich sites in Germany to assess mental stress and define measures in accordance with the methodology recommended by the Professional Association for Energy, Textile, Electrical, and Media Products (BG ETEM, Germany).

The global KPI LTIFR in 2023 was significantly below the previous year’s figure. However, the challenging target (see table) was not achieved. Compared to the previous year, the absolute number of accidents fell, but this also applied to the working hours to be taken into account.

Of the accidents reported, one was so serious that the employee affected was unable to recover in less than six months or is unlikely to be able to do so at all.

Occupational Health and Safety Key Figures

	2020	2021	2022	2023	Target 2023
Global LTIFR <sup>1</sup>	0.31	0.23	0.27	0.24	0.21
LTIFR EMEA	0.34	0.39	0.47	0.42	
LTIFR Americas	0.47	0.30	1.01	0.25	
LTIFR Asia/Pacific	0.28	0.13	0.10	0.12	
Global SR <sup>1</sup>	5.0	7.4	4.7	5.2	7.8
SR EMEA	9.6	13.2	9.4	10.6	
SR Americas	15.4	14.6	7.0	7.6	
SR Asia/Pacific	1.4	3.0	1.9	1.7	
Number of accidents resulting in absence from work	87	63	64	51	
Number of high-consequence accidents <sup>2</sup>	2	3	1	1	
Number of cases of recognized occupational illness <sup>3</sup>	0	3	0	1	

<sup>1</sup> The LTIFR represents the number of accidents at work resulting in at least one day lost in relation to the total number of working hours during the fiscal year. The SR represents the total number of days lost in relation to the total number of working hours during the fiscal year. Both KPIs are scaled to 200,000 working hours, excluding commuting accidents.

<sup>2</sup> Accidents that result in an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within six months.

<sup>3</sup> Occupational diseases are illnesses suffered by employees as a result of their professional activity and which are recognized as such by authorities or insurance carriers. ams OSRAM adheres to local legislation with regard to the responsible authorities and the procedures to be followed.

## 6.3 Diversity and Equality of Opportunities

As a global company with subsidiaries in 39 countries, diversity and inclusion are of great importance to us. As at the end of 2023, employees from 84 (previous year: 85) different nationalities were employed at ams OSRAM. We strongly believe that diversity has a positive impact on our business in different markets, as international customer and supplier relationships require cultural competence and flexibility. At the same time, it is our experience that diverse teams are highly innovative. We define diversity according to the “4 Layers of Diversity” model based on the dimensions of culture, national and ethnic origin, age, social background, sexual orientation, gender and gender identity, physical and mental abilities, religion, and ideology.

### Guidelines, Structures, and Processes

To reflect our commitment, OSRAM has been a signatory to the “Charter of Diversity” since 2013, a voluntary commitment by German companies to diversity management, which is continued by ams OSRAM. In addition, ams OSRAM is involved in other voluntary initiatives such as the PROUT AT WORK Foundation (since 2016), which aims to anchor and strengthen diversity and inclusion within the Company.

We respect the human and personal rights of all employees, business partners, and customers and respect their personal dignity and privacy. In accordance with our corporate principles and the labor laws of the countries in which we operate, we do not tolerate discrimination, sexual harassment, bullying, or other personal attacks on individuals. These principles are set out in our ams OSRAM Code of Conduct → [3.1.1 Core Values](#) and our Human Rights Policy → [5.1 Respect for Human Rights](#). In this way, we want to promote equal opportunities and exclude any possible discrimination against employees based on the above-mentioned characteristics.

The principle of equality of opportunity is also reflected in our HR work → [6.1 Our Human Resources Work](#): in the recruitment process, the performance management process (PMP) → [6.5 Attractiveness as an Employer, Employee Satisfaction, and Remuneration](#), in the selection for the talent programs, and the classification of applicants, we work with standardized processes, clearly defined criteria, and the dual control principle to avoid any possible unequal treatment. Diversity and inclusion is one of a number of factors that are used at ams OSRAM in recruitment. Special programs to promote women and develop female managers are another important component of our management approach.

Globally, the “Women Leadership Forum” offers women in senior positions the opportunity to hone their management skills and establish a network within ams OSRAM → [6.4 People Development](#).

ams OSRAM also makes it easier to combine work and family life by offering parental leave and flexible working models, such as the option of working part-time or from home. Employees dealing with special family needs, such as caring for relatives, have the option to reduce their working hours. Furthermore, a number of locations offer support in the form of childcare or arrange childcare for employees. For example, ams OSRAM offers employees at the Regensburg site (Germany) a company kindergarten and a company crèche. At the OSRAM site in Premstaetten (Austria), employees are granted subsidies for school events (including accommodation costs) via the works council fund.

At ams OSRAM, the principle of “equal pay for equal work” applies. A pilot project for a gender pay gap analysis was carried out at the end of 2022. We are currently working on improving data quality. From 2024, this analysis is to be carried out annually.

### Objectives, Action Taken, Results, and KPIs

As part of our Diversity, Equity, and Inclusion (DEI) strategy, we aim to increase the proportion of women in management positions. To highlight the importance of diversity and equality of opportunities for the Company and to achieve further progress, the Management Board set a target of 25% for the proportion of women in the first two management levels of the entire Group for ams OSRAM in 2021. This target is to be achieved by the end of 2026. In 2023, the figure was 22% (previous year: 21%).

To attract female talent, ams OSRAM, as a technology company, participates in activities such as specialized recruiting fairs and events aimed at enhancing the attractiveness of technical professions for girls and women.

In line with our DEI strategy, we want to strengthen our diverse and inclusive corporate culture through additional specialized programs and initiatives. We have appointed Diversity Ambassadors in the business units and regions to help implement them. This initiative also promotes integration throughout the Company on a decentralized level. Through various employee groups, we facilitate discussions among all employees on specific topics or diversity aspects. We also successfully implemented the Diversity Day/Month again in 2023.

Share of Female Managers

	First management level <sup>1</sup>			Second management level <sup>2</sup>			Total		
	2021	2022	2023	2021	2022 <sup>3</sup>	2023	2021	2022	2023
Total	347	351	336	2,217	4,161	3,776	24,499	22,461	20,378
<30 years	1	1	1	10	26	25	3,723	3,190	3,354
30–49 years	115	118	119	1,313	2,595	2,484	15,321	13,898	12,612
>49 years	231	232	216	894	1,540	1,267	5,455	5,373	4,412
thereof female	47	45	44	482	890	869	10,783	9,785	8,960
Share (in %)	14%	13%	13%	22%	21%	22%	44%	44%	41%
<30 years	0	0	0	6	10	7	2,106	1,757	1,744
30–49 years	18	16	20	334	661	654	6,728	6,139	5,621
>49 years	29	29	24	142	219	208	1,949	1,889	1,595

<sup>1</sup> Senior managers who belong to the executive level of the organization  
<sup>2</sup> Managers above pay scale  
<sup>3</sup> In the course of the introduction of the career paths in fiscal year 2022, ams OSRAM decided to define the management career for the early development of talents up to and including grade 17 as level manager.

Full-Time and Part-Time Employees

	EMEA			Americas			Asia/Pacific			Total		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Full-time employees	8,301	8,186	7,022	1,456	976	953	13,637	12,195	11,306	23,394	21,357	19,281
thereof female	2,368	2,380	2,069	440	290	292	7,281	6,419	5,930	10,089	9,089	8,291
Part-time employees	1,083	1,071	1,025	22	33	70	0	0	2	1,105	1,104	1,097
thereof female	687	686	645	7	10	22	0	0	2	694	696	669
Total	9,384	9,257	8,047	1,478	1,009	1,023	13,637	12,195	11,308	24,499	22,461	20,378
thereof female	3,055	3,066	2,714	447	300	314	7,281	6,419	5,932	10,783	9,785	8,960



## 6.4 People Development

In view of the shortage of skilled workers, people development that adapts to changing parameters and needs is one of the keys to economic success. Our various people development measures are all intended to support our employees in forging a career that reflects their individual abilities and interests.

### Structures and Processes

From professional development via a degree apprenticeship, assorted career paths right up to those designed for talent and management development, our employees have the opportunity to develop, both professionally and personally, throughout their entire career at ams OSRAM. We also provide an extensive range of learning and training programs for all employees under the umbrella of the ams OSRAM University.

ams OSRAM has established a performance management process (PMP) for employee development, which involves regular and structured dialog between employees and line managers. This is supported by two feedback meetings per year. The aim of this process is to identify talented staff within the Company throughout the world. This close dialog is a collaborative approach to agreeing on and implementing development targets.

### Breakdown by Career Paths

in % (rounded)	2021	2022		2023	
	Total	Total	thereof female	Total	thereof female
Leadership	15	15	24	14	24
Sales	6	4	14	3	16
Engineering	58	58	20	59	21
Specialist	20	21	61	21	63
Project management	2	2	26	2	26
Total	100	100	29	100	30

### Objectives, Action Taken, Results, and KPIs

Our aim is to provide employees with development opportunities through appropriate measures. In this way, we strengthen our attractiveness as an employer and develop a pool of talent for the various career paths.

Our apprenticeships play a major role in securing the next generation of employees. We currently provide training in 16 recognized technical trades, one commercial apprenticeship, and eight degree apprenticeships. In 2023, 164 (previous year: 161) young people were employed at ams OSRAM as part of their training or apprenticeship.

Our career path model comprises five equivalent development paths: Engineering, Leadership, Project Management, Sales, and Specialist. Our employees are offered individual training and development programs tailored to where they are in their careers and according to their skills profile. For example, a vast range of management training — from the “New to Manager Program” through to the “Senior Leadership Program” — is available within the Leadership career path. As of December 31, 2023, 10,850 (previous year: 11,924) employees were assigned to the various career paths.

Anchoring our leadership principles and core values plays a key role in the Leadership career path. We offer managers the opportunity to further develop their leadership skills with the help of various programs. The opportunities to communicate on a one-to-one basis with others on the programs and for tandem learning promote the development and expansion of a global managerial network. The success is reflected in the rate of internal appointments to management positions (see table “Recruitments to Management Positions”).

We encourage employees with the potential for significant responsibilities within the Group — irrespective of their particular career path — through local or global talent programs. In addition to professional development, these programs also focus (depending on the level of seniority) on personal development, preparation for future roles at local or global level, and the opportunity to gain cross-functional and cross-cultural experience. In addition to Germany, China, and Malaysia, local talent programs have been run in Austria and Singapore since 2022. In 2023, a total of 74 (previous year: 148) employees worldwide took part in the local and global talent program, which corresponds to 0.6% of the indirect workforce.

### Recruitments to Management Positions

Number of recruitments	2021		2022		2023	
	Total	thereof female	Total	thereof female	Total	thereof female
Senior management positions <sup>1</sup>	33	3	63	10	46	8
thereof internal recruitments	18	1	47	7	31	6
Management positions <sup>2</sup>	213	60	520	139	181	53
thereof internal recruitments	146	44	286	85	76	22
Total management positions	246	63	583	149	227	61
thereof total internal recruitments	164	45	333	92	107	28

<sup>1</sup> Senior managers who belong to the executive level of the organization  
<sup>2</sup> Managers above pay scale

The annual performance management process (PMP) → [6.5 Attractiveness as an Employer, Employee Satisfaction, and Remuneration](#) identifies talented individuals who can be nominated for the talent programs.

The Key Expert Program is open to employees of the Engineering career path who work in our R&D departments. So-called TechFields have been defined that reflect current and future technological topics that are of central importance to ams OSRAM. One focus is on networking so that our key experts can contribute their knowledge to the Company, advise management on technological issues, and thus influence decisions. As of December 31, 2023, 355 (previous year: 236) key experts had been identified and appointed worldwide.

The ams OSRAM University offers a Company-wide modern training program, containing over 16,000 learning modules. These offer a wide range of educational and training opportunities, which can be flexibly compiled. In light of new forms of work, the goal is to make training content easily accessible.

In 2023, ams OSRAM spent a total of EUR 4.4 million (previous year: EUR 7.6 million) on training its employees.

Average Hours of Training per Employee by Function

	Production and service			Research and development			Administration and selling			Total workforce		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Number of employees by function (in FTE)	18,423	16,479	14,098	3,445	3,453	3,144	4,262	3,389	3,289	26,130	23,322	20,530
Average hours of training per employee		4.8	7.2		12.1	18.5		8.3	10.3	7.1	6.4	9.4
Average hours of training per female employee		3.1	4.8		16.4	26.6		10.2	11.5		4.0	7.5

## 6.5 Attractiveness as an Employer, Employee Satisfaction, and Remuneration

Being perceived as an attractive employer is essential to the Company’s long-term success → [6.1 Our Human Resources Work](#). We believe that the satisfaction of our employees and our attractiveness as an employer are indicators of how we treat each other within the Company and how we value our employees. We value our employees and treat them with respect, and this includes offering them fair remuneration. Our remuneration system is designed to ensure that pay is fair and commensurate with performance. It does not discriminate on the basis of gender or other characteristics → [6.3 Diversity and Equality of Opportunities](#). Further information on expenses in connection with remuneration and benefits can be found in [ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, 4 Expenses](#).

### Guidelines, Structures, and Processes

The attractiveness of employers is becoming increasingly important. This is especially true in view of the severe global shortage of skilled specialists. In 2023, we described our employer promise in an Employer Branding Guide in order to establish uniform standards across the Group. This focuses primarily on addressing talented people in the labor market in a target group-specific manner and ensuring that ams OSRAM has a uniform global employer brand presence.

Motivated and committed employees are one of the most important success factors for a company. In order to retain our employees in the future — especially in light of the shortage of skilled workers — it is important for management to know what the mood in the Company is like and how satisfied and committed employees are. To measure employee satisfaction, engagement, and loyalty, we conducted the first worldwide employee survey at ams OSRAM in 2022. Based on the results, global, local, and departmental measures were continuously implemented in 2023. Identified key issues were discussed at Group level and within the responsible teams, leading to the development of appropriate measures and their subsequent implementation. As these measures have now largely been completed, a further employee survey is planned for 2024. Findings from this are to be used for measures to increase the attractiveness of ams OSRAM as an employer and to improve employee satisfaction.

To create opportunities for dialog, we regularly hold town hall meetings with our management and organize webcasts with the Management Board and other management representatives, where employees can ask questions and give feedback.

ams OSRAM aspires to retain its employees by offering them a long-term remuneration concept. A profit-sharing program for all employees of ams OSRAM adds an attractive, immediate component to the existing stock option plans and remuneration programs. The profit-sharing program is ams OSRAM’s way of rewarding the joint contribution of all employees to the success of the business. More information about the profit-sharing bonus for employees can be found in [ams OSRAM Annual Report, Management Report, 5 Employees](#).

With regard to fair pay, we view it as self-evident that we comply with local legal requirements. We measure our remuneration against benchmark data for comparable companies per country or location, which are reviewed annually and adjusted if necessary. We promote the performance of our employees with clearly defined bonus programs based on globally defined guidelines for variable remuneration and sales bonuses. The definition of the respective remuneration is based on the corresponding job evaluation. This is carried out in a non-discriminatory manner on the basis of the neutral criteria uniformly defined for the Group in 2021. In companies with collective bargaining agreements, the respective collective bargaining agreement forms the basis for the evaluation and the remuneration system; this is the case at ams OSRAM in Germany,<sup>1</sup> for example. Depending on the national rules and regulations, ams OSRAM offers discretionary benefits over and above the legal requirements in areas such as health and accident insurance → [6.2 Occupational Health and Safety](#), an occupational pension, and forms of deferred remuneration.

Our understanding of fair working conditions includes the right to freedom of association and the possibility of concluding collective agreements, for example on remuneration issues.

### Objectives, Action Taken, and Results

In order to increase our attractiveness as an employer, counteract the shortage of skilled workers, and strengthen staff loyalty, we implemented various external and internal measures in 2023:

External recruitment measures included participating in various career events, holding a global recruiting event series, participating in the annual AustroChip congress, several content days to involve employees in employer branding activities, training the global recruiting teams on “active sourcing” (proactively approaching candidates), opening a TikTok channel to appeal to young talent in particular, and a general overhaul of social media formats.

In September 2023, we had more than 480,000 followers on our social media platforms. At the same time, we reached 15.5 million users via our HR social media platforms. This corresponds to an increase of 168% compared to September 2022 (September 2022: 5.8 million). Internal measures to retain employees included the continuation of the global smart working scheme, the streamlining of approval processes, continuous town hall meetings by the Management Board, and the intensified marketing of the ams OSRAM University.

Collective bargaining agreements are in place at our European companies<sup>2</sup> with the biggest workforces. At the end of 2023, 98% of the workforce was covered by such agreements within these companies. We also work closely with employee representatives (both works councils and trade unions). In Germany and Austria, for example, this has resulted in a large number of works agreements.

In Germany, 100% of employees at OSRAM companies were covered by collective bargaining agreements. 45% of employees of German ams companies were covered by collective agreements. In Austria, 100% of the employees of ams OSRAM subsidiaries were covered.

<sup>1</sup> i.e. at former OSRAM companies

<sup>2</sup> In Germany, Austria, Slovakia, Italy, and the Czech Republic





# 7.0 Appendix

**Assurance Report**

**GRI Index and SASB**

**EU Taxonomy KPIs**

**TCFD Recommendations**

**Imprint and Contact**

# 7.1 Assurance Report

To the Management Board  
ams-OSRAM AG,  
Premstaetten

This English language independent assurance report is a translation provided for information purposes only. The original German text shall prevail in the event of any discrepancies between the English translation and the German original. We do not accept any liability for the use of, or reliance on, the English translation nor for any errors or misunderstandings that may derive from the translation.

## Independent Assurance Report on the Non-financial Reporting according to GRI Standards

We have performed an independent limited assurance engagement on the combined consolidated non-financial report according to GRI Standards (“NFI report”) for the financial year 2023, which has been published as Sustainability Report 2023 of **ams-OSRAM AG, Premstaetten** (referred to as “ams OSRAM” or “the Company”).

### Conclusion

Based on the procedures performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the NFI report of the Company is not in accordance with the sustainability reporting guidelines of the Global Reporting Initiative (GRI Standards) (option “in accordance with”) and the provisions of Article 8 of the Regulation (EU) 2020/852 as amended and the supplementing delegated Regulation (EU) 2021/2178 (Taxonomy eligibility only; hereafter “EU Taxonomy Regulation”) in all material respects.

### Management’s Responsibility

The Company’s management is responsible for the proper preparation of the NFI report in accordance with the reporting criteria. The Company applies the sustainability reporting guidelines of the Global Reporting Initiative (GRI Standards) (option “in accordance with”) as reporting criteria. In addition, the Company prepares disclosures in accordance with the EU Taxonomy Regulation (Taxonomy eligibility), which are published as part of sustainability reporting. The audit of the disclosures included in the NFI report related to the TCFD recommendations (Annex 7.4) is not part of our engagement.

The Company’s management is responsible for the selection and application of appropriate methods for non-financial reporting (especially the selection of significant matters) as well as the use of appropriate assumptions and estimates for individual non-financial disclosures, given the circumstances. Furthermore, their responsibilities include the design, implementation, and maintenance of systems, processes, and internal controls that are relevant for the preparation of the sustainability report in a way that is free of material misstatements — whether due to fraud or error.

### Auditors’ Responsibility

Our responsibility is to state whether, based on our procedures performed and the evidence we have obtained, anything has come to our attention that causes us to believe that the Company’s NFI report is not in accordance with the sustainability reporting guidelines of the Global Reporting Initiative (GRI Standards) (option “in accordance with”) and the legal requirements of the EU Taxonomy Regulation (Taxonomy eligibility) in all material respects.

Our engagement was conducted in conformity with the International Standard on Assurance Engagements (ISAE 3000) applicable to such engagements. These standards require us to comply with our professional requirements including independence requirements, and to plan and perform the engagement to enable us to express a conclusion with limited assurance, taking into account materiality.

An independent assurance engagement with the purpose of expressing a conclusion with limited assurance (“limited assurance engagement”) is substantially less in scope than an independent assurance engagement with the purpose of expressing a conclusion with reasonable assurance (“reasonable assurance engagement”), thus providing reduced assurance. Despite diligent engagement planning and execution, it cannot be ruled out that material misstatements, illegal acts, or irregularities within the non-financial report will remain undetected.

The procedures selected depend on the auditor’s judgment and included the following procedures in particular:

- Inquiries of personnel at the group level, who are responsible for the materiality analysis, in order to gain an understanding of the processes for determining material sustainability topics and respective reporting thresholds of the Company;
- A risk assessment, including a media analysis, on relevant information on the Company’s sustainability performance in the reporting period;
- Evaluation of the design and implementation of the systems and processes for the collection, processing, and monitoring of disclosures on environmental, social, and employees matters, respect for human rights, anti-corruption as well as bribery and also includes the consolidation of data;
- Inquiries of personnel at the group level, who are responsible for providing, consolidating, and implementing internal control procedures relating to the disclosure of concepts, risks, due diligence processes, results, and performance indicators;
- Inspection of selected internal and external documents, in order to determine whether qualitative and quantitative information is supported by sufficient evidence and presented in an accurate and balanced manner;
- Assessment of the processes for local data collection, validation, and reporting, as well as the reliability of the reported data through a (remotely conducted) survey performed on a sample basis at the Regensburg site.

- Analytical evaluation of the data and trend of quantitative disclosures regarding the GRI Standards listed in the GRI-Index, submitted by all locations for consolidation at the group level;
- Evaluation of the consistency of the GRI Standards (option “in accordance with”) and the EU Taxonomy Regulation to disclosures and indicators of the NFI report, which apply to the Company;
- Evaluation of the overall presentation of the disclosures by critically reading the NFI report.

The procedures that we performed do not constitute an audit or a review. Our engagement did not focus on revealing and clarifying illegal acts (such as fraud), nor did it focus on assessing the efficiency of management. Furthermore, it is not part of our engagement to audit future-related disclosures, prior-year figures, statements from external sources of information, expert opinions, or references to more extensive external reporting formats of the Company.

### Restriction on Use

Because our report will be prepared solely on behalf of and for the benefit of the principal, its contents may not be relied upon by any third party, and consequently, we shall not be liable for any third-party claims. We agree to the publication of our assurance certificate and NFI report. However, publication may only be performed in its entirety and as a version has been certified by us.

### General Conditions of Contract

Our responsibility and liability towards the Company and any third party is subject to paragraph 7 of the General Conditions of Contract for the Public Accounting Professions.

Vienna, April 24, 2024

KPMG Austria GmbH  
Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

signed by:  
Johannes Bauer  
Wirtschaftsprüfer  
(Austrian Chartered Accountant)



## 7.2 GRI Index and SASB<sup>1</sup>

GRI Content Index			
GRI STANDARDS AND DISCLOSURES		PAGE	COMMENT
1	Foundation 2021		ams OSRAM has reported in accordance with the GRI Standards for the period 1.1.–31-12.2023.
2	General Disclosures 2021		
2-1	Organizational details	6	Based on the Global Industry Classification Standards (GICS, a classification of industry into sectors), ams OSRAM is assigned to the Semiconductors and Semiconductor Equipment Industry Group within the Information Technology sector.
2-2	Entities included in the organization’s sustainability reporting	4, 6	
2-3	Reporting period, frequency and contact point	4, 73	
2-4	Restatements of information	4	
2-5	External assurance	57/58	
2-6	Activities, value chain and other business relationships	4, 6, 7, 39	
2-7	Employees	47/48	
2-8	Workers who are not employees	47/48	
2-9	Governance structure and composition	10-12	No underrepresented groups are represented on the Management Board and Supervisory Board. Different competencies and also stakeholder perspectives are covered by the elected Supervisory Board members; these can be viewed in the CVs <a href="https://ams-osram.com/about-us/supervisory-board">https://ams-osram.com/about-us/supervisory-board</a> .
2-10	Nomination and selection of the highest governance body	10/11	Voting results for the Supervisory Board election can be viewed on the <a href="#">corporate website</a> .
2-11	Chair of the highest governance body	12	
2-12	Role of the highest governance body in overseeing the management of impacts	12	Due to our listing on the stock exchange, we generally pursue a congruent information policy. Information for all stakeholders is available on the <a href="#">corporate website</a> .
2-13	Delegation of responsibility for managing impacts	10/11, 13	
2-14	Role of the highest governance body in sustainability reporting	13	
2-15	Conflicts of interest	12	
2-16	Communication of critical concerns	19/20	
2-17	Collective knowledge of the highest governance body	10	
2-18	Evaluation of the performance of the highest governance body	10	The results of the Supervisory Board’s self-evaluation are confidential.
2-19	Remuneration policies	12	
2-20	Process to determine remuneration	12	Voting results for the remuneration policy can be viewed on the <a href="#">corporate website</a> .
2-21	Annual total compensation ratio	–	The remuneration report for fiscal year 2023 <a href="#">ams OSRAM Annual Report, Compensation Report</a> is generally based on the requirements of section 78c of the Austrian Stock Corporation Act. In accordance with this legal requirement, the average remuneration of employees is used to compare the development of remuneration, see section “4. Change in remuneration of the Managing Board compared to the workforce” of the remuneration report.

<sup>1</sup> Sustainability Accounting Standards Board (SASB) Industry Standard “Semiconductors”

GRI STANDARDS AND DISCLOSURES			PAGE	COMMENT
2-22	Statement on sustainable development strategy		3	
2-23	Policy commitments		3, 10, 38	The Code of Conduct was signed by the Management Board.
2-24	Embedding policy commitments		10, 39	
2-25	Processes to remediate negative impacts		10, 20, 38	
2-26	Mechanisms for seeking advice and raising concerns		19/20	
2-27	Compliance with laws and regulations		19/20	
2-28	Membership associations		17/18	<div><div>— Our political commitment is limited to membership in industry associations. Measured in terms of contributions and importance of our activities the following associations are the most relevant:</div><div>— German Electrical and Electronic Manufacturers’ Association (ZVEI) In this association, we are active in the semiconductor and light trade associations. There, we participate in the development of industrial positions, which are essential to our business activities. We pay particular attention to the impact of the EU Green Deal. We ensure that we comply with legal requirements (directives/regulations), in particular when it comes to issues related to taking back, recycling, and/or repairing products or to the use of materials (RoHS, REACH), that legal requirements (directives/regulations) can be complied with by us.</div><div>— LightingEurope This association is particularly concerned with specific issues in the EU lighting sector. We are currently on the board of directors and in the most important working groups “Sound Product Rules,” “Value of Light,” and “Sustainability.”</div><div>— IMAT e. V. — Innovative materials for sustainable high-tech electronics, photonics, and related industries The members of IMAT e. V. are particularly affected by EU chemicals legislation. IMAT e. V. constantly monitors developments and analyzes the impact through its network of experts. IMAT e. V. participates in the legislative processes of the EU, for example by participating in stakeholder consultations.</div><div>— SEMI We are a member of the SEMI semiconductor association and a founding member of the Semiconductor Climate Consortium (SCC) initiative within the association. SCC focuses on the decarbonization of the semiconductor value chain and its member companies, while at the same time seeking solutions to accelerate greenhouse gas reductions in other sectors of the value chain.</div><div>— Compulsory membership of employers’ and employers’ associations In these associations, we do not take an active role, but follow the decisions and general information that these associations provide. In Germany, for example, we are subject to collective bargaining.</div><div>— VDA — Association of the German Automotive Industry, Manufacturer Group III Through this association, technical specifications and standards in the automotive sector are drawn up, which are essential for the development of our products and solutions. Apart from the acquisition of such information/authorizations/certificates, we are not active in this association.</div></div>
2-29	Approach to stakeholder engagement		3, 17/18	
2-30	Collective bargaining agreements		55	
3-1	Process to determine material topics		13/14	
3-2	List of material topics		14	



MATERIAL TOPICS	GRI STANDARDS AND DISCLOSURES		PAGE	COMMENT																														
Integrity & Responsibility	3-3	Management of material topics	10, 19/20	b. In fiscal year 2023, no corresponding company disclosures on business relationships and their potential negative effects were published at <a href="https://ams-osram.com/about-us/investor-relations/financial-news/financial-news-2023">https://ams-osram.com/about-us/investor-relations/financial-news/financial-news-2023</a> .																														
	203	Indirect Economic Impacts 2016																																
	203-1	Infrastructure investments and services supported	19/28, 44																															
	203-2	Significant indirect economic impacts	7/8, 44/45																															
	205	Anti-corruption 2016																																
	205-1	Operations assessed for risks related to corruption	–	a. Information incomplete With the upcoming introduction of reporting according to CSRD, ams OSRAM will examine a possible extension of reporting. b. <a href="#">ams OSRAM Annual Report, Management Report</a> , 8 Risk Management																														
	205-2	Communication and training about anti-corruption policies and procedures	20/21	As part of a three-year training cycle, the employees of the relevant target group complete the scheduled and mandatory compliance training courses. The company controls the implementation via the coverage rate disclosed in this sustainability report. In addition to this control-relevant indicator, ams OSRAM discloses with this overview the regional overview of the employees trained in fiscal year 2023 as required by GRI.  <b>Compliance Training by Region</b> <table><tr><th></th><th>Compliance Basic<sup>1</sup></th><th>Code of Conduct<sup>1</sup></th><th>Anti-Corruption</th><th>Data Privacy</th><th>Antitrust</th></tr><tr><td>Employees trained in 2023</td><td>1,634</td><td>5,714</td><td>4,489</td><td>3,129</td><td>1,198</td></tr><tr><td>thereof EMEA</td><td>618</td><td>2,279</td><td>1,731</td><td>1,146</td><td>627</td></tr><tr><td>thereof Americas</td><td>49</td><td>199</td><td>218</td><td>154</td><td>93</td></tr><tr><td>thereof Asia/Pacific</td><td>967</td><td>3,236</td><td>2,540</td><td>1,829</td><td>478</td></tr></table> <sup>1</sup> Compliance Basic training was replaced in October 2023 by the newly introduced Code of Conduct training, which covers topics such as anti-corruption, antitrust, and conflicts of interest, as well as human rights, environmental protection, and whistleblower protection; at the same time the target group was expanded. The data for the Compliance Basic training in 2023 covers the period until August 1, 2023.		Compliance Basic <sup>1</sup>	Code of Conduct <sup>1</sup>	Anti-Corruption	Data Privacy	Antitrust	Employees trained in 2023	1,634	5,714	4,489	3,129	1,198	thereof EMEA	618	2,279	1,731	1,146	627	thereof Americas	49	199	218	154	93	thereof Asia/Pacific	967	3,236	2,540	1,829	478
		Compliance Basic <sup>1</sup>	Code of Conduct <sup>1</sup>	Anti-Corruption	Data Privacy	Antitrust																												
	Employees trained in 2023	1,634	5,714	4,489	3,129	1,198																												
	thereof EMEA	618	2,279	1,731	1,146	627																												
	thereof Americas	49	199	218	154	93																												
	thereof Asia/Pacific	967	3,236	2,540	1,829	478																												
205-3	Confirmed incidents of corruption and actions taken	21	c. Information incomplete We plan to expand our reporting in this area as part of the European Supply Chain Sourcing Obligations Act.																															
206	Anti-competitive Behavior 2016																																	
206-1	Legal actions for anti-competitive behavior, antitrust, and monopoly practices	20																																
415	Public Policy 2016																																	
415-1	Political contributions	18	Expenditure on political campaigns and political organizations such as parties: EUR 0. Internal expenditure for lobbying via associations, see <a href="#">Lobby register of the German Bundestag</a> (available in German only) External expenditure for association work → 3.2.4 Dialog with Stakeholders, Political Engagement, and Memberships (paragraph on expenditure). Breakdown of expenses by highest contributions: German Electrical and Electronic Manufacturers’ Association (ZVEI): EUR 56,000; SEMI: EUR 33,500; LightingEurope: EUR 13,000; IMAT e. V.: EUR 10,000 An important substance policy issue in 2023 was the EU’s proposed general ban on PFAS (per- and polyfluorinated alkyl substances). ams OSRAM will be able to avoid these substances in its end products as far as possible, but they are currently necessary in the production of semiconductors and factory infrastructure, which is why ams OSRAM formally participated in the public consultation conducted by the European Chemical Agency (ECHA).																															



MATERIAL TOPICS	GRI STANDARDS AND DISCLOSURES		PAGE	COMMENT
Integrity & Responsibility	418	Customer Privacy 2016		
	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	21	
Geopolitics	3-3	Management of material topics	18, 41	The risks listed in chapter → <a href="#">3.2.5 Risk Management and Geopolitical Risks</a> can have an impact on the supplier and customer structure. Information was exchanged with customers and suppliers.
	201	Economic Performance 2016		
	201-1	Direct economic value generated and distributed	6	ams OSRAM generates revenues from the sale of products. These revenues are offset by expenses for e.g. material procurement (suppliers), employees (wages and salaries), taxes and other charges (social security, etc.), financing costs (interest), and others. Reserves (which remain with ams OSRAM) are formed from the profits generated. Parts of the profit may also be distributed to shareholders in the form of dividends. For details, see <a href="#">↗ ams OSRAM Annual Report, Notes to the consolidated financial statement</a> and → <a href="#">5.2 Supply Chain Management</a> for material procurement.
	201-2	Financial implications and other risks and opportunities due to climate change	7, 18, 70-72	
Climate Change	3-3	Management of material topics	23/24, 26/27	
	305	Emissions 2016		
	305-1	Direct (Scope 1) GHG emissions	7, 27	c. Information unavailable The use of such energy sources is being examined. If required, we will review the medium-term recording as part of the preparation for future CSRD reporting. g. Source: <a href="#">↗ Bavarian State Office for the Environment</a> (available in German only)
	305-2	Energy indirect (Scope 2) GHG emissions	7, 27	PFC emissions are not reported separately, but are included in Scope 1 emissions. “Location-based” approach: emission factors from the International Energy Agency (IEA); “market-based” approach: emission factors reported by the respective electricity suppliers.
	305-3	Other indirect (Scope 3) GHG emissions	26/27	c. Information unavailable As part of the preparation for CSRD reporting, we are examining a possible medium-term survey.
	305-4	GHG emissions intensity	27	
	305-5	Reduction of GHG emissions	27	
	305-7	Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other significant air emissions	26/27	
Energy	3-3	Management of material topics	23-25	
	302	Energy 2016		
	302-1	Energy consumption within the organization	25	c. ii. Information incomplete Due to the current data situation, we are unable to report consumption by category separately. With the imminent introduction of CSRD reporting, ams OSRAM intends to expand its reporting in this regard in the medium term. d. Not applicable (no sale) g. Source: <a href="#">↗ Bavarian State Office for the Environment</a> (available in German only)
	302-2	Energy consumption outside of the organization	–	Information unavailable This data is not yet available to us. With the imminent introduction of CSRD reporting, ams OSRAM plans to expand its reporting in the medium term.

MATERIAL TOPICS	GRI STANDARDS AND DISCLOSURES		PAGE	COMMENT
Energy	302-3	Energy intensity	25	
	302-4	Reduction of energy consumption	25	b. Information incomplete With the imminent introduction of CSRD reporting, ams OSRAM will examine a possible expansion of reporting in the medium term.
	302-5	Reductions in energy requirements of products and services	–	Information unavailable We intend to expand our reporting on this indicator in the medium term in connection with the creation of LCAs (LCAs enable the selection of energy-efficient or energy-efficiently produced materials) → <a href="#">2.2.1 Impact of our Business Model</a>
Use of Ressource & Circular Economy	3-3	Management of material topics	23, 29	Information unavailable As part of future CSRD reporting, we plan to expand our reporting in this regard in the medium term.
	306	Waste 2020		
	306-1	Waste generation and significant waste-related impacts	31/32	
	306-2	Management of significant waste-related impacts	31/32	
	306-3	Waste generated	32	
	306-4	Waste diverted from disposal	32	b. and c. Information incomplete With the imminent introduction of CSRD reporting, ams OSRAM will examine a possible expansion of reporting in the medium term.
	306-5	Waste directed to disposal	32	Information incomplete We do not yet record waste data separately everywhere, but distinguish between hazardous and non-hazardous waste for disposal. With the imminent introduction of CSRD reporting, ams OSRAM will examine a possible expansion of reporting in the medium term.
Water	3-3	Management of material topics	32/33	
	303	Water and Effluents 2018		
	303-1	Interactions with water as a shared resource	32/33	
	303-2	Management of water discharge-related impacts	32	
	303-3	Water withdrawal	32/33	
	303-4	Water discharge	32/33	
	303-5	Water consumption	32/33	
Human Rights	3-3	Management of material topics	39	
	204	Procurement Practices 2016		
	204-1	Proportion of spending on local suppliers	42	
	414	Supplier Social Assessment 2016		
	414-1	New suppliers that were screened using social criteria	42	
	414-2	Negative social impacts in the supply chain and actions taken	41/42	d. Information incomplete Data collection is currently in preparation. With the imminent introduction of CSRD reporting, ams OSRAM will examine a possible medium-term expansion of reporting. e. Information unavailable The information is not yet collected centrally. With the imminent introduction of reporting in accordance with CSRD, ams OSRAM will examine a possible medium-term expansion of reporting.

MATERIAL TOPICS	GRI STANDARDS AND DISCLOSURES		PAGE	COMMENT
Human Rights	407	Freedom of Association and Collective Bargaining 2016		
	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	38	The methodology for risk assessments described in 5.1 also includes the right to freedom of association and collective bargaining.
	408	Child Labor 2016		
	408-1	Operations and suppliers at significant risk for incidents of child labor	38	The methodology for risk assessments described in 5.1 also includes the risk of child labor.
	409	Forced or Compulsory Labor 2016		
	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	38	The methodology for risk assessments described in 5.1 also includes the risk of forced or compulsory labor.
	308	Supplier Environmental Assessment 2016		
	308-1	New suppliers that were screened using environmental criteria	41/42	
Product Stewardship	308-2	Negative environmental impacts in the supply chain and actions taken	41/42	d./e. Information unavailable We do not currently report any percentage figures on suppliers with negative impacts. We are planning to evaluate the self-assessments for potential negative impacts in the next report. Information on the termination of business relationships due to negative environmental impacts by suppliers is not currently collected centrally. With the forthcoming expansion of reporting in accordance with CSRD, ams OSRAM is examining a medium-term expansion of reporting.
	3-3	Management of material topics	42-43	
	416	Customer Health and Safety 2016		
	416-1	Assessment of the health and safety impacts of product and service categories	43/44	All our products, that is 100%.
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	44	
Working Conditions	3-3	Management of material topics	49	
	401	Employment 2016		
	401-1	Employment	48	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	–	Information unavailable Due to our activities in many different countries, the collection of data is complex. With the imminent introduction of CSRD reporting, ams OSRAM will examine a possible medium-term expansion of reporting.
	401-3	Parental leave	–	Information unavailable Due to our activities in many different countries, the collection of data is complex. With the imminent introduction of CSRD reporting, ams OSRAM plans to expand its reporting in this regard in the medium term.
	403	Occupational Health and Safety 2018		
	403-1	Occupational health and safety management system 2018	49	
	403-2	Hazard identification, risk assessment, and incident investigation	49/50	
	403-3	Occupational health services	49/50	
	403-4	Worker participation, consultation, and communication on occupational health and safety	49/50	
	403-5	Worker training on occupational health and safety	49/50	
	403-6	Promotion of worker health	49/50	



MATERIAL TOPICS	GRI STANDARDS AND DISCLOSURES	PAGE	COMMENT
Working Conditions	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	49/50	
	403-8 Workers covered by an occupational health and safety management system	49	
	403-9 Work-related injuries	50	v. Information incomplete Our responsibility for occupational health and safety also includes the employees of external companies at our sites. However, because we do not specifically record their number and working hours, the figure provided only includes our own permanent employees. With the imminent introduction of CSRD reporting, ams OSRAM plans to expand its reporting in this regard in the medium term.
	403-10 Work-related ill health	50	b. Information incomplete Our responsibility for occupational health and safety also includes the employees of external companies at our sites. However, because we do not specifically record their number and working hours, the figure provided only includes our own permanent employees. With the imminent introduction of CSRD reporting, ams OSRAM plans to expand its reporting in this regard in the medium term. a. iii. /b. iii. We explicitly reported on the exceptional corona virus situation in the past, but this is no longer material.
	404 Training and Education 2016		
	404-1 Average hours of training per year per employee	54	
	404-2 Programs for upgrading employee skills and transition assistance programs	53/54	
	404-3 Percentage of employees receiving regular performance and career development reviews	–	Information unavailable Due to our activities in many different countries, the collection of data is complex. With the imminent introduction of CSRD reporting, ams OSRAM plans to expand its reporting in this regard in the medium term.
	405 Diversity and Equal Opportunity 2016		
	405-1 Diversity of governance bodies and employees	10, 47/48	
	405-2 Ratio of basic salary and remuneration of women to men	–	Information incomplete With the imminent introduction of CSRD reporting, ams OSRAM will examine a possible medium-term expansion of reporting.
	406 Non-discrimination 2016		
	406-1 Incidents of discrimination and corrective actions taken	20, 39	a. Information incomplete We are in the process of establishing reporting on violations of human rights and fair working conditions and do not currently report cases of discrimination separately. With the imminent introduction of CSRD reporting, ams OSRAM plans to expand its reporting in this regard in the medium term.
	402 Labor/Management Relations 2016		
	402-1 Minimum notice periods regarding operational changes	–	Information unavailable Due to our activities in many different countries, the collection of data is complex. With the imminent introduction of CSRD reporting, ams OSRAM will examine a possible medium-term expansion of reporting.

SASB	ACCOUNTING METRIC	CODE	COMMENT
Greenhouse Gas Emissions	① Gross global Scope 1 emissions and	TC-SC-110a.1	→ <a href="#">4.2.3 Greenhouse Gas Emissions, Objectives, Action Taken, Results, and KPIs, table</a>
	② amount of total emissions from perfluorinated compounds		→ <a href="#">GRI Index, 305-2</a>
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	TC-SC-110a.2	→ <a href="#">4.2.3 Greenhouse Gas Emissions, Objectives, Action Taken, Results, and KPIs</a>
Energy Management in Manufacturing	① Total energy consumed (Gigajoules (GJ))	TC-SC-130a.1	Reported in MWh, not in GJ; → <a href="#">4.2.1 Energy Efficiency at the Group’s own Locations, Objectives, Action Taken, Results, and KPIs, table</a>
	② percentage grid electricity,		→ <a href="#">4.2.1 Energy Efficiency at the Group’s own Locations, Objectives, Action Taken, Results, and KPIs, table</a>
	③ percentage renewable		
Water Management	① Total water withdrawn,	TC-SC-140a.1	→ <a href="#">4.3.4 Water, Objectives, Action Taken, Results and KPIs, table</a>
	② total water consumed,		
	Percentage of each in regions with High or Extremely High Baseline Water Stress		n.a. (no production site with high or extremely high water stress), → <a href="#">4.3.4 Water, Objectives, Action Taken, Results, and KPIs</a>
Waste Management	Amount of hazardous waste from manufacturing, percentage recycled	TC-SC-150a.1	ams OSRAM reports according to GRI 306: Waste 2020; therefore, waste (hazardous and non-hazardous) is reported including the entire activities of the organization and does not separately indicate waste not from manufacturing (which, as ams OSRAM is a production company, is by far the bigger share) → <a href="#">4.3.3 Waste, Objectives, Action Taken, Results and KPIs, table</a>
Employee Health & Safety	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	TC-SC-320a.1	→ <a href="#">6.2 Occupational Health and Safety, Guidelines, Responsibilities, Structures, and Processes</a>
	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations. The entity shall briefly describe the nature, context, and any corrective actions taken as a result of the monetary losses	TC-SC-320a.2	→ <a href="#">6.2 Occupational Health and Safety, Objectives, Action Taken, Results, and KPIs</a>
Recruiting & Managing a Global & Skilled Workforce	Percentage of employees that are	TC-SC-330a.1	
	① foreign nationals and		→ <a href="#">2.1 Our Company, table “ams OSRAM at a Glance”</a>
	② located offshore		
Product Lifecycle Management	Disclosure shall include a description of potential risks of recruiting foreign nationals and/or offshore employees, and management approach to addressing these risks		→ <a href="#">5.1 Respect for Human Rights</a> (management approach)
	Percentage of products by revenue that contain IEC 62474 declarable substances	TC-SC-410a.1	→ <a href="#">4.3.1 Resource Efficiency</a> ; as we market our products worldwide, increasingly strict specifications and laws must be observed for the raw materials and materials used in production and those remaining in products. Many of our customers place further requirements on us. Due to these priorities, we do not report sales according to IEC.
	Processor energy efficiency at a system-level for: ① servers, ② desktops, and ③ laptops	TC-SC-410a.2	Not applicable (not part of our portfolio)
Materials Sourcing	Description of the management of risks associated with the use of critical materials	TC-SC-440a.1	→ <a href="#">4.3.2 Conflict Minerals, Guidelines, Responsibilities, Structures, and Processes</a> (incl. cobalt and mica)
Intellectual Property Protection & Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	TC-SC-520a.1	↗ <a href="#">ams OSRAM Annual Report, Management Report, 3. Research and Development</a> , number of patents → <a href="#">3.3 Combating Corruption and Anti-Competitive Behavior, table with KPIs</a>

7.3 EU Taxonomy KPIs

EU Taxonomy — Turnover

Financial year 2023	2023			Substantial Contribution Criteria						DNSH criteria („Does Not Significantly Harm“) (h)													
Economic activities (1)	Code (a) (2)	Turnover (3)	Proportion of Turnover	Climate change mitigation (5)	Climate change adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversi- ty (10)	Climate change mitigation (11)	Climate change adaptation (12)	Water (13)	Pollu- tion(14)	Circular Economy (15)	Biodiversi- ty (16)	Minimum Safe- guards (17)	Proportion of Taxonomy- aligned (A.1) or -eligible (A.2) turn- over, year 2022 (18)	Category enabling activity (19)	Category transitional activity (20)				
		EURO million	%	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T			
A. TAXONOMY-ELIGIBLE ACTIVITIES																							
A.1 Environmentally sustainable activities (Taxonomy-aligned)																							
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	-															-	E				
of which Enabling		0	-															-					
of which Transitional		0	-														-				T		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (g)																							
				EL; N/EL (f)	EL; N/EL (f)	EL; N/EL (f)	EL; N/EL (f)	EL; N/EL (f)	EL; N/EL (f)											-			
Manufacture of electrical and electronic equipment	CE 1.2	42	1%	N/EL	N/EL	N/EL	N/EL	EL	N/EL														
Manufacture of batteries	CCM 3.4	15	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL														
Manufacture of energy efficiency equipment for buildings	CCM 3.5	44	1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL														
Manufacture of other low carbon technologies	CCM 3.6	1,300	37%	EL	N/EL	N/EL	N/EL	N/EL	N/EL														
Sale of spare parts	CE 5.2	479	14%	N/EL	N/EL	N/EL	N/EL	EL	N/EL														
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		1,879	54%	72%				28%															
A. Turnover of Taxonomy-eligible activities (A.1 + A.2)		1,879	54%	72%				28%		26%													
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																							
Turnover of Taxonomy-non-eligible activities		1,598	46%																				
Total		3,477	100%																				





EU Taxonomy — CapEx

Financial year 2023				2023						Substantial Contribution Criteria						DNSH criteria („Does Not Significantly Harm’) (h)						Minimum Safe-guards (17)	Proportion of Taxonomy-aligned (A.1) or -eligible (A.2) CapEx, year 2022 (18)	Category enabling activity (19)	Category transition-al activity (20)
Economic activities (1)	Code (a) (2)	CapEx (3)	Proportion of CapEx	Climate change mitigation (5)	Climate change adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate change mitigation (11)	Climate change adaptation (12)	Water (13)	Pollution(14)	Circular Economy (15)	Biodiversity (16)										
		EURO million	%	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T						
A. TAXONOMY-ELIGIBLE ACTIVITIES																									
A.1 Environmentally sustainable activities (Taxonomy-aligned)																									
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	-														-	E							
of which Enabling		0	-														-								
of which Transitional		0	-													-	T								
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (g)																									
				EL; N/EL (f)	EL; N/EL (f)	EL; N/EL (f)	EL; N/EL (f)	EL; N/EL (f)	EL; N/EL (f)																
Manufacture of electrical and electronic equipment	CE 1.2	0.3	0%	N/EL	N/EL	N/EL	N/EL	EL	N/EL																
Manufacture of batteries	CCM 3.4	0.4	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																
Manufacture of energy efficiency equipment for buildings	CCM 3.5	4	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																
Manufacture of other low carbon technologies	CCM 3.6	113	14%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																
Sale of spare parts	CE 5.2	4	1%	N/EL	N/EL	N/EL	N/EL	EL	N/EL																
Production of heat/cool using waste heat	CCM 4.25	0.1	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																
Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5	4	1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																
Construction of new buildings	CCM 7.1	250	31%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																
Installation, maintenance and repair of energy efficiency equipment	CCM 7.3	0.2	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	CCM 7.5	5	1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																
Acquisition and ownership of buildings	CCM 7.7	40	5%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																
Data processing, hosting and related activities	CCM 8.1	1	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		422	53%	99%				1%																	
A. CapEx of Taxonomy-eligible activities (A.1 + A.2)		422	53%	99%				1%																	
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																									
CapEx of Taxonomy-non-eligible activities		368	47%																						
Total		790	100%																						

EU Taxonomy — OpEx

Financial year 2023	2023			Substantial Contribution Criteria						DNSH criteria („Does Not Significantly Harm’) (h)						Minimum Safe-guards (17)	Proportion of Taxonomy-aligned (A.1) or -eligible (A.2) OpEx, year 2022 (18)	Category enabling activity (19)	Category transitional activity (20)										
Economic activities (1)	Code (a) (2)	OpEx (3)	Proportion of OpEx	Climate change mitigation (5)	Climate change adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate change mitigation (11)	Climate change adaptation (12)	Water (13)	Pollution(14)	Circular Economy (15)	Biodiversity (16)														
		EURO million	%	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y; N; N/EL (b) (c)	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T										
A. TAXONOMY-ELIGIBLE ACTIVITIES																													
A.1 Environmentally sustainable activities (Taxonomy-aligned)																													
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	-														-	E											
of which Enabling		0	-														-												
of which Transitional		0	-													-	T												
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (g)																													
				EL; N/EL (f)	EL; N/EL (f)	EL; N/EL (f)	EL; N/EL (f)	EL; N/EL (f)	EL; N/EL (f)																				
Manufacture of electrical and electronic equipment	CE 1.2	1	0%	N/EL	N/EL	N/EL	N/EL	EL	N/EL																				
Manufacture of batteries	CCM 3.4	1	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																				
Manufacture of energy efficiency equipment for buildings	CCM 3.5	4	1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																				
Manufacture of other low carbon technologies	CCM 3.6	196	30%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																				
Sale of spare parts	CE 5.2	10	2%	N/EL	N/EL	N/EL	N/EL	EL	N/EL																				
Installation, maintenance and repair of energy efficiency equipment	CCM 7.3	4	1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																				
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	CCM 7.4	0	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																				
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	CCM 7.5	1	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																				
Acquisition and ownership of buildings	CCM 7.7	0.1	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																				
Data processing, hosting and related activities	CCM 8.1	0.4	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL																				
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		218	33%	95%				5%																					
A. OpEx of Taxonomy-eligible activities (A.1 + A.2)		218	33%	95%				5%																					
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																													
OpEx of Taxonomy-non-eligible activities		444	67%																										
Total		661	100%																										

## 7.4 TCFD Recommendations

In addition to the requirements of the GRI Standards and the Greenhouse Gas (GHG) Protocol, ams OSRAM’s reporting on greenhouse gases and climate change is also based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), a G20 expert commission that has issued recommendations on standardized climate reporting for companies.

This Sustainability Report brings together ams OSRAM’s reporting on the status of implementation in all four areas of the TCFD recommendations. Further information is available in connection with the Company’s participation in the [CDP Climate Change Rating](#) and under [→ 4.2.3 Greenhouse Gas Emissions](#).

### 1. Governance: Disclosure of the Organization’s Governance concerning Climate-related Risks and Opportunities

As an aspect of sustainability, responsibility for climate-related topics rests with the Management Board. This is in line with its remit involving fundamental issues of business policy and corporate strategy [→ 3.1.2 Executive Bodies of the Company](#). Accordingly, the Management Board is responsible for the climate strategy and its implementation, which it adopted in 2022 [→ 4.2 Climate Protection](#) and [→ 4.2.3 Greenhouse Gas Emissions](#).

Within the Management Board, the Chief Financial Officer (CFO) is responsible for sustainability and makes the necessary decisions for the entire Management Board. Specialist coordination is the responsibility of the Sustainability Department, in collaboration with the relevant specialist departments and business units. This is embedded in the reporting line of the CFO [→ 3.2.1 Organization and Structures](#).

As part of its remit as a governance body, the Supervisory Board deals with climate protection in particular, in addition to other sustainability-related topics. Within the Supervisory Board, the ESG Committee monitors, among other things, the implementation of the climate strategy and upcoming regulatory requirements in connection with the Company’s climate reporting [→ 3.1.2 Executive Bodies of the Company, Key Topics of the Board Regarding Sustainability in 2023](#).

The Sustainability Council ensures the broad anchoring of sustainability in the Company [→ 3.2.1 Organization and Structures, diagram “Governance Structure of Sustainability”](#). The Council carries out strategic assessments of climate-related and other

topics. It examines the trends, risks, opportunities, as well as future legal requirements and embeds appropriate measures within the organization where necessary.

### 2. Strategy: Disclosure of the Actual and Potential Impacts of Climate-related Risks and Opportunities on the Organization’s Businesses, Strategy, and Financial Planning

Transition risks were systematically assessed for the first time in 2022. This was carried out by internal experts and extensively embedded in the methodology of the existing risk management system. A review was carried out in 2023, which did not result in any significant changes.

The time horizon used for ams OSRAM’s enterprise risk management (ERM) was taken as the basis for analyzing the impact of transition risks, whilst physical risks are considered over a longer period:

#### Highest-rated Climate-related Transition Risks

TRANSITION RISKS	FOCUS	DESCRIPTION OF IMPACT	RISK MITIGATION STRATEGY
<b>Policy and Legal:</b> Enhanced emissions-reporting obligations or mandates on and regulation affecting products	Energy consumption of the products or emissions	Bans on inefficient technologies or products and possible loss of revenues	Future regulations are monitored at various levels within the Company. To gain further insights, we are involved in sector organizations such as the German Electro and Digital Industry Association (ZVEI).
<b>Technology:</b> Substitution of existing products/ processes with more energy-efficient or lower-emission solutions/solutions with a lower water footprint	Energy consumption of the products or emissions and water consumption during manufacture	Increased costs (R&D, production processes/equipment) and possible loss of revenues	Energy: As far as our portfolio is concerned, we keep a close watch on technological developments in the sector at various levels of the Company; we are continually optimizing our processes and, by extension, our production footprint. New facilities are built to the very latest standards. As our product portfolio is made up of high-tech products, the production processes also require modern, high-tech equipment, most of which is sourced from appropriate manufacturers.  Water: We monitor developments to stay abreast of state-of-the-art options on the market.
<b>Market:</b> Changing customer behavior	Energy consumption and emissions	Lower demand for goods and services and possible loss of revenues	Energy: Environmental footprint project started to create transparency regarding products’ carbon footprint; pilot project planned in automotive area to reduce carbon footprint <a href="#">→ 4.4 EU Taxonomy</a> ; Scope 3 target adopted to reduce carbon footprint in the supply chain.

- Short term — transition risks: up to 3 years; physical risks: current situation
- Medium term — transition risks: 3-5 years; physical risks: up to 2030
- Long term — transition risks: up to 10 years; physical risks: up to 2050 or 2100

#### Transition Risks and Opportunities

In the case of transition risks, the impact and probability levels provided for in enterprise risk management (ERM) were used to classify potential risks. No scenarios were used yet. The focal topics were “Energy consumption and emissions” and “Water.”

The targets that ams OSRAM has set for itself in terms of climate protection are another important step towards reducing our transition risks [→ 4.2.3 Greenhouse Gas Emissions](#).



As a company whose energy-efficient, intelligent products can make a contribution to tackling climate change, there are also business opportunities for ams OSRAM → [2.2 Our Portfolio](#), → [4.2.4 Green Tech Development](#), and → [4.4 EU Taxonomy](#).

Highest-rated Climate-related Transition Opportunities

TRANSITION OPPORTUNITIES	DESCRIPTION	STRATEGY FOR CAPITALIZING ON THE OPPORTUNITIES
<b>Resource Efficiency and Energy Sources:</b> <ul style="list-style-type: none"><li>— Use of more efficient production processes</li><li>— Use of clean energy</li></ul>	Lowering operating costs (e.g. through efficiency improvements and cost reductions) Increased production capacity, leading to higher revenues	<ul style="list-style-type: none"><li>— The Operations Sustainability Program was launched in 2023 for the semiconductor sites, where 91% of our greenhouse gas emissions are generated. A separate function was created to coordinate this. One focus is on implementing the climate strategy at the semiconductor sites (→ <a href="#">Foreword</a>).</li><li>— The share of electricity from renewable energy sources (2023: 49%) is to be increased to 100% by 2028 (→ <a href="#">Foreword</a>).</li><li>— More efficient production processes → <a href="#">Energy Efficiency at the Group’s Own Locations</a>, table “Energy Efficiency Measures 2023”</li><li>— Consolidation in site structure: In Singapore, production at one site was relocated at the beginning of 2023 and subsequently discontinued. In Italy, a site with two operating units was sold. Two smaller R&amp;D sites in China and Germany were part of another sale (→ <a href="#">4.1 Environmental Management</a>).</li></ul>
<b>Products and Services:</b> Development and/or expansion of portfolios of energy-efficient products through R&D and innovation	Increased revenue stream from demand for lower-emission products	→ <a href="#">2.2 Our Portfolio</a> , → <a href="#">2.2.2 Our Products’ Contribution to the SDGs</a> , → <a href="#">4.2.4 Green Tech Development</a> ; this is one of our defined key issues. → <a href="#">4.4 EU Taxonomy</a>
<b>Resilience:</b> Ability to develop replacement products or energy-efficient products	Guaranteed revenue stream from demand for lower-emission products	<ul style="list-style-type: none"><li>— Substantial investment in R&amp;D → <a href="#">ams OSRAM Annual Report, Management Report, 3 Research and Development</a>.</li><li>— Development of energy-efficient products and systems based on semiconductors</li><li>— LED-based solutions for the automotive spare parts business as a substitute for halogen lamps → <a href="#">2.2.2 Our Products’ Contribution to the SDGs</a>.</li></ul>

Physical Risks

For physical risks, the risks and their potential financial impact were qualitatively scored along the value chain, based on two greenhouse gas scenarios and the relevant climate scenarios for the locations.

These physical risks were identified in a two-stage analysis carried out in 2020 and 2021, involving external experts and the relevant internal specialist functions. The analysis found no acute risk at present and rated all risks as low until further notice. Nonetheless, we will closely monitor developments. Chronic risks were also analyzed but have no notable effects in any scenario or timescale.

Assessment of Physical Risks based on IPCC RCP 2.6 and 6.0 Scenarios for Greenhouse Gas Emissions and Climate Change

VALUE CHAIN	PHYSICAL RISKS	DESCRIPTION OF POTENTIAL IMPACT	SCENARIOS	RISK ASSESSMENT OF POTENTIAL IMPACT AND TIMESCALE	RISK MITIGATION STRATEGY
Upstream value chain and key suppliers	Acute risks: floods following extreme weather events (Asia) and hurricanes (Asia/USA)	Higher costs due to supply chain imbalances and/or production being disrupted	RCP 2.6	2030: low to medium 2050: medium to very high 2100: high to very high	Monitoring of selling markets and development of measures such as supply chain diversification, business continuity management
			RCP 6.0	2030: medium 2050: high to very high 2100: very high	
Own production facilities	Acute risks: tropical hurricanes, heat waves, and convective storms	Higher costs due to infrastructure damage and/or production disruption and loss of sales	RCP 2.6	2030: low 2050: low 2100: low to medium	Monitoring of developments, possible structural modifications, business continuity management, insurance policies
			RCP 6.0	2030: all business units: low 2050: Semi: low <sup>1</sup> AM: medium 2100: all business units: medium to high	
Downstream value chain and key accounts	Acute: floods following extreme weather events (Asia) and hurricanes (Asia/USA)	Loss of sales	RCP 2.6	2030: medium to high 2050: high 2100: very high	Monitoring of developments on main markets, development of measures in the event of changes
			RCP 6.0	2030: medium to high 2050: high to very high 2100: very high	

<sup>1</sup> Except for Calamba (Philippines)

**3. Risk Management: Identifying, Assessing, and Managing Climate-related Risks and Opportunities**

Climate-related and other non-financial risks are part of the enterprise risk management (ERM) process and must be recorded in the risk inventory for the entire Group if they satisfy the materiality criteria. The catalog of risks includes physical risks and transformation risks for the Company as well as risks relating to our business model that could have an impact on society and the environment. Explanatory notes on risk management (identification, process, reporting) can be found in [ams OSRAM Annual Report, Management Report, 8 Risk Management](#) and in [→ 3.2.5 Risk Management and Geopolitical Risks](#).

The analyses described do not reveal any material climate-specific risks in the short to medium term. Therefore, whilst the risks are covered by our risk management

activities, they are not currently quantified and, as such, are not incorporated in our risk reporting.

Due to the long period over which the potential physical risks could materialize (2050 being the earliest), no specific measures are called for in the short term; we will monitor developments over the medium term.

We have also performed an assessment of the potential risks of water stress, using the World Resources Institute’s Aqueduct Water Risk Atlas [→ 4.3.4 Water](#).

Our Business Continuity Management draws up plans on how to resume business as usual as soon as possible following events such as natural disasters and other incidents that cause disruption. This limits the damage done and avoids existential

threats to our own business and to associated companies. Appropriate insurance policies are in place for all buildings.

**4. KPIs and Targets: Disclosure of the Metrics and Targets used to Assess and Manage relevant Climate-related Risks and Opportunities**

To reduce our carbon footprint and implement the target for carbon neutrality for our own activities that we set in 2021, a climate strategy was developed in 2022. This strategy is guided by the Paris Climate Agreement, with the addition of a Scope 3 target (“Purchased goods and services” category) [→ 4.2 Climate Protection](#). To achieve our targets, we are focusing primarily on switching to green electricity and on energy efficiency measures and report annually on progress [→ 4.2.3 Greenhouse Gas Emissions](#). We aspire to a net zero target in the medium term.

## 7.5 Imprint and Contact

### Editorial Notes

This report is published online in German and English and was published on April 26, 2024. The editorial deadline was April 19, 2024.

The ams OSRAM Annual Report and the ams OSRAM Sustainability Report are available in German and English and can be downloaded at [🔗 https://ams-osram.com](https://ams-osram.com).

### Forward-looking Statements

In addition to a retrospective analysis, this report contains forward-looking statements and information, that is statements about events that lie in the future rather than the past. These are based on information available today and assumptions based on current forecasts. They are therefore subject to a number of risks and uncertainties. Accordingly, forward-looking statements should not be relied upon as a prediction of actual results.

### Publisher

ams-OSRAM AG  
Tobelbader Strasse 30  
8141 Premstaetten  
Austria

### Contact

Group Sustainability (SU)  
Marcel-Breuer-Strasse 4  
80807 Munich  
Germany

E-mail: [sustainability@ams-osram.com](mailto:sustainability@ams-osram.com)  
[🔗 https://ams-osram.com/about-us/sustainability](https://ams-osram.com/about-us/sustainability)

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