



Sustainability Report 2022

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 = Reference to external websites

 = Reference within this document

Foreword

Dear Readers,

We can look back on a fiscal year during which, overall, we achieved solid results in a challenging market environment.

In the 2022 fiscal year we made tremendous headway with the integration of ams and OSRAM and almost completed the realignment of the portfolio. Once again, there was an increase in the share of energy-efficient semiconductor-based solutions in group revenues. At the same time, we invested heavily in supporting our long-term strategy. Central to this is the construction of the industry's first 8-inch LED front-end production facility, for which the foundation stone was laid in fiscal year 2022. Construction work is proceeding swiftly, in line with the ambitious schedule. The factory buildings and infrastructure are nearing completion. Going forward, we will chiefly be producing high-quality and sophisticated LED technologies at this new production facility in Malaysia, including microLEDs for next-gen display technology.

This report is a good example of successful integration: It demonstrates how sustainability has become deeply embedded in the Company, involving all the relevant functions. In fiscal year 2022 we developed a comprehensive sustainability strategy, covering specific focus topics: climate protection, labor conditions/diversity, human rights, integrity and circular economy. We introduce the targets we have set ourselves, how these are to be implemented and what milestones we have already achieved. We also make clear our stance: We understand sustainability not only as a basis for our “license to operate”, but more importantly – and that is our strong belief – as an essential precondition for long-term success.

With our portfolio, we address global challenges such as climate change, the scarcity of resources or urbanization. We also want to improve quality of life in various areas such as health, safety and mobility. This is what we understand by our Company motto “Sensing is life.”

In addition, integrating sustainability into our approach to running our business opens up new opportunities for us: We are already helping our customers in the automotive or consumer (mobile) sector to become technology leaders with our innovations. We offer components for a low-carbon footprint and also make a positive contribution to society, such as through solutions for horticulture. It is part of our business model to help reduce the amount of resources we use. For example, ams OSRAM experts are working on developing ever smaller and more efficient solutions.

Sustainability implies taking responsibility towards our customers, employees, shareholders, society and the environment. We focus on dealing responsibly with resources, protecting the environment, providing attractive labor conditions, protecting health and safety at work as well as complying with human rights along our value chain.

With this report, we underline our commitment to sustainable development and document our sustainability activities as a recently established combined company. We are guided by the 17 Sustainable Development Goals (SDGs) of the United Nations. As a supporter of the UN Global Compact, we align our business activity and our sustainability strategy with these universally acknowledged principles such as zero tolerance of corruption.

Reflecting this, we have also adapted our governance structures with regard to sustainability. The Supervisory Board, for instance, has formed an ESG committee, which commenced its work in early 2023 and will focus on supporting the implementation of our sustainability strategy and the development of future CSRD reporting.

The past fiscal year was also dominated by the process of harmonizing our management approaches, including guidelines, the consolidation of data and the standardization of the IT landscape. The progress achieved here also reflects the results of our ESG ratings: For example, ams OSRAM improved significantly compared with the previous year in ratings by Sustainalytics, ISS ESG Corporate Rating, ISS QualityScore and the Corporate Sustainability Assessment by S&P. In addition, ams OSRAM was added to the select companies to feature in the S&P Sustainability Yearbook. We are particularly delighted by a customer-led award: ams OSRAM received the Supplier ESG Award 2022 from BENQ/Qisda.

As a company and through our innovations, we want to make a contribution to a sustainable future. The best way to do this is through dialog and collaboration, in a spirit of partnership. This is why we are taking this opportunity to invite you to get in touch with us.

Thank you for your interest!

Aldo Kamper
(Chief Executive Officer, CEO)

April 26, 2023



1.0 Report Profile

About this Report

This Sustainability Report for the 2022 fiscal year provides an insight into the sustainability strategy of the Group, which has been combined since 2020, 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, it reports voluntarily in the form of a Sustainability Report to inform stakeholders about sustainability activities and to meet the increasing reporting requirements in accordance with future regulations such as the Corporate Sustainability Reporting Directive (CSRD) or the EU Taxonomy Regulation (2020/852).

The Sustainability Report 2022 has been prepared in accordance with the GRI Standards (2021). It also takes account of the framework of the Sustainability Accounting Standards Board (SASB), with a separate index for the SASB “Semiconductors” industry standard. The Appendix to the report also contains separate, unaudited sections on the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD) and on the EU taxonomy eligibility of our product portfolio.

Reporting Parameters

Essentially, this Sustainability Report follows the approach of financial reporting.

- In keeping with the consolidated financial statements, the reporting period for the Sustainability Report 2022 is from January 1 to December 31, 2022.
- Unless indicated otherwise in this report, all Group companies fully consolidated in the consolidated financial statements are included in our sustainability reporting [ams OSRAM Annual Report, Corporate Governance, Corporate Structure and Shareholders](#) and [ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, 30 Group Companies](#). Upcoming or past changes to the portfolio that impact on reporting are shown in line with the rules for financial reporting.

- In the case of key figures for which the trend development compared with the year 2020 plays an important role, it has to be taken into account that OSRAM’s activities for the full 2020 calendar year were incorporated. Therefore, here we deviate from the financial reporting in which the OSRAM business was fully consolidated only with effect from July 9, 2020.

Portfolio Changes in Fiscal year 2022

The following portfolio changes are taken into account in sustainability reporting as follows:

Unit	Part of Reporting
Sale of Fluence Bioengineering Inc.	no longer included from May 2, 2022
Sale of automotive lighting systems business (AMLS)	no longer included from July 1, 2022
Sale of Traxon Technologies business	no longer included from December 1, 2022
Acquisition of remaining 70% of shares in 7Sensing Group	consolidated since April 1, 2022 and therefore included

For further information on disposals of business units and property, plant and equipment, assets held for sale and liabilities held for sale, please refer to the [ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, 27 Disposals of Business Activities and Property, Plant, and Equipment, Assets and Liabilities Classified as Held for Sale](#).

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 (2021).
- The process of harmonizing sustainability reporting is almost complete, thanks to great progress with integration.
- Financial data contained in the report are taken from the ams OSRAM Consolidated Financial Statements 2022.
- Financial data are reported in millions of EUR, rounded to the closest million, in the Sustainability Report.
- Rounding differences may occur in tables when totaling rounded amounts and percentages.

- Essentially, key metrics in tables illustrate the development of a trend. Therefore, wherever possible and/or relevant, key metrics are reported over a three-year timescale. 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 [10 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 English version is a translation of the original German. In case of differences in interpretation, the German original version is binding.

This Sustainability Report of the ams OSRAM Group for the 2022 fiscal year was approved by the Management Board on April 26, 2023.

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). It reviewed the disclosures for fiscal year 2022.

This report is available as a professionally laid-out PDF and can be downloaded at <https://ams-osram.com/about-us/sustainability>.



Company Profile

2.0

Our Company

Our Portfolio

Impact of Our Business Model

Added Value and Our Products' Contribution to the SDGs

2.1 Our Company

ams OSRAM is a leading provider of optical technologies → 2.2 Our Portfolio. In this connection, ams OSRAM researches technologies and develops innovative products and solutions based on these, which are marketed via a global sales network.

Operational implementation of our business largely takes place via the two segments Semiconductors and Lamps & Systems, whose target groups are customers in the consumer, automotive and industrial & medical technology markets. With the exception of the spare parts market business in the automotive segment, ams OSRAM exclusively serves business customers (B2B).

Based on the Global Industry Classification Standards (GICS), ams OSRAM is assigned to the Semiconductors and Semiconductor Equipment Industry Group within the Information Technology sector. Geographically, our corporate activities are split into three regions or regional markets: EMEA (Europe, Middle East and Africa), Americas and APAC (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 highest-level parent company, it owns active, unlisted, direct and indirect subsidiaries and investments → ams OSRAM Annual Report, Management Report, 7 Subsidiaries and Investments, and → ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, 30 Group Companies. 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.

ams OSRAM was affected in fiscal year 2022 by the ongoing, but markedly easing Covid-19 pandemic. The war in Ukraine, however, had a greater impact in the reporting year and beyond, with all the consequences of sanctions and supply restrictions to contend with. Various sections of the 2022 Annual Report discuss the direct and indirect effects of the pandemic and the war in Ukraine on business activity and the course of business.

ams OSRAM at a Glance

KPI	Unit of reported KPI	2020	2021	2022
Employees (average; FTE)	Average number of employees	30,031	26,130	23,322
Employee (headcount as of December 31)	Headcount as of December 31	29,753	24,499	22,461
thereof outside Austria			23,125	21,101
thereof Austria			1,374	1,360
Revenue	Total revenue in millions of EUR	3,504	5,038	4,819
Revenue (regional split)				
thereof EMEA	Revenue by region in millions of EUR	765	1,413	1,455
thereof Americas	Revenue by region in millions of EUR	521	962	849
thereof Asia/Pacific	Revenue by region in millions of EUR	2,218	2,663	2,515
Revenue (segments)				
thereof Semiconductors	Revenue by segment in millions of EUR	2,605	3,279	3,167
thereof Lamps & Systems	Revenue by segment in millions of EUR	900	1,760	1,652
R&D expenses	in millions of EUR	642	692	630
Total assets	in millions of EUR	9,963	9,644	8,832
Equity	in millions of EUR	3,027	3,150	2,833
Equity ratio	Equity in percent of total assets	30%	33%	32%
Production site	Number of locations with own production (globally)		23	20
Subsidiaries	Number of subsidiaries (globally)		117	99
Countries with business activities	Number of countries with subsidiaries and participations consolidated in the financial statements		43	40

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 light emitters, optical components and modules, light sensors and associated ICs (integrated circuits), algorithms and software as well as platforms for optical applications. One priority is the development of green tech products and solutions → [4.2.4 Development of Green Technologies](#).

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](#).

However, the production of semiconductors can potentially have a negative impact on people and the environment, since for example hazardous chemicals are used. Manufacturing processes in the semiconductor industries are energy-intensive, because of the cooling processes involved. Furthermore, production requires ultrapure water in large quantities. 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 prevents potential negative effects 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 sections of this report.

Life cycle analyses have found that our products have the biggest impact in the downstream supply chain, i.e. 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.

2.2.2 Our Products' Contribution to the SDGs

ams OSRAM is guided by the 17 Sustainable Development Goals of the United Nations (SDGs) and wants 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.

One focus of development at present is microLED technology, which is distinguished by microscopically small light-emitting diodes (LED). MicroLEDs offer considerable advantages for display technology, including higher pixel density, longer lifespan, higher brightness, faster switching speed, a wider color spectrum and lower energy consumption. This significantly improves energy efficiency while also reducing emissions of climate-damaging emissions. MicroLEDs have uses in areas including displays for various consumer devices, such as TVs, head-up displays or wearables. In perspective, this technology will impact positively on SDGs 9, 12 and 13 in the core business → [4.3.1 Resource Efficiency](#). microLED technology and other innovations are described in greater detail in the [ams OSRAM Annual Report, Management Report, 3 Research and Development](#). 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

 3 GOOD HEALTH AND WELL-BEING	 7 AFFORDABLE AND CLEAN ENERGY	 11 SUSTAINABLE CITIES AND COMMUNITIES	Automotive & Mobility LiDAR for advanced driver assistance enables safer driving, less accidents etc. Intelligent multi-pixelated forward lighting for better sight and projecting warning symbols In-cabin sensing for driver monitoring and alert systems with fast detection, improved safety for driver and passengers Energy-efficient and safer solutions for a more autonomous future mobility Circular LED modules for automotive lighting	 3 GOOD HEALTH AND WELL-BEING	 7 AFFORDABLE AND CLEAN ENERGY	 13 CLIMATE ACTION	Consumer Vital sign monitoring for several health measurements, very small and energy-saving device design UV-A sensor for sun protection, to alert the user/ prevent sunburn Behind-screen applications for improved display brightness and colors Multiple energy-efficient optical consumer solutions/ high convenience with low power consumption Small projection units for augmented reality (AR) devices in glasses	 3 GOOD HEALTH AND WELL-BEING	 6 CLEAN WATER AND SANITATION	 7 AFFORDABLE AND CLEAN ENERGY	Industrial & Medical Energy-saving UV-C disinfection solution without using chemicals or mercury (conventional UV-C solution) – no harm to the environment Horticulture LEDs for a better yield, improved farming, less resource and energy usage, enables vertical farming High-performance medical imaging for better quality/diagnostics with lower radiation for patients and doctors Cutting-edge LEDs for high-performance lighting with low energy use
 12 RESPONSIBLE CONSUMPTION AND PRODUCTION	 13 CLIMATE ACTION	 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	 11 SUSTAINABLE CITIES AND COMMUNITIES	 12 RESPONSIBLE CONSUMPTION AND PRODUCTION	 13 CLIMATE ACTION						

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

Political Engagement and Memberships

Risk Management and Geopolitical Risks

Combating Corruption and Anti-Competitive Behavior

Data Protection

3.1 Sustainable Corporate Governance

For ams OSRAM, good 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 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 enshrined in the [ams OSRAM Code of Conduct \(CoC\)](#) and also determine how we conduct ourselves as colleagues and business partners.

The CoC also takes account of statutory provisions, rules for publicly listed companies¹ and international agreements on human rights, combating corruption and other areas of responsible corporate governance. All employees undertake to abide by the CoC when they first start working for the Company – which also includes a commitment to due diligence, the precautionary principle and respect for human rights. 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](#).

¹ ams-OSRAM AG is a stock corporation under Austrian law. Because it is listed on the SIX Swiss Exchange, it is also subject to corporate governance requirements for listed companies in Switzerland (Swiss Corporate Governance Directive). These requirements are 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 principles defined in our CoC via our Code of Conduct for Suppliers → [5.2 Supply Chain Management](#).

Potential violations of the principles of our CoC can be reported via the whistleblowing system [“Tell ams OSRAM”](#). 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](#). Detailed information can be found in the Annual Report [ams OSRAM Annual Report, Corporate Governance, Supervisory Board and Management Board](#).

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 [ams OSRAM Annual Report, Corporate Governance, Management Board](#). Within the Management Board, the Chief Financial Officer (CFO) is responsible for sustainability.

When appointing people to management functions in the Company, the Management Board pays attention to diversity and inclusion, and is striving, among other things, to increase the proportion of women in management functions to at least 25% by fiscal year 2026 → [6.3 Diversity and Equality of Opportunities](#).

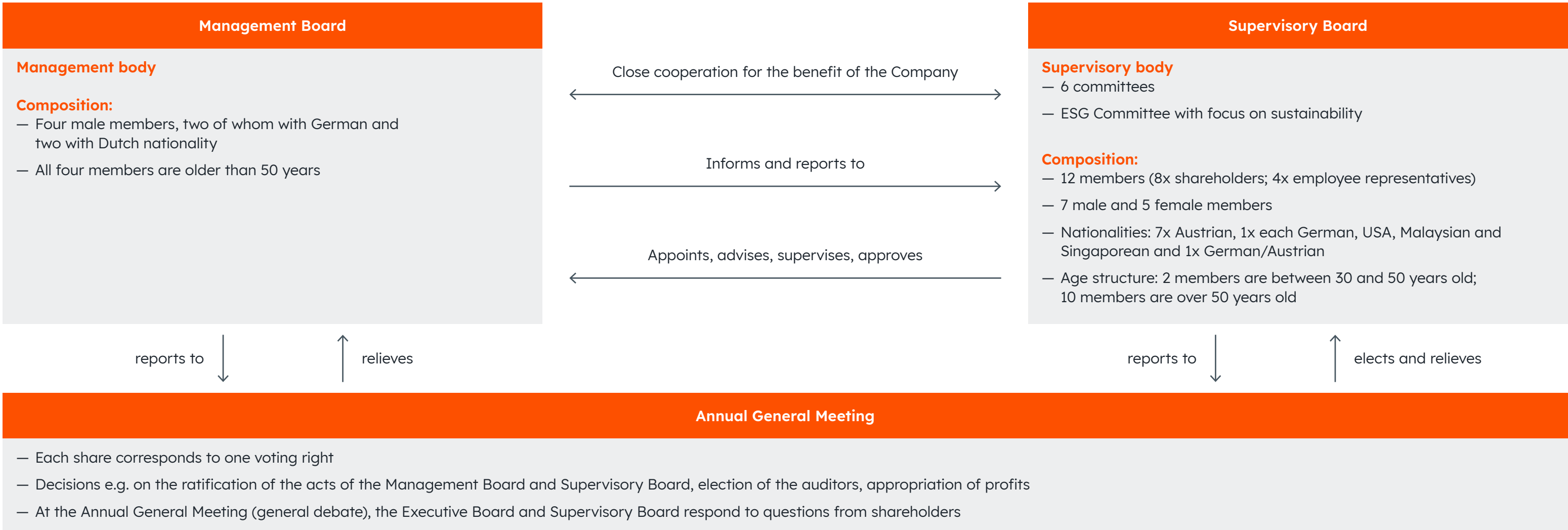
The Management Board reports to the Supervisory Board about all relevant questions of strategy, planning, business development, the financial position and results of operations and compliance as well as material corporate risks regularly, promptly and in full. Sustainability topics are also covered in these regular reports.

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. Significant Management Board decisions, such as major acquisitions or divestments, significant changes to the organization, and financial measures, must be approved by the Supervisory Board. Another of the Supervisory Board’s tasks is to decide on appointments to, and the remuneration of the Management Board. When setting targets for the variable components of the Management Board’s remuneration, it sets particular store by the Company’s sustainable and strategic development [ams OSRAM Annual Report, Remuneration Report](#).

Within the Supervisory Board, various Committees are dedicated to specific topics. The Chairs of the Committees report at Supervisory Board meetings on the work done on

Two-Tier Board Structure of ams-OSRAM AG¹



¹ Status quo at the time of report release by the Management Board.

the Committees. Owing to the importance of sustainability-related topics, the Supervisory Board decided to establish an ESG Committee, which was assembled at the start of 2023. The ESG Committee will deal extensively with ESG requirements, strategic targets and the associated action, as well as preparing any decisions by the Supervisory Board. It will work closely with the Audit Committee, which also deals with sustainability-related regulatory requirements and sustainability reporting which, going forward, will be mandatory throughout the EU (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 aspects of sustainability in its work and oversees the Company’s progress in those areas.

The Supervisory Board regularly assesses the effectiveness of its work, as it did in fiscal year 2022, and, going forward, incorporates its findings in its working methods. The next self-assessment is planned for fiscal year 2023. In fiscal year 2022, as part of the onboarding process the new members of the Supervisory Board attended compliance training with the emphasis on capital market compliance.

Composition of the Supervisory Board

As well as a broad mix of professional qualifications, the Board must also be comprised of members of a variety of ages, genders and cultural backgrounds, for example. These criteria are explained in detail in the [Policy on the Composition and Diversity of the Supervisory Board](#).

Independence of the Supervisory Board

When the 2022 Annual General Meeting was electing representatives of shareholders to the Supervisory Board, as required by Section 87, para. 2 of the Austrian Stock Corporation Act (AktG) all candidates up for election gave a declaration prior to their election of their independence with regard to the performance of the 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 which constitute a material conflict of interest and, as such, are apt to influence 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 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. No member of the Supervisory Board has performed tasks on the Company’s Management Board in the last 15 years. Should conflicts of interest emerge, they must be disclosed to the Chairman 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 fiscal year 2022.

Business relationships with related companies and persons (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 Companies and Persons](#).

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 which are presented to the Annual General Meeting for a vote. This is to ensure 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.

Current remuneration and the principles governing remuneration of the members of the Management Board and Supervisory Board are based on the remuneration principles and the [Remuneration Policy](#), adopted by the Company’s Annual General Meeting on June 2, 2021. 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 significant change.

In the year under review, the remuneration of the Management Board consisted of performance-unrelated and performance-related components. There are two elements to the variable, performance-related remuneration of the Management Board: Whilst short-term variable remuneration is a bonus model with an annual payment, the long-term remuneration components are made up of various multi-year stock option plans. When setting short-term, variable remuneration components, non-financial, strategic targets are also taken into consideration. For fiscal year 2022 the Supervisory Board decided for the first time to use ESG performance indicators as part of the annual targets for members of the Management Board. Thus, for fiscal year 2022 the Management Board’s remuneration also comprises an ESG-related component for reporting in accordance with GRI and achieving the climate target for their own business activity.

In future, the ESG target-based remuneration of the Management Board will be integrated into the long-term remuneration components. Partly for this reason, the Supervisory Board will propose to the 2023 Annual General Meeting that the remuneration policy be revised accordingly, deriving an ESG target with a weighting of 20% from the company-wide ESG strategy.

The remuneration of the Supervisory Board consists in principle of standard, basic salary. Since they handle more activities and carry more responsibility, the Chair of

the Supervisory Board, the Deputy and the Chairs of the Committees are paid a higher basic salary than the members. The members of the Supervisory Board do not receive any variable or share-based compensation.

In principle, under the current remuneration policy the members of the Management Board do not receive any sign-on bonuses. The arrangements for payments in connection with termination of Management Board contracts or in connection with termination of Supervisory Board activity are set out in the current remuneration policy.

Further information about the remuneration of Management Board and Supervisory Board members is provided in the [ams OSRAM Annual Report, Remuneration Report](#).

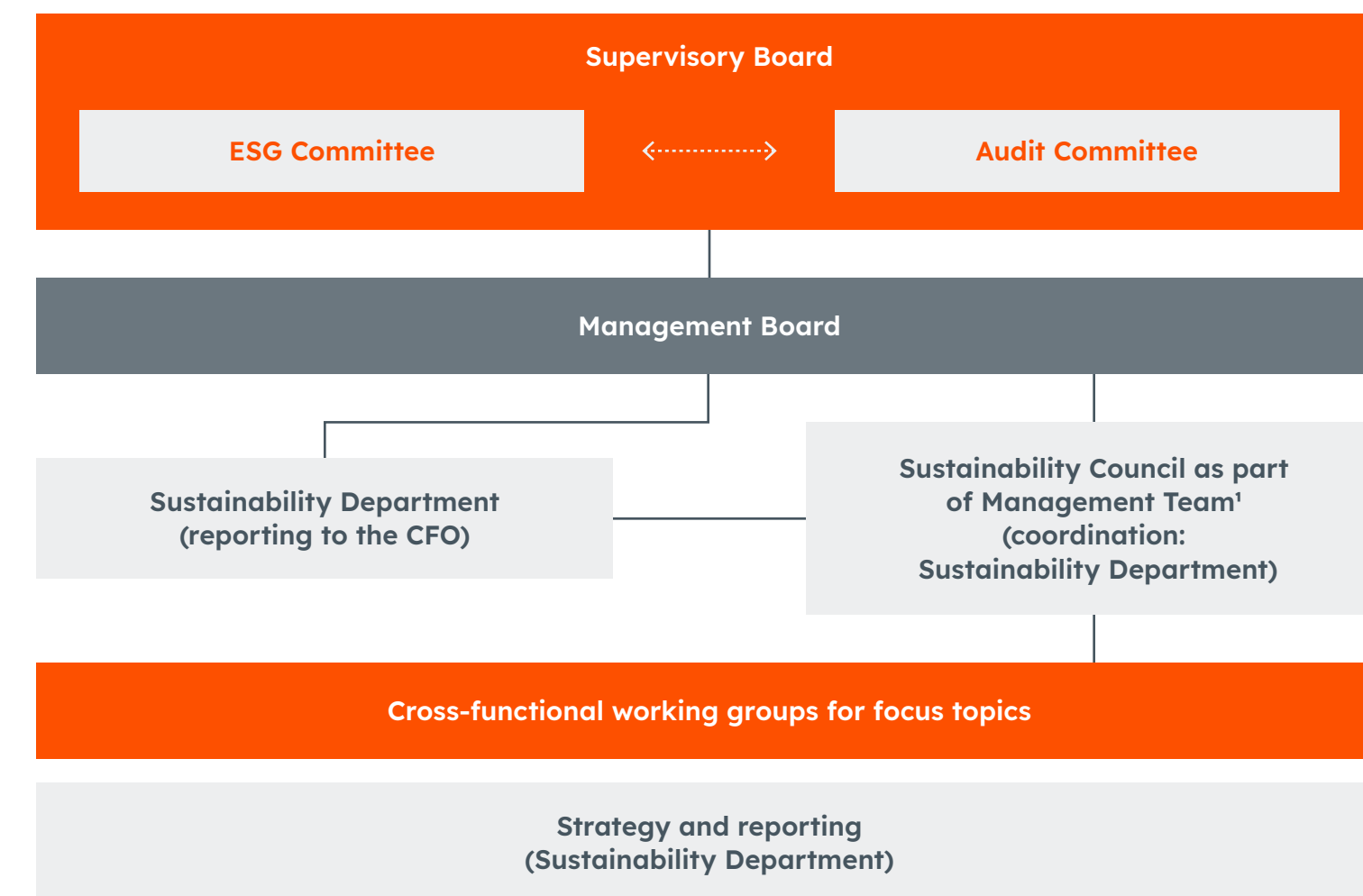
Sustainability-related Priorities in 2022 (Management Board and Supervisory Board)

In the past fiscal year, the climate strategy announced in the 2021 report was developed, approved by the Management Board and submitted to the Supervisory Board. Essentially, the Management Board decides on adequate targets and significant sustainability projects and oversees their implementation. Other topics were the carbon-neutrality of more locations, human rights policies and the concept of a risk assessment on human rights. In fiscal year 2022 the Supervisory Board reorganized its sustainability-related activities and decided to establish an ESG Committee, the members of which were appointed at the start of 2023.

3.2 Implementing Sustainability within the Company

3.2.1 Organization and Structures

Governance Structure of Sustainability



¹ The ams OSRAM Management Team consists of four Management Board members, the business unit heads and the heads of certain corporate functions.

The governance framework created in order to develop the sustainability strategy → [3.2.3 Sustainability Strategy](#) involves all the relevant functions and business units and covers the implementation of the strategy and the progress being made with sustainability activities. 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's tasks include monitoring sustainability trends, the annual review of key topics with regard to their impact, opportunities and risks as well as reporting. The Management Board and the Management Team are informed in case of significant changes.

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

3.2.2 Materiality Analysis

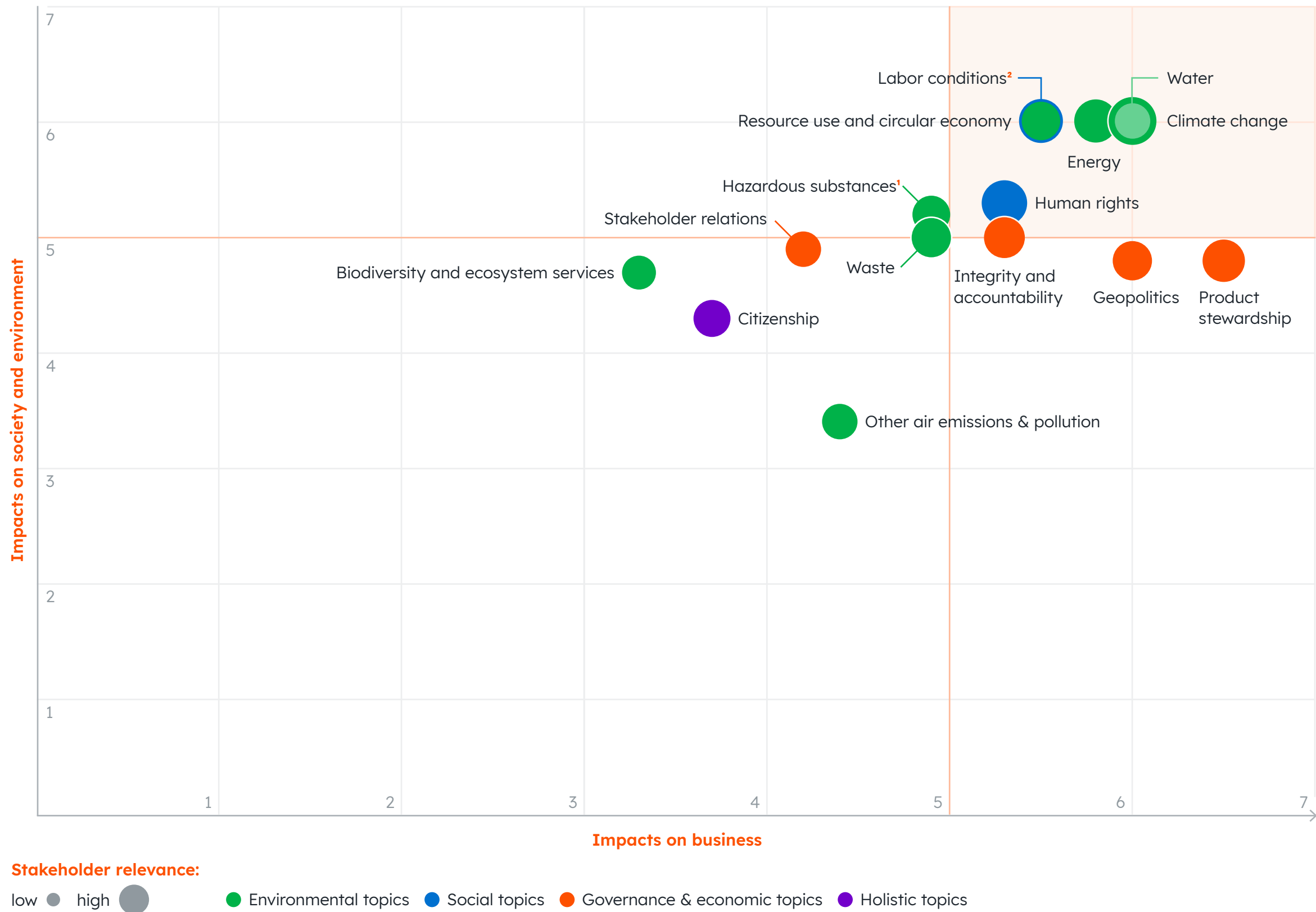
In 2021, a materiality analysis was undertaken as the basis for reporting and for developing the sustainability strategy. This analysis rated individual topics for their relevance to stakeholders of ams OSRAM and their potential and actual positive or negative effects on the environment, people and society. The significance of 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, going forward, also the future European reporting obligation (CSRD). Further information is provided in chapter → [3.2.4 Dialog with Stakeholders](#).

The process of the materiality analysis carried out in fiscal year 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 impact were identified within the context of ams OSRAM. The basis for this was provided by an analysis of competitors, customer and capital market requirements, relevant global standards, and upcoming and potential legislation. 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 the table Classification of Material Topics, Focus Topics and Strategic Added Value for Stakeholder Groups).
- **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) with regard to their positive and negative impact, both potential and actual. 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 material topics are as follows:

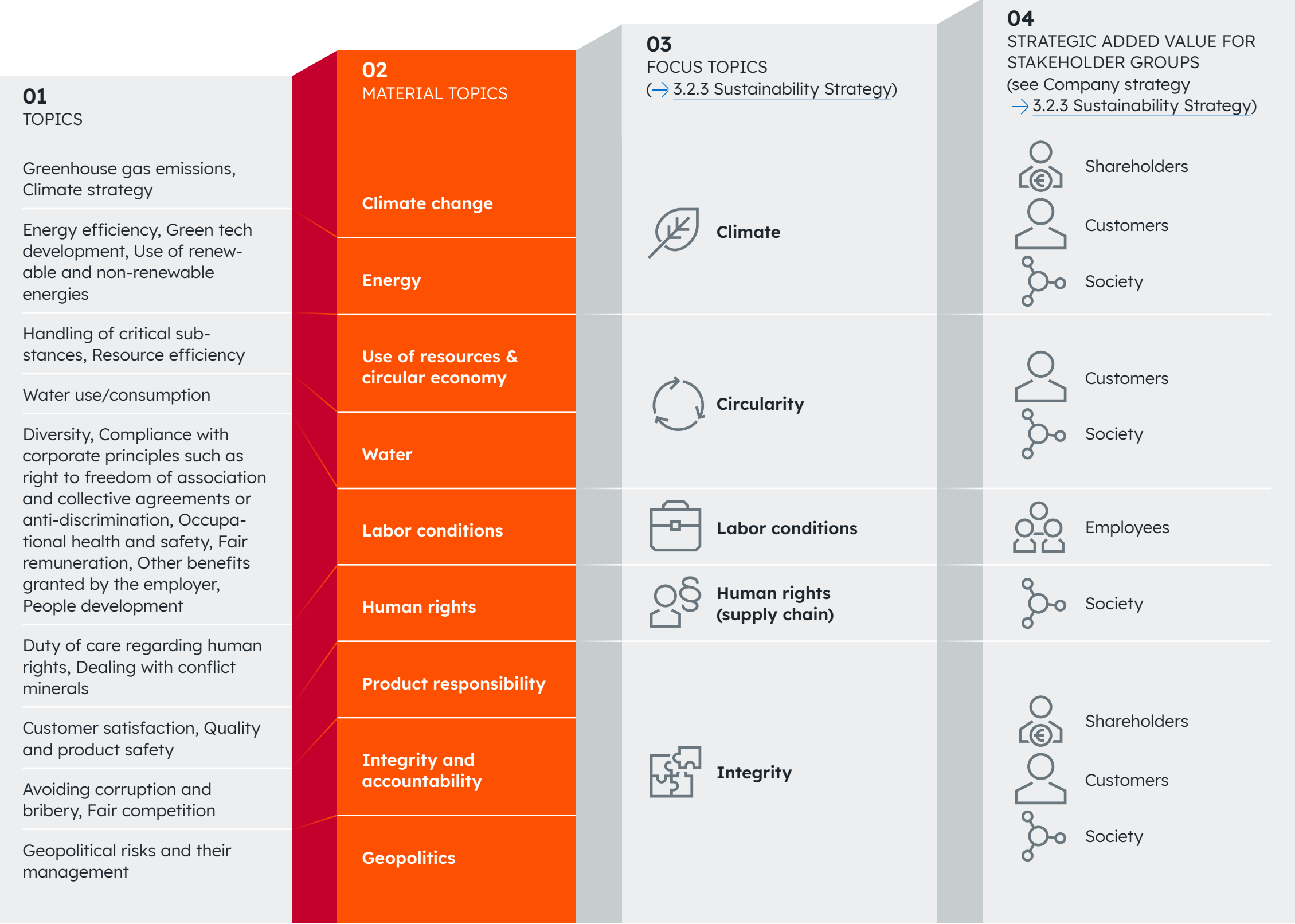
Results of the Materiality Analysis



¹ Integrated in the chapter → 4.3.1 Resource Efficiency.
² Integrated in the chapters of → 6.0 Responsibility to Employees.

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

Material Topics



The material topics were reviewed in fiscal year 2022, giving consideration to the need for the materiality analysis to be updated or revised in light of potential significant changes in external and internal influencing factors. 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 defined our own indicators or based them on 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

The corporate strategy already comprises overarching sustainability aspects. Besides commercial success, the requirements of our stakeholders such as customers, shareholders, employees and society are also addressed. This is underpinned by our “Sensing is life” vision, in other words our aspiration to improve people’s quality of life → [2.2.2 Our Products’ Contribution to the SDGs](#).

In fiscal year 2022 a comprehensive sustainability strategy was developed, based on the focus topics Climate, Circular Economy, Labor Conditions/Diversity, Human Rights and Integrity as identified by the materiality analysis. These have been analyzed and rated in light of the future expectations of the stakeholders prioritized in the strategy.

Concrete targets for climate protection and percentage of women in managerial roles were adopted back in 2021 for the topics of Climate and Diversity, which are part of the Labor Conditions focus topic and are rated as most pressing by the Management Board. For each focus topic, in fiscal year 2022

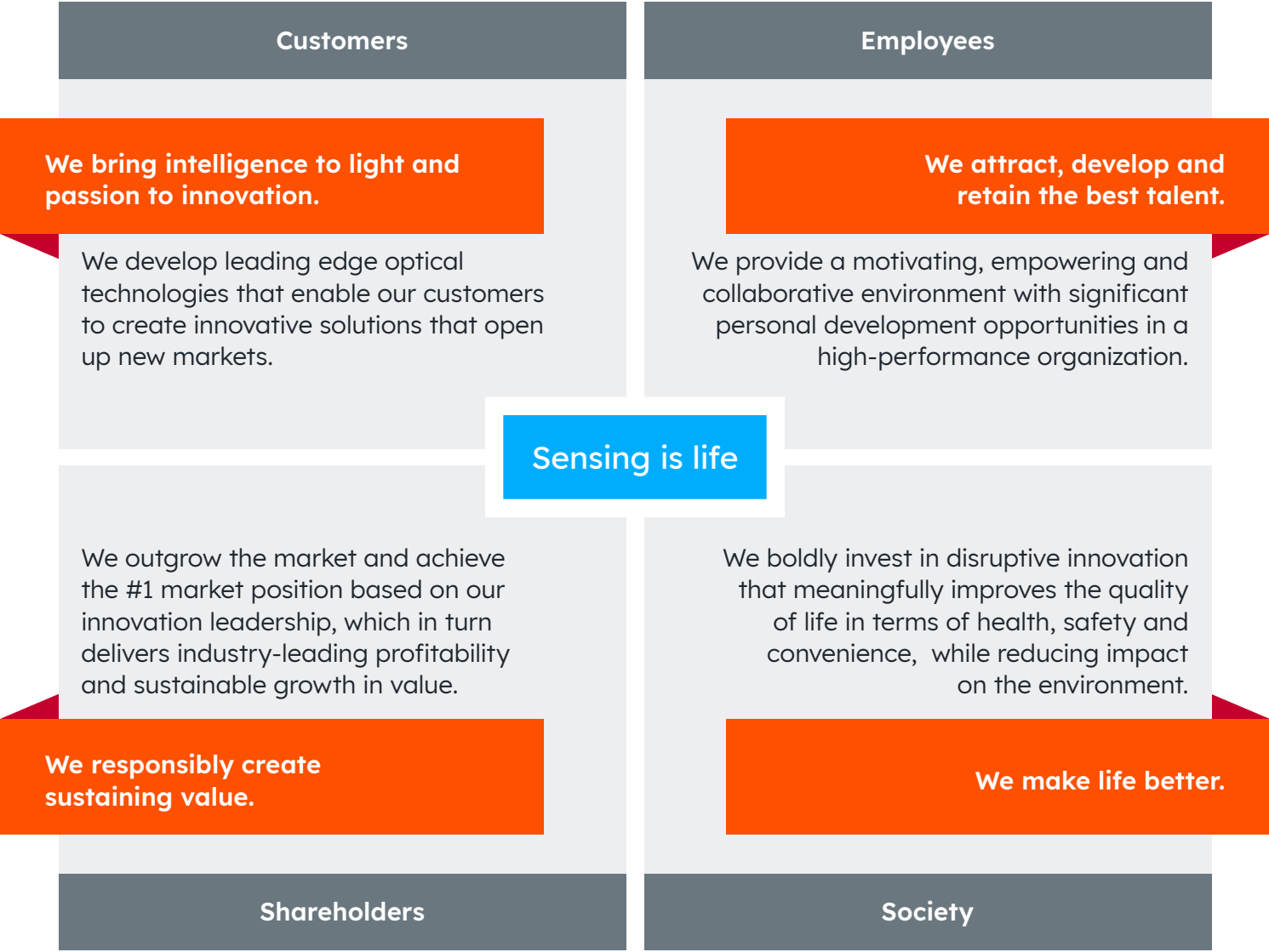
- targets were defined
- integration – where not yet complete – was driven forward
- oversights such as missing guidelines were rectified
- processes were improved where necessary
- action was taken
- KPIs were defined and recorded where necessary.

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. Its purpose is the Company’s sustainable management, so that we fulfill our responsibility and minimize risks. The strategy is founded on deeply embedded values and principles, clear structures and defined processes.

With our portfolio, we already address global challenges such as climate change, the scarcity of resources or urbanization. In areas such as health, safety and mobility, we want to keep improving quality of life and contribute to the UN SDGs.

For us, sustainability means minimizing our impact on the environment, using resources responsibly, contributing to climate protection, offering attractive labor conditions, protecting health and safety at work and observing human rights. We have summarized our aspiration in our Sustainability Vision, which reads: “We create sustainable values and improve life with our optical solutions.”

Corporate Strategy: Creating Value Added for Our Stakeholders



Sustainability Strategy:

“We create sustainable value and improve lives with optical solutions”

Our portfolio contributes to:



UN Sustainable Development Goals



Climate

Low-carbon value chain

- Carbon **neutrality** of **own operations** by 2030
- Medium and long-term targets for science-based **reductions of Scope 3 emissions** (purchased goods/services)
- Strategy principle “avoid, reduce, compensate” applied to **reduction path**

Human rights

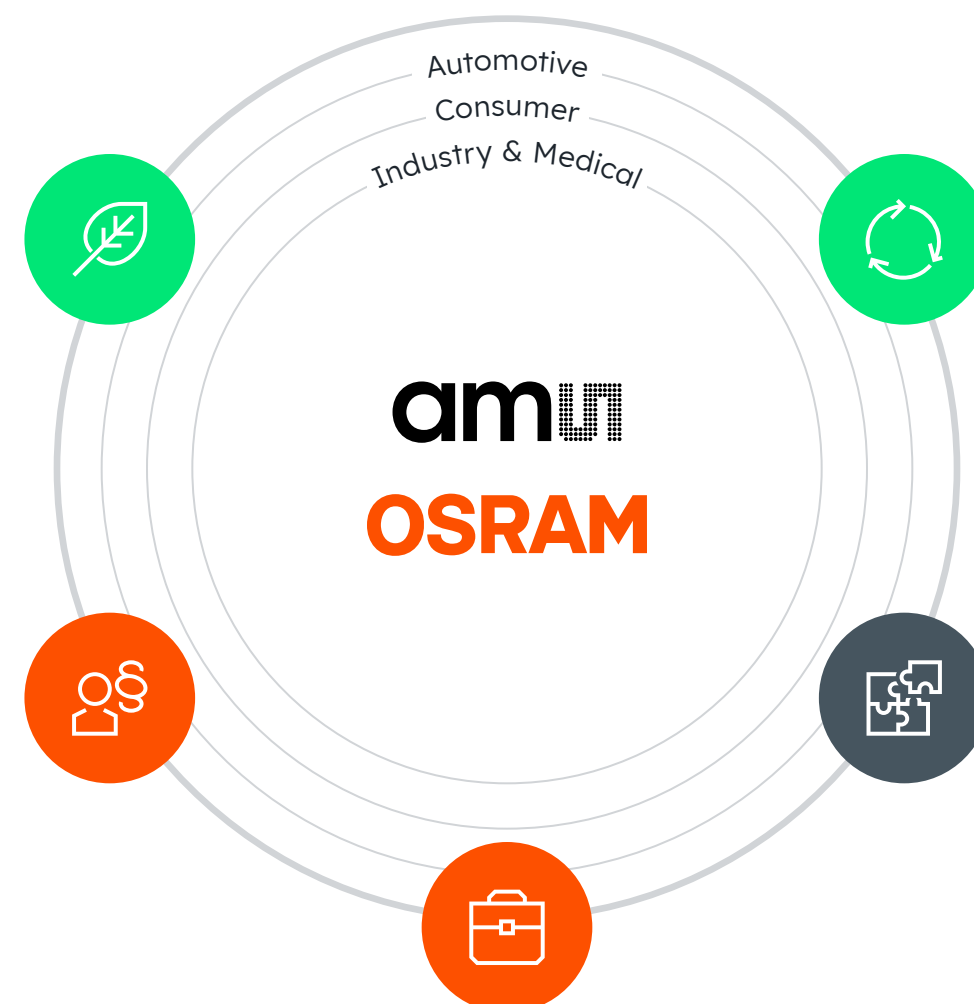
Due diligence

- **Human rights** training for all employees by 2024
- Annual **human rights risk assessments** of own sites
- Complete coverage of the **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



Circularity

Responsible resource use

- Expand wafer **substrate recycling**
- Implement **plastic-free packaging** for aftermarket
- Expand **circular LED modules** for automotive lighting
- Regular **water risk assessment**
- Implement impact awareness with **LCA approach**

Integrity

Ethical business practices and sustainable governance

- ESG target achievement as part of **Management Board remuneration**
- Coverage of **compliance training** extended to all blue-collar employees by end of 2024
- Start **ESG Committee** within Supervisory Board from 2023
- Publication of **Diversity and Independence Policy** for Supervisory Board

Key Outcomes of the Individual Focus Topics in Fiscal Year 2022



3.2.4 Dialog with Stakeholders

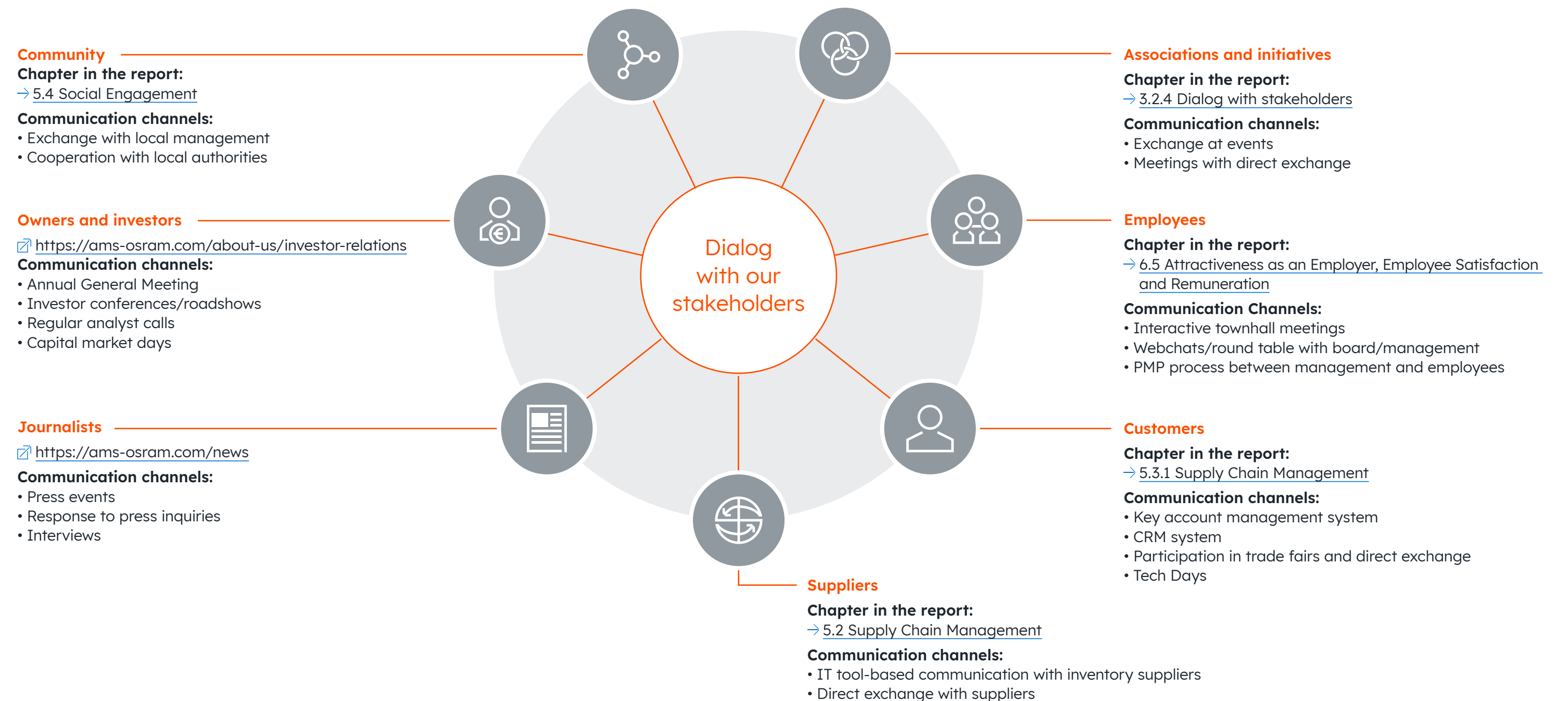
Within the current materiality analysis → [3.2.2 Materiality Analysis](#), we checked which stakeholders are relevant for ams OSRAM. Each topic is individually assessed to determine what the potential impact on stakeholders is, or would be. We look to improve our activities for more sustainability by engaging in dialog with our stakeholders. Therefore, the feedback obtained from talking to them 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, whose members have expertise in various fields, and on which there are four employee representatives out of a total of twelve members.

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 each group and documents the 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



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 political organizations. Rules to this effect are fixed in the Code of Conduct. ams OSRAM does not maintain any lobbying offices, nor does it employ agencies of this kind.

Sponsorship agreements, contributions to trade associations and membership fees for organizations that serve the Company’s interests do not count as donations. 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 → [5.4 Social Engagement](#).

Our political engagement is limited to memberships of industrial associations. In terms of contributions, the following associations are most relevant: the German Electro and Digital Industry Association (ZVEI), LightingEurope and Assil Associazione Nazionale Produttori Illuminazione (ASSIL, Italy) as well as compulsory memberships of employer and business associations or chambers of industry and commerce.

ams OSRAM is also a voluntary member of organizations that are directly associated with our key topics. These include the UN Global Compact, the Responsible Business Alliance (RBA), the Responsible Minerals Initiative (RMI) and the “Charta der Vielfalt” (Diversity Charter) Association. 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 optical solutions, new requirements 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 there.

In fiscal year 2022, membership fees came to around EUR 2.2 million (previous year: EUR 2.0 million). Since a total overview was not possible for the previous year and only the expenses of the former OSRAM units were shown, a comparison of the figures is of limited value.

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 (financial) political interests, geopolitical risks but also 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 corporate function for risk management is part of the Corporate Audit department and coordinates the risk management process and risk reporting. The head of

department reports directly to the Management Board, as well as having a direct reporting line to the Supervisory Board’s Audit Committee, which monitors the effectiveness of the risk management 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. Business opportunities that present themselves, and capitalizing on them, are at the heart of the strategy, planning and controlling process.

Identifying, assessing, reporting and managing material risks are the responsibility 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. Risks are reported to the Management Board and Supervisory Board every six months, and if required also on an ad hoc basis. The Management Board determines whether individual risks or the risks as a whole present a going concern risk, and that there is no substantial threat to the Company’s continuity.

Material risks are reported in the [ams OSRAM Annual Report, Management Report, 8 Risk Management](#).

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, risks do not occur, or negative impacts are kept to a minimum.

As part of the materiality analysis carried out in fiscal year 2021 and confirmed in fiscal year 2022 → [3.2.2 Materiality Analysis](#), non-financial risks were reflected 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 Material Judgments](#).

3.3 Combating Corruption and Anti-Competitive Behavior

Since fiscal year 2022, risks have been recorded and assessed using a new, Company-wide IT tool. Among other things, details of the potential impact of compliance and quality risks on the Company are provided in the Risk Report [ams OSRAM Annual Report, Management Report, 8 Risk Management](#).

Geopolitical risks and conflicts were identified as a material issue within the materiality analysis for the Company and as a material risk in the risk management process. Geopolitical impact on our business became apparent in recent years through the Covid-19 pandemic, in particular. At present, the geopolitical situation is dominated by the 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. These risks could have both a direct impact on our existing procurement and selling markets and indirect consequences due to changing macroeconomic parameters.

ams OSRAM is very closely monitoring developments, so that it is well prepared to respond swiftly to changing business conditions. 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 action [ams OSRAM Annual Report, Management Report, 8 Risk Management](#). On top of this, upcoming investment decisions are increasingly affected by geopolitical developments.

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

Guidelines, Responsibilities, Structures and Processes

Our compliance management system is based on the elements prevent, detect and respond. It comprises regulations, measures and processes to avoid breaches of the law relating to anticorruption, competition and antitrust law, the prevention of money laundering, data protection and export controls.

From an organizational perspective, the compliance management system consists of experts at various locations throughout the world. The Head of Compliance reports directly to the Chief Technology Officer (CTO), 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 effectiveness and appropriateness of the compliance management system. Within the Supervisory Board, this task is performed by the Audit Committee, to which the Head of Compliance presents reports on current topics and potential risks on a quarterly basis and whenever appropriate.

Our [Code of Conduct](#) contains mandatory requirements for employees to combat corruption, anticompetitive behavior and money laundering. The compliance guidelines define in detail the requirements set out in the Code of Conduct, which contains specific rules on points including the following:

- Compliance-relevant processes and requirements in regard to combating corruption
- Compliance with antitrust law, in particular the prohibition of arrangements with business partners or competitors with the aim or effect of restricting or preventing free competition between the companies
- Rules for the prevention of money laundering, including specific indications of suspected cases

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

To identify and respond appropriately to potential compliance risks at an early stage, compliance risk assessments of all compliance issues are regularly carried out at selected entities and business units. The companies to be audited are selected in a risk-based approach: Group entities and business units are categorized in risk groups. The risk parameters applied include revenues generated in the last fiscal year, the circumstances surrounding any previous compliance incidents and Transparency International's Corruption Perceptions Index (CPI) for the respective country. We also report on material legal and compliance risks in the Risk Report [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](#).

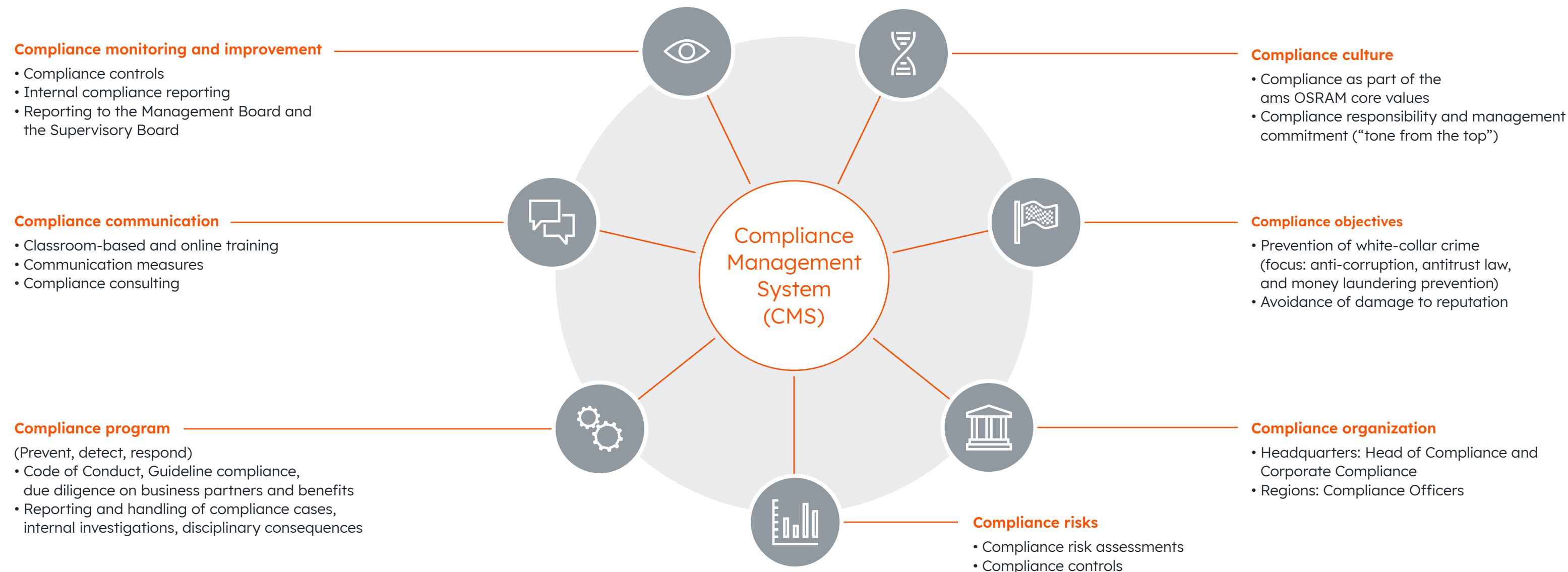
There are also tools which support our employees with assessing the legality of benefits such as gifts, hospitality and invitations to entertainment events, or guide them through the approval process. Rather than fixed amounts or thresholds, we focus on raising employees' awareness as part of our training.

The whistleblowing system "Tell ams OSRAM" is a central feature of the compliance management system. Employees and third parties can use the system to report – anonymously, if they wish – indications of breaches of legislation governing anti-corruption, competition and antitrust law, the prevention of money laundering, data protection and export controls, but also human rights and labor conditions via "Tell ams OSRAM" → [5.1 Respect for Human Rights](#) and → [3.1.1 Corporate Values](#). Reports can also be made via the usual internal Company channels: to the Compliance organization or the line manager. All indications are followed up; retaliatory measures against whistleblowers are not tolerated. If there is specific evidence, internal investigations are conducted. Once the investigation is complete, the Compliance organization recommends measures to address the deficiencies identified and monitors 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 training program is a further key component of the compliance management system. We conduct classroom-based and online training sessions focused on anti-corruption, competition and antitrust law as well as data protection and export controls. The mandatory training program is aimed at employees or indirect employees ("white-collar" employees) at all management levels, including the Management Board. A three-year cycle has been set for all training sessions.

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

Compliance Management System



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 fighting corruption and bribery consistently, clarifying any suspected cases without exception and enforcing appropriate corrective actions if a suspected case is confirmed.

In the past fiscal year, the integration and harmonization of the rules, processes and tools already in place at ams and OSRAM were largely completed. This was accompanied by company-wide training and communication activities which focused on the former ams companies. For instance, the whistleblowing system "Tell ams OSRAM", which is now used throughout the Company, was publicized by a poster campaign and the employees from the ams arm were informed about the ams OSRAM compliance management system.

In addition, the priorities of compliance work were aligned with the business risks affecting the whole Group. Owing to the greater orientation towards the semiconductor business, the topic of export controls gained more traction. In this context, the implementation in the existing SAP system of checking and approval processes required by export control laws was largely completed.

Another focus in fiscal year 2022 was preparing for the German Act on Corporate Due Diligence Obligations in Supply Chains (“Lieferkettensorgfaltspflichtengesetz”, LkSG) and for the upcoming EU Directive on Corporate Sustainability Due Diligence (CSDD), as well as the EU Whistleblowing Directive and its implementation in EU countries. 2022 therefore saw the start of the appropriate adaptations to the whistleblowing system “Tell ams OSRAM”.

Relevant employees received ongoing training on compliance topics, tailored to specific target groups and risks. The target group for the in-person Compliance Basic Training and for the add-on online training units on anticorruption, antitrust law and data protection involved 10,191 employees at the end of the fiscal year. In terms of our defined three-year training cycle, at the end of fiscal year 2022 the individual training reached the following coverage ratios:

Compliance Training

	Compliance (Basic) ¹	Anti- Corruption ²	Antitrust ²	Data Privacy ²
Target group (“white collars”)	10,191	10,191	10,191	10,191
Coverage rate according to training cycle (status “on target”)	96.9%	98.8%	98.3%	98.6%
Number of employees trained	3,847	1,734	1,720	1,934

¹ Classroom-based training
² Online training

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 violations³ are analyzed on an ongoing basis and resulting insights are taken into account in the continual process of refining the compliance management system.

In fiscal year 2023, revising the internal rules on dealing with the requirements of capital markets law will be one focus. The integration and harmonization activities are also due to be completed.

Compliance Incidents⁴

	2020	2021	2022
Inventory of (unclosed) compliance incidents as of January 1	31	22	25
New compliance incidents	23	38	39
Compliance incidents closed during the year	32	35	42
therein number of compliance incidents with proven violations	13	13	14
therein number of consequences under labor law in the event of proven violations	5	3	6
Inventory of (unclosed) compliance incidents as of December 31	22	25	22
Number of antitrust or monopoly lawsuits	0	0	0
Number of legal actions for other anti-competitive behavior	0	0	0

⁴ 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.

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. He is a member of the Information Security Operation Board (ISOB) established at ams OSRAM and reports directly to the Management Board on current developments. Data Protection Officers or Data Protection Coordinators are nominated, 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 involving personal data are documented in an “Index of Procedures,” documenting the risk assessment of internal processes with regard to protecting 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.

Binding Corporate Rules (BCR) and Inter Company Agreements (ICA) have been signed between the individual Group companies. These provide the legal basis for transmitting personal data between ams OSRAM Group companies. The group-wide rollout of the BCR and ICA was concluded in fiscal year 2022.

Training measures as described in → [3.3 Objectives, Action Taken, Results and KPIs](#) were carried out in fiscal year 2022. We also involve business partners that have access to sensitive personal data in training measures: They are required to ensure their staff receive appropriate training. Additionally, the indexes of procedures have been largely harmonized. The harmonization process during which the relevant IT tools will be switched is due to be completed in fiscal year 2023. Human Resources and Internal Audit were the focus of training aimed at specific target groups.

Protection and Security of Personal Data

	2020	2021	2022
Governmental data protection requests	-	2	-
Customer complaints	-	-	2
Requests for information ¹			
in time	9	15	53
not in time	-	-	-
Privacy incidents			
without sanctions	3	7	1
with sanctions	-	-	-

¹ 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

Circular Economy

4.1 Environmental Management

Protecting the climate and the environment safeguards our livelihood and is essential to sustainable business management. Therefore, we at ams OSRAM are committed to complying with stringent environmental standards and to 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 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, occupational health and safety → [6.2 Occupational Health and Safety](#) within the ams OSRAM Group lies with the Chief Technology Officer (CTO), who has delegated tasks and managerial authority to the head of the corporate Environmental Protection, Health and Safety department (EHS). At regular intervals, the EHS department reports directly to the Management Board on significant developments.

EHS coordinates environmental protection requirements, monitors their local implementation and is developing the environmental management system on an ongoing basis. To this end, the department issues the EHS Manual, which is applicable throughout the Group (rules incl. [EHS Policy](#)) and defines supporting EHS processes in order to comply with environmentally relevant provisions and laws at local and regional level as well as global internal requirements. The manual takes account of industrial and product-related environmental protection, the transportation of hazardous goods, occupational health and safety and fire safety. 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 Semiconductor Operations and the Business Units. The latter are also responsible for designing products to be environmentally compatible and to ensure 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. All former OSRAM locations in Germany also employ an energy management system certified to ISO 50001.

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 Handbook 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 cover more than 99% of our environmental impact¹ and the locations at which 88% of all our employees are based.

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 express environmental performance in relation to operating output and production volume, thus enabling a comparison to be made and targets set regardless of economic development.

ams OSRAM tracks the data collected and attainment of relative targets at Group level, as part of its quarterly EHS reporting. These relative figures express an absolute target or actual figure in relation to generated or planned operating output² (operating output in EUR millions). The use of this parameter is a departure from the previous year, as we now present the figure in relation to revenues. The new 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 in Chapter 4.

¹ 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.

² Operating output is production output valued at standard costs, chiefly comprising material and personnel expenses, depreciation and value creation.

4.2 Climate Protection

In fiscal year 2022, eleven locations underwent successful external audits, seven of them with ISO 14001 and four with ISO 50001 certifications. The corporate EHS department carried out a further 13 EHS audits to check that the EHS management system is used permanently worldwide. These combined audits are based on the ISO 14001 and ISO 45001 standards (occupational health and safety) and in Germany also on ISO 50001.

The Covid-19 pandemic only had a minor impact on our operational activities in fiscal year 2022. For some semiconductor sites, lower capacity utilization year-on-year affected the environmental KPIs [↗ ams OSRAM Annual Report, Management Report](#) and [→ 2.2 Results of Operations](#). Production at a location in Singapore was relocated in fiscal year 2022 and then shut down. Three other locations in China, the USA and Italy were sold. The former regional headquarters of OSRAM Sylvania Inc. in the USA was abandoned.

No relevant penalties or fines of over EUR 10,000 were imposed on ams OSRAM because of breaches of environmental protection rules in fiscal year 2022.

To combat human-driven climate change, the international community committed, in the 2015 Paris Climate Agreement, to limit the global temperature increase to 1.5 degrees Celsius if possible but, in any event, to well below 2 degrees Celsius compared with the pre-industrial age. In Europe, the European Commission's Green Deal is the most notable action. However, the capital market and general public also place demands on companies.

ams OSRAM takes its corporate responsibility 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 2 (in accordance with the Greenhouse Gas Protocol). In fiscal year 2022 we developed a climate strategy [→ 4.2.3 Greenhouse Gas Emissions](#).

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 products to administration, whereas natural gas is used primarily for heating and as a process gas in post-combustion during gas treatment at the semiconductor locations. The production of lamps such as halogen lamps, with a glass body that is not made of quartz glass, relies in principle on natural or liquefied petroleum gas. Furthermore, natural gas had always been used in Germany for several cogeneration units. Due to the current conflict with Russia and its impact in terms of the price of natural

gas and potentially limited availability in Europe, we have worked on alternatives to Russian gas [↗ ams OSRAM Annual Report, Management Report, 8 Risk Management](#).

The climate strategy developed in fiscal year 2022 takes account of the increase in our own energy efficiency as well as the use of green energy sources as a result of directly purchasing Renewable Energy Certificates. We regard offsetting by means of carbon credits as the last resort for remaining, unavoidable emissions.

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 has the benefit of, firstly, reducing the impact on the environment and, secondly, making our production costs more competitive.

The reduction scenario for achieving our climate target was developed in fiscal year 2022 [→ 4.2.3 Greenhouse Gas Emissions](#). The relative target for energy consumption [→ 4.1 Environmental Management](#) set for fiscal year 2022 and the anticipated total greenhouse gas emissions (GHGs) are consistent with this.

Energy Consumption

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

In fiscal year 2022, energy consumption in absolute terms fell 6.9%, whilst the relative target scaled to operating output was missed by 1.5% (see influence of economic developments on KPIs in → 4.1 Environmental Management). Absolute energy consumption was around 1.6% lower due to the sale of locations in 2021 and 2022. The following selected efficiency measures also contributed to the reduction:

- Substantial improvement measures were implemented in compressed air provision and vacuum generation at our semiconductor sites in Penang (Malaysia) and Calamba (Philippines).
- At the lamp factory in Nové Zámky (Slovakia), a heat recovery system was installed on the renovated compressed air generation unit.

— Lighting and air conditioning were further optimized at the locations in Ang Mo Kio (Singapore), Calamba (Philippines) and Premstaetten (Austria).

4.2.2 Renewable Energies

In order to achieve our climate target by 2030, as well as energy efficiency measures we are prioritizing green electricity, of which we will be making increasing use in our operations. However, renewable energies are not currently available at all locations, Malaysia being one example. Therefore, we are also using the option of Renewable Energy Certificates there to offset emissions.

Our Austrian and German production facilities as well as the headquarters in Premstaetten (Austria) and the co-headquarters in Munich (Germany) are already supplied with CO₂-neutral electricity, mainly from hydroelectric power. Since midway through fiscal year 2022, the Calamba (Philippines) location has been procuring 30% of its electricity from solar power.

Action Taken, Results and KPIs

In fiscal year 2022, ams OSRAM obtained 249,100 MWh (previous year: 217,500 MWh) of electricity from renewable energy sources. This equates to a 39% share of the entire electricity consumption (previous year: 32%). This breaks down as follows:

- The Premstaetten location has been supplied with CO₂-neutral electricity from hydroelectric power since 2011.
- In Germany, the co-headquarters in Munich and the Berlin, Regensburg, Herbrechtlingen and Schwabmuenchen locations 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, 2,600 MWh were demonstrably obtained from solar power in the third and fourth quarters.

— The Exeter and Hillsboro facilities are located in the state of New Hampshire (USA), in which electricity suppliers are obliged under the “Electric Renewable Portfolio Standard” to provide a minimum share of 22.5% of the electricity mix from renewable energies.

We see further potential in the in-house generation of renewable energy. So far, the sites in Wuxi (China) and Premstaetten together generate around 450 MWh per year. We are currently evaluating the extent to which more locations will be included, and by when.

In addition, the locations in Calamba and Ang Mo Kio (Singapore) have offset consumption of 7,500 MWh and 24,000 MWh respectively with Renewable Energy Certificates (RECs).

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 Targets paragraph).

Guidelines, Structures and Processes

For the recording and reporting of its greenhouse gas emissions in

- 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.

ams OSRAM is guided by 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 adopt both market-based accounting (“market-based”), using the vendor-specific emission factor, and location-based accounting (“location-based”), using the regional and national grid average when reporting our Scope 2 emissions.

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), Tampines (Singapore) and, for the first time, Kulim (Malaysia) and Regensburg (Germany).

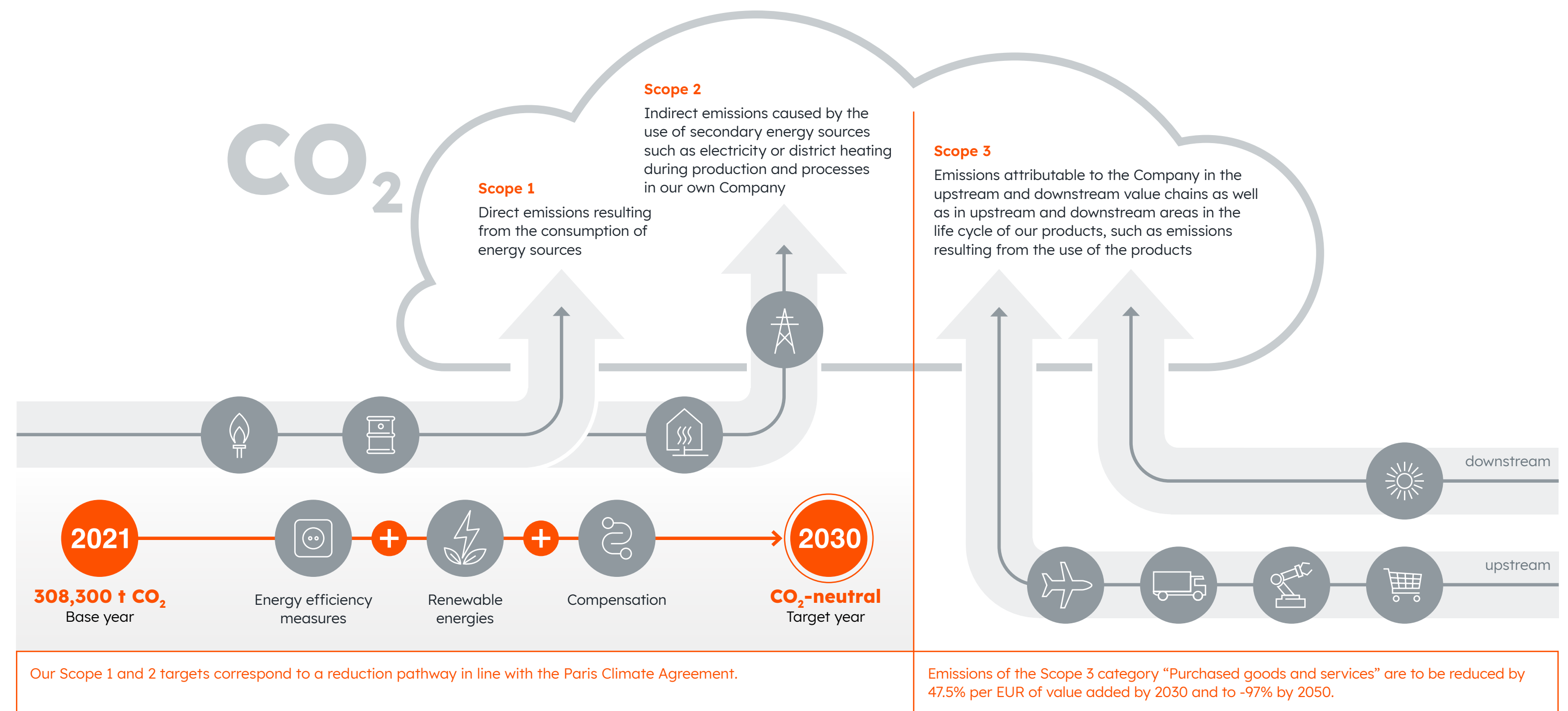
Objectives, Action Taken, Results and KPIs

Our annual greenhouse gas emissions and energy efficiency targets are closely linked in terms of Scope 1 and 2. We calculate the overall global target (metric tons, t CO₂e greenhouse gas emissions, GHGs) in relation to operating output → [4.1 Environmental Management](#).

We have prepared figures for individual Scope 3 categories for the entire ams OSRAM Group for fiscal year 2022. Goods and services purchased as well as capital goods were included here. An approximation model recognized in the industry was used for this purpose¹. To calculate greenhouse gas emissions from upstream transport and distribution and business travel, we obtained data² from our business partners and service providers.

As part of the climate strategy developed in fiscal year 2022, a reduction scenario for achieving our targets for Scope 1 and 2 was adopted that is consistent with maximum warming of 1.5 °C (Paris Climate Agreement). 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 it further by 2050 to -97% → [5.2 Supply Chain Management](#).

Climate Strategy



¹ estell 6, Systain.

² The data are based in part on estimates.

CO₂ Emissions

in metric tons CO ₂ e	2020	2021	2022
GHG Scope 1 emissions	51,700	46,600	65,500
Natural gas	29,900	29,600	27,100
Liquefied petroleum gas, diesel for on-site use, heating oil	2,800	2,600	2,600
Process gas emissions	19,000	14,400	35,800
GHG Scope 2 emissions (market-based)	264,100	261,700	230,500
Electricity	258,000	256,000	225,300
District heating and steam	6,100	5,700	5,200
GHG Scope 2 emissions (location-based)	332,300	321,400	291,000
Total GHG Scope 1 and 2 emissions (market-based)	315,800	308,300	296,000
Metric tons of CO₂e emissions from own activities (Scope 1 and 2) per EUR 1 million operating output		146	149
Target for metric tons of CO ₂ e emissions from own activities (Scope 1 and 2) per EUR 1 million operating output			140
Compensation of CO ₂ e emissions by I-RECs (International Renewable Energy Certificates) or similar instruments			15,100
Net GHG Scope 1 and Scope 2 emissions (market-based)	315,800	308,300	280,900
Absolute GHG reduction compared to base year 2021 (308,300 t CO ₂ e)			27,400
GHG reduction compared to base year 2021 in %			9.0
Avoidance of CO ₂ e emissions due to the use of renewable energies, incl. I-RECs	62,800	60,500	70,500
Prevention of GHG emissions through energy efficiency projects (major projects)		4,600	1,800
GHG Scope 3 emissions			
Purchased goods and services	1,071,300	1,106,400	1,119,800
Capital goods	54,100	76,800	199,100
Upstream transport and distribution	54,500	59,700	47,400
Business travel	4,000	2,600	7,200
VOC emissions	29	30	34

For Scope 1 and 2 as well as Scope 3 (“Purchased goods and services” category), fiscal year 2021 has been set as the base year for the climate strategy. Following the completion of ams’ acquisition of OSRAM in March 2021, this year is the first period in which ams OSRAM was operating as a joint company for much of the year, and processes and reporting were harmonized. 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.

The relative target, scaled to operating output, was missed by 6.4% (see influence of economic developments on KPIs in → [4.1 Environmental Management](#)). Moreover, the emissions from non-combusted process gases at the sites in Regensburg and Kulim could not be estimated until the fiscal year was underway. Consequently, they are not included in the target and the previous year’s figures and were higher than initially assumed.

So that our efforts can be externally assessed, we take part in the annual survey by CDP, the world’s biggest ranking platform for climate protection.

CDP Climate Change

	2020	2021	2022
Score	C	B-	C

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 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 Technology Officer (CTO) is responsible for research and development. The CTO 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 definition and execution of this model, and reports to the CBO (Chief Business Development Officer). 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 and 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, such as governmental affairs, academia and/or public authorities.













Action Taken and Results

Many funded cooperation projects in which ams OSRAM is involved – among them Caviar, Energy ECS and iREL4.0 – are having a positive impact. Often, they reduce negative influences on the environment, both along the value chain and throughout the product's life cycle and beyond. Our 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 UV-C projects, we are researching materials and devices to replace UV lamps that contain mercury.

With the EU Green Deal and its associated programs and regulation, the green tech development will become more important in the future. As well as enjoying funding opportunities, companies will have to fulfill extensive reporting requirements → [7.3 EU Taxonomy](#).

For an up-to-date overview of R&D processes, expenditure and innovation, see the [ams OSRAM Annual Report, Management Report, 3 Research and Development](#). The technologies that contribute to the SDGs are listed in → [2.0 Company Profile](#), and the extent to which these save resources is explained in → [4.3.1 Resource Efficiency](#).

Key Societal Megatrends Drive Demand for our Optical Solutions

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

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. The aim is therefore to return raw materials to the cycle wherever possible, expand recycling and make even more efficient use of resources.

For these reasons, it is important for ams OSRAM to deal with materials and substances in a way that conserves resources, since this has a positive impact on the environmental balance and on the cost position of our products. It also boosts acceptance of our products by 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, and is implemented by the business units.

Guidelines, Responsibilities, Structures and Processes

The corporate Environmental, 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](#). Current legal provisions are intended to make product recycling easier and, wherever possible, avoid hazardous materials or provide a framework for declaring them, as a means of protecting 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](#).

When implementing all of this in our operations, we distinguish between the business units in the Semiconductors segment and those in the Lamps & Systems segment. 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 → [Sustainability Website](#) (ams OSRAM product responsibility and list of critical substances). Suppliers must confirm receipt of those requirements and provide evidence 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 & 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-check¹ provide a framework for this.

¹ 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 and Results

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 executed by means of “technology roadmaps”, ensuring that we invest in resource-efficient processes and technologies and the related manufacturing technologies. To give one example, the use of Bayesian optimization (machine learning) has enabled us to reduce the number of experiments, which translates into consuming fewer materials, shorter development and optimization times, and lower resource consumption in production.

We are continually seeking ways to reduce our resource consumption through new approaches to recycling and reuse. For example, we have developed ways of reusing wafer substrates and made preparations to implement this in mass production. Whilst we have been recycling germanium for a few years already, the next milestone will be the recycling of sapphire wafers. This is due to commence in 2023 and, once the tests have been successfully completed, will be gradually upscaled over the next few years.

Our process engineers in Exeter (USA) have successfully reduced the length of the rinsing process using forming gas in the sinter furnace prior to the actual thermal stage without any loss of quality, saving around 49,000 cubic meters of pure hydrogen each year.

Furthermore, in 2022 we incorporated customer feedback and developed a concept for environmentally friendly packaging for the automotive aftermarket business. Now, plastic in replacement bulb packaging is to be largely substituted with paper and cardboard, making the manufacture of our packaging more environmentally friendly and significantly increasing the recycling rate. The use of plastic is to be gradually reduced by around 90%. With the new packaging, we will be supporting our customers with their environmental targets while also improving our own environmental footprint.

From 2023 onwards, in the NAFTA market the measures we take in the automotive field to optimize existing packaging will save around 10 tons of polyethylene and 230 tons of cardboard a year. This equates to a saving of around 150 tons of CO₂.

At the same time, we are working on fundamentally new technologies, such as the development of microLEDs → [2.2.2 Our Products’ Contribution to the SDGs](#). Their diminutive size means that substantially fewer materials are needed to manufacture them compared with conventional LEDs. At around 10 µm, a microLED is 13 times smaller than a MiniLED.

We are constantly striving to design more environmentally compatible products. Where required by law, we inform customers and the public via our website, where the relevant declarations on the conformity of our products with essential legal requirements can be found. Products in the Lamps & Systems segment are subject to specific legal requirements: Customers must be given information about the substances used. Since fiscal year 2022, 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 & Systems segment, with Procurement. Globally, a joint Conflict Mineral Policy applies, which can be accessed online [Conflict Minerals Policy](#). In fis-

cal year 2022 we completed the standardization of processes and associated tools and systems.

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. Special RMI reporting templates help us obtain information about the country of origin and the smelters used. 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” guideline. To fulfill its requirements in regard to conflict minerals in our supply chain, we use automated tools to verify compliance by our suppliers. This enables us to identify suppliers from whom a declaration is required. The tools can also be used to send out questionnaires to obtain information. Feedback from suppliers is automatically verified to identify non-compliant smelters. In this case, communication with those suppliers is triggered with the aim of removing non-compliant smelters from the supply chain. The extent to which our procurement value is currently covered by the Conflict Mineral Reporting Template (CMRT) and the Extended Mineral Reporting Template (EMRT) is described in → [5.2 Supply Chain Management](#).

We update our Conflict Mineral Reporting Templates for the Lamps & Systems and Semiconductors segments annually and make them publicly accessible [www.ams-osram.com/about-us/sustainability/product-stewardship](#).

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 recycled¹ 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 mostly separated at the locations themselves but if this is too difficult technically, they are separated by the service provider. The recovery of these valuable resources is always carried out by specialists.

Waste sent for disposal is either incinerated or sent to landfill, depending on local regulations and what is technically and commercially possible. For this reason, we do not record this information by disposal method, but distinguish between hazardous and

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

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](#).

Objectives, Action Taken, Results and KPIs

As described in Chapter → [4.1 Environmental Management](#), economic developments influenced the KPIs and the amounts of waste generated. The absolute quantities both for disposal and for reuse were significantly lower than in the previous year. The target scaled to operating output was also achieved.

Waste

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

Waste management at the sites is supported by the local EHS programs, for example:

- At the Schwabmuenchen fluorescent materials and metals plant in Germany, recycling has saved around 10 t/year of grinding sludge created in molybdenum and tungsten manufacture.
- In Ag-filter manufacture at the Premstaetten (Austria) semiconductor plant, efforts to recycle dimethyl sulfoxide (DMSO) commenced in the previous year were confirmed.

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 fiscal year 2022.

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 sparing use of water.

At all our locations, we are careful to withdraw water sparingly and we ensure its chemical-physical treatment in accordance with the conditions imposed on us, 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 [World Resources Institute’s Aqueduct Water Risk Atlas](#)¹. 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 is 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 compliance 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, although periodic checks are also required. 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.

¹ 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.

Objectives, Action Taken, Results and KPIs

Water Withdrawal

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

Water withdrawal in absolute terms has decreased marginally overall (see influence of economic developments on the KPIs in → 4.1 Environmental Management) and the target, scaled to operating output, was met. However, this KPI was slightly above the previous year’s figure. Our semiconductor sites are responsible for around 91% of the Group’s water withdrawal.

ams OSRAM does not currently regard the availability of water at any of its locations as critical. 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.

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), product changes have reduced annual freshwater consumption by around 15,000 m³.

There are no specific targets for the discharge of wastewater. However, volumes are recorded and monitored within the framework of EHS management. Around 19% of total water withdrawal in fiscal year 2022 was attributable to losses in waste value streams or evaporation into the atmosphere.

In order to comply with official regulations, monitoring of the discharge of chemically unchanged cooling water is carried out as described above. The data quality is very high thanks to the input measurement and the precisely defined path for cooling water. For other types of wastewater, however, some of the figures have to be estimated. 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
Into public sewers as industrial wastewater	2,507,000	2,282,000	2,274,000
Into public sewers as sanitary wastewater	564,000	595,000	473,000
Into saline surface water as industrial wastewater	389,000	391,000	337,000
Into non-saline surface water as industrial wastewater	30,000	30,000	22,000
Into the groundwater as chemically unchanged wastewater from cooling processes	100,000	113,000	101,000
Total	3,590,000	3,411,000	3,208,000
Consumption – through evaporation, disposal as waste, other losses	615,000	699,000	772,000

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
Score	B-	B-



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 right now than they have been for many years. Companies too must step up and do whatever is within their sphere of 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 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 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 → [5.2 Supply Chain Management](#) 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 and human trafficking – either within our own business activities or involving our suppliers or business partners.

We set out our stance on respect for human rights in our [Human Rights Policy](#), which is aimed at all employees – i.e. permanent employees, temporary and migrant workers, students and agency staff. 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. A group-wide human rights guideline was implemented in summer 2022. This is based on the Universal Declaration of Human Rights and the United Nations’ 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 place an obligation on all ams OSRAM employees to apply these in their areas of responsibility.

The Human Resources (HR) department coordinates our duty of care as a company regarding human rights > 6.1 Our Human Resources Work, and our Procurement department handles coordination with regard to our supply chain → [5.2 Supply Chain Management](#). The HR department has issued the set of rules mentioned above and oversees their compliance within our Company.

Should there be a breach of human rights or the principle of fair labor conditions – such as harassment, workplace bullying or discrimination – this can be reported via the whistleblowing system “Tell ams OSRAM” → [3.3 Combating Corruption and Anti-Competitive Behavior](#). Incidences can also be reported to the usual places within the Company, such as the appropriate local HR area or respective line managers. All reports are systematically assessed and investigated and, if they prove justified, we take action such as conflict mediation, improving labor conditions, or consequences in accordance with labor law.

Objectives, Action Taken, Results and KPIs

Our objective is to avoid human rights abuses and provide fair labor conditions for our employees. We want to raise awareness of this key topic within the organization and prevent breaches of human rights¹. We use various prevention methods to raise awareness. As part of our activities to promote respect for human rights, we also pursue region- and country-specific topics, such as local handling of cases, audits, and aligning our processes or training measures with local legislation.

In fiscal year 2022 the methodology was devised for the risk assessment regarding potential violations of human rights, which will be conducted annually in future. This entailed carrying out analyses focusing on risks specific to the sector in order to ascertain a specific degree of risk for all locations, starting with a pilot assessment of a high-risk location.

During the fiscal year we received 31 reports via the whistleblowing system “Tell ams OSRAM” of potential breaches of human rights or fair labor conditions – including harassment, workplace bullying and discrimination. These were systematically recorded and analyzed. No actual breach of human rights or fair labor conditions was identified in any of these cases.

Our specialist departments also continuously monitored the relevant national and international frameworks governing human rights in fiscal year 2022. As part of this, we prepared for the German Act on Corporate Due Diligence Obligations in Supply Chains (“Lieferkettensorgfaltspflichtengesetz”) and published a group-wide declaration on the Modern Slavery Act in the UK.

¹ See → [3.2.3 Sustainability Strategy](#), graph with targets: Performance of RBA audits at our own locations and human rights training planned.

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, China, Singapore, Malaysia, Taiwan, and the USA. The largest material fields by volume are contract manufacturing, investments in buildings and facilities, and pre-materials for optical semiconductors.

For Tier 1 suppliers, social and environmental topics are the main source of potential risk of possible 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. Economic and non-financial risks and their management are described in [ams OSRAM Annual Report, Management Report, 8 Risk Management](#).

Guidelines, Responsibilities, Structures and Processes

The objective of our purchasing 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.
- Decarbonization of our supply chain is to be accelerated.
- Legal requirements, particularly those protecting human rights and the environment, must be fulfilled. We are implementing the current regulatory environment in processes and activities.

At ams OSRAM, procurement is a global function. Depending on the business unit concerned and the procurement markets for specific materials and services, procurement activities take place either globally or regionally. In the Semiconductor segment, the Head of Operations Semiconductors (a unit under the aegis of the CEO) is responsible for purchasing. Responsibility for purchasing in Lamps & Systems rests with the segment's Controlling unit, for which the CFO is responsible. In the individual material fields, cross-functional sourcing teams are responsible for the specific sourcing strategy and its implementation. This approach relies on close collaboration to ensure that every supplier fulfills the quality standards for the specific material field.

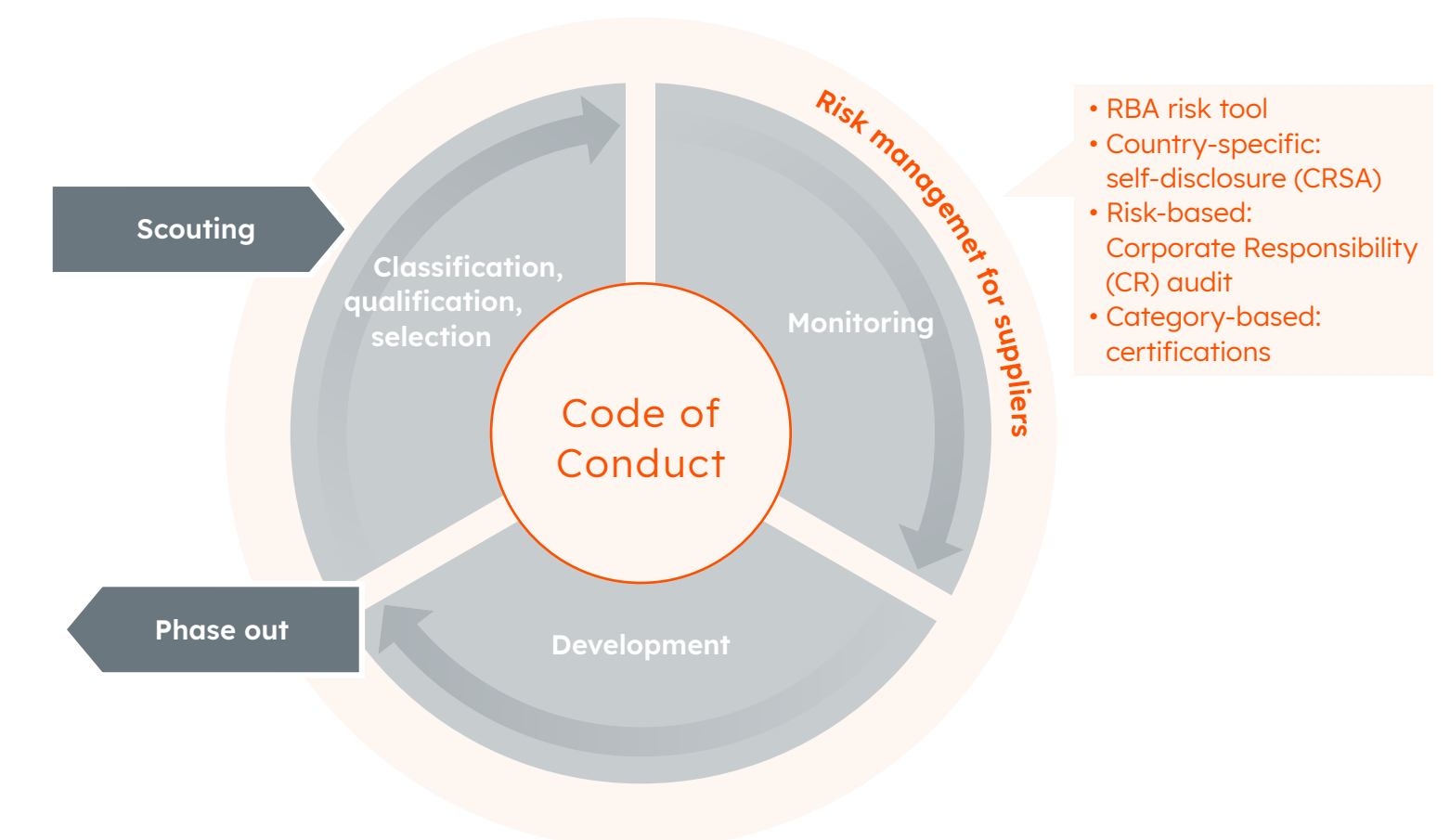
Experts in Environmental Protection, Health & Safety (EHS), Quality, Procurement Excellence and Sustainability are involved in the decision-making processes on matters such as coordinating audits of conflict minerals or updating supplier requirements.

Supplier Management

The importance of sustainability in procurement at ams OSRAM is reflected in defined rules, processes and tools. The specialist Procurement Excellence department is responsible for supplier management processes, which are implemented by 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 collaboration with our suppliers.

Supplier Management Process



Code of Conduct for Suppliers

The [Code of Conduct for Suppliers \(CoC\)](#) is the foundation of our supplier partnerships and takes account of 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 CoC is mandatory for all suppliers with a procurement volume of EUR 50,000 or higher and is also part of the qualification process for new suppliers. Irrespective of the procurement volume, each supplier receives notification of ams OSRAM's General Terms and Conditions and the CoC when purchase orders are placed.

Risk Management

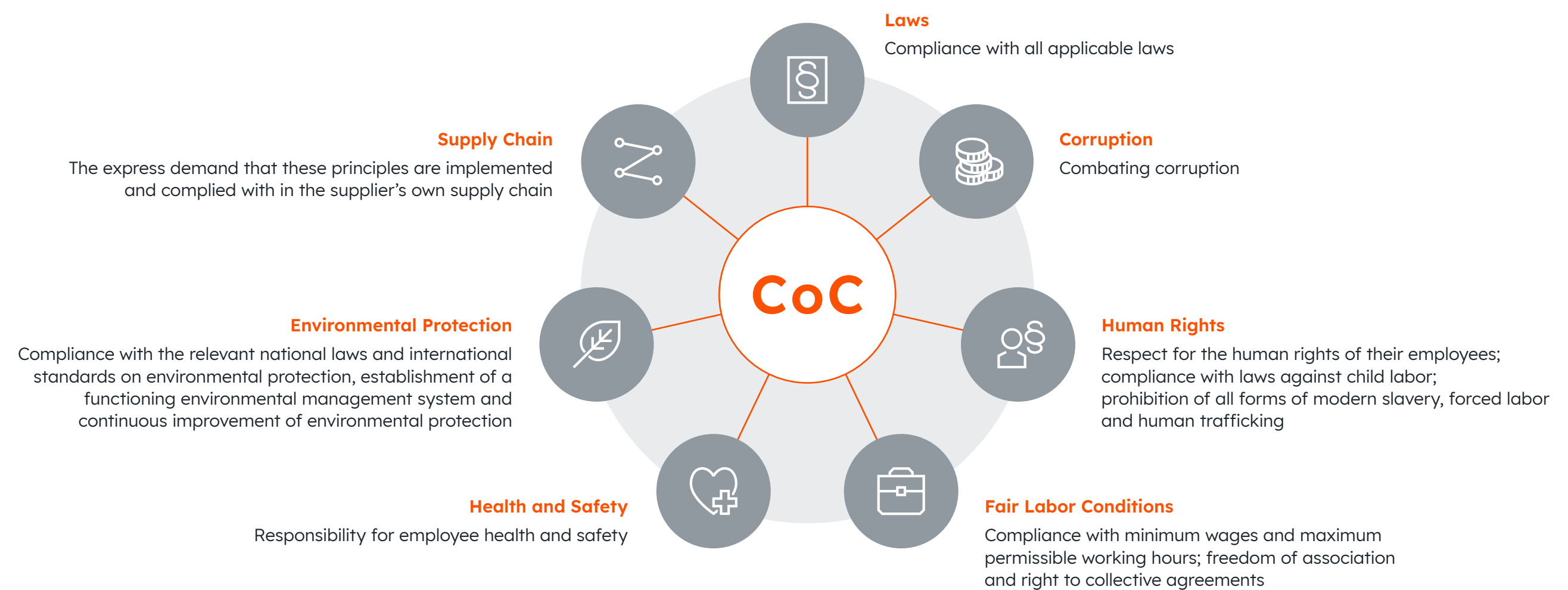
Ongoing reviews of the procurement process to identify possible risks are a core element of supplier management. The handling of supply chain risks specific to procurement and sustainability is also embedded in the company-wide risk management system [ams OSRAM Annual Report, Management Report, 8 Risk 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. For vendors of direct materials, these procurement risks are assessed on an ongoing basis and the findings, along with the purchasing volume and the suppliers' strategic relevance, are used to define critical suppliers. Secondly, there are risks associated with the potential for a supplier's actions to cause harm to people, the environment or society.

We use the risk assessment platform of the Responsible Business Alliance (RBA) to analyze our procurement volume with respect to social and environmental risks. The risk assessment is based on a multitude of indexes, which are used to produce a geographical and a product-related risk classification. The geographical risk classification reflects the supplier risks in the areas of labor, health, safety, the environment and business ethics, and also includes the relevant management systems. The product-related risk classification gives an indication of human rights risks, always based on the labor conditions of the industry and production processes customary in the country of procurement.

A risk map is then produced from the findings, as a basis for further, specific investigation of the potential high-risk suppliers identified. Once the available certificates,

Code of Conduct for Suppliers (CoC)



Corporate Responsibility Self-Assessments (CRSA) and sustainability assessments have been analyzed, those high-risk suppliers can be required to undergo a Corporate Responsibility audit – e.g. in accordance with the RBA standard [Supplier Classification, Qualification and Selection](#).

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, this process also takes account of sustainability-related requirements such as duty of care with regard to human rights, and environmental protection.

These requirements depend on the material sourced, the country in which it is sourced (see [→ Risk Management](#), left column of this page) and the volume purchased from the suppliers. Some of the requirements are as follows:

- Suppliers from countries where social risks are more acute must submit a self-assessment on relevant aspects of corporate responsibility.
- Suppliers of production materials must demonstrate in the selection process that they are certified in accordance with environmental management norm ISO 14001 and comply with the EU RoHS Directive (Restriction of Hazardous Substances in electrical and electronic equipment) and the EU REACH Regulation (Registration, Evaluation, Authorization and Restriction of Chemicals).

- In the qualification phase for automotive suppliers from whom materials are to be purchased directly, the suppliers undergo a process audit as prescribed by VDA 6.3 (German Association of the Automotive Industry). The audit assesses the supplier’s production and service processes.
- Regardless of the materials or services they intend to provide for us, prior to being accepted as a supplier of ams OSRAM these companies are checked against international sanctions lists. Updated lists are automatically uploaded to the export monitoring systems and serve as a basis for also checking existing suppliers every time an order is submitted and before every payment run.
- In the process of selecting suppliers for energy-intensive equipment, anticipated energy consumption and the associated CO₂ emissions are already taken into consideration in the total cost of ownership calculation (TCO). Cost savings over the entire period of use, such as energy savings, are therefore factored into the decision to buy.

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.

Supplier Monitoring and Development

The supplier monitoring process involves mechanisms for systematically reviewing compliance with the requirements, such as performing so-called sustainability ratings for strategically relevant suppliers. Depending on the results, our strategic buyers agree actions with the suppliers as part of the development process, which are to be implemented within a specified period. Should these be unsuccessful or if the results of the ratings bring to light significant omissions compared with ams OSRAM’s requirements, suppliers are no longer considered in the procurement process.

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 human rights, responsible sourcing or specific changes.

To share sustainability expertise with our suppliers, we regularly publish information and training documents in our [Procurement Portal](#).

Objectives, Action Taken, Results and KPIs

We have set ourselves various goals for responsible procurement and made good headway in fiscal year 2022:

STRATEGIC FOCUS	GOAL	PROGRESS/RESULTS 2022
Governance and Integrity	<div><div>— Purchasing volume fully covered by Code of Conduct for Suppliers</div><div>— Entire purchasing volume fully covered by risk classification</div></div>	<div><div>— → Procurement key figures table</div><div>— 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.</div></div>
Decarbonization	<div><div>— Science-based reduction in Scope 3 emissions (purchased goods and services)</div><div>— Greater transparency regarding our suppliers’ carbon footprint</div></div>	<div><div>— → 4.2.3 Greenhouse Gas Emissions</div><div>— Initial steps have been taken to incorporate CO₂ emissions in supplier sustainability ratings which should be implemented in fiscal year 2023.</div><div>— A project for transparency regarding our suppliers’ carbon footprint was initiated and will be extended in 2023.</div></div>
Environmental Protection	<div><div>— Higher percentage of suppliers with ISO 14001 certification for direct materials</div></div>	<div><div>— → Procurement key figures table</div></div>
Society	<div><div>— Higher percentage of high-risk suppliers providing self-assessment</div><div>— Higher coverage of Corporate Responsibility (CR) audits</div><div>— Conflict minerals: higher coverage rates of EMRT/CMRT</div></div>	<div><div>— 92% of the volume purchased from these suppliers is covered by self-assessments → Procurement key figures table</div><div>— A series of CR audits were performed in 2022 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. Action has been taken. The process of working through the development measures is still ongoing.</div><div>— The process of creating transparency with regard to mica and cobalt has been simplified and the technology rolled out globally (→ Procurement key figures table)</div></div>
Structures and Processes	<div><div>— Organizational structures and processes fully harmonized as part of the merger between ams and OSRAM</div></div>	<div><div>— We completed the integration in fiscal year 2022 and now have full transparency regarding our direct suppliers (Tier 1).</div><div>— The supplier qualification process was globally rolled out in 2022, meaning that we now have a standard process.</div><div>— Several on-site training measures took place in 2022 in the APAC region covering the globally rolled-out overall supplier management process and sustainability in the supply chain.</div></div>

5.3 Product Responsibility

In fiscal year 2022, we also started to prepare for the upcoming German Act on Corporate Due Diligence Obligations in Supply Chains (“Lieferkettensorgfaltspflichtengesetz”) → [5.1 Respect for Human Rights](#). As part of this, the risk analysis concept was refined. Implementation is planned for fiscal year 2023. We also worked on implementing the Uyghur Forced Labor Prevention Act (UFLPA).

Procurement Key Figures

	2020	2021	2022
Number of suppliers	12,349	14,654	12,714
Procurement volume (goods and services purchased from third parties)	1.7	2.9	3.1
thereof accounted for by local suppliers ¹	63%	51%	53%
Supplier Codes of Conduct (CoCs)			
Newly signed codes of conduct	339 ²	266 ²	430
Coverage of procurement volume with CoCs in total	96% ²	97% ²	92%
Proportion of direct procurement volume covered by ISO 14001	86% ²	89% ²	94%
Conflict Minerals Reporting Template (CMRT) coverage	98% ²	97% ²	99%
Extended Mineral Reporting Template (EMRT) coverage			81%
Corporate Responsibility Self Assessment (CRSA) coverage			92%

¹ Local suppliers are defined as those that are based in the same country as the purchasing ams OSRAM location.
² 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 life cycle – from 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](#). We describe below the possible negative effects and how we strive to avoid them. 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 just 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 & Systems as part of our market to business strategy. A regionally positioned, global sales and marketing team is responsible for the entire semiconductors business, whose 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 an allotted contact. This “one face to the customer” principle is designed to ensure customer satisfaction.

In fiscal year 2022, the semiconductor business was given its own sales team responsible for the entire portfolio and all customers. As part of the integration process, the sales organization was also positioned along regional rather than global lines during the year under review with the aim of generating synergies and improving the service provided to our customers and partners.

ams OSRAM values customer feedback on the satisfaction and loyalty of our customers and we continually incorporate this feedback in improvements to our processes and structures. Defined processes are initiated in response to customer feedback of all kinds. For instance, the product or process manager within the business units is involved to work on a solution when negative feedback is received. This is also the case where general communication with customers is required, in the form of a customer letter, for example.

Action Taken and Results

We hold “Tech Days” to meet with customers, discuss a joint roadmap and receive their feedback on what we are doing. The pandemic still placed constraints on these events in fiscal year 2022.

We support our customers throughout the purchase decision-making process (customer journey) with various digital and non-digital contact points. Here, the Company’s websites play a crucial role, as do social media channels, newsletters, blogs and digital communication together 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.

There was no extensive customer survey in 2022, as the integration had not yet been fully completed → [1.0 Report Profile, Portfolio Changes](#).

5.3.2 Product Safety and Quality

ams OSRAM strives to offer high levels of quality, safety and reliability in its products and solutions. To ensure that we keep this promise to our customers, we have enshrined appropriate principles within the Company to foster the long-term success of the business. Our customers in the automotive industry set particularly 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 processes 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 Technology Officer (CTO), who has assigned the relevant tasks and managerial authority to the head of Quality. In addition to being responsible for technical and product-related quality, he is 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 the [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 and the head of Operations in the semiconductor segment. At regular intervals, the Qual-

ity Management department reports to the CTO on significant developments. The CTO is also informed immediately of any incident classified as a critical quality issue by the business unit responsible.

Quality and product safety 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 check the current product portfolio regularly regarding 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, such as regarding 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. Relevant internal and customer-oriented measures have been specified and range from simply providing information to customers to a product recall.

Our processes and management systems are regularly certified to quality management norm ISO 9001 and, for automotive customers, also to norm IATF 16949 of the International Automotive Task Force (IATF). In addition, ams OSRAM regularly con-

ducts 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 and environmental stimulations, 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. We believe that high-quality products can only be realized if the early stages of their development include an analysis of safety requirements and an evaluation of expected product quality based on environmental simulations.

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 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, that 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.

5.4 Social Engagement

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.

The end-to-end processes in quality management were harmonized in 2021. These processes are now optimized group-wide, and sub-processes that need to be carried out in a particular chronological or logical order to meet specific customer needs are transparent for all departments and/or functions involved. All certification-related checks went well and support our zero defects strategy. 38 locations in all were certified to ISO 9001 and 16 to IATF 16949.

According to reports from business customers, ams OSRAM achieved a 12% reduction in the defect rate for products under warranty in fiscal year 2022. At the same time, quality costs (non-conformance costs) as a percentage of revenues were cut by 9%.

In fiscal year 2022, the Quality Management department received no indications of possible violations concerning the impact of our products on the health or safety of our customers. Therefore, there were no product recalls and the objective of delivering safe products to our customers was once again achieved.

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. We have appointed one individual to take responsibility for each of the categories referred to. 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.

We also support our employees in their fundraising activities and their personal involvement in projects. We use an online tool to measure the costs and success 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 fiscal year 2022, as part of its social engagement activities, ams OSRAM provided a total of around EUR 2.7 million (previous year: EUR 2.4 million) in donations, sponsorships and membership fees to projects, initiatives, organizations and events.

Social Contribution by Category

	in EUR millions	in %
Cash contributions	2.1	78.5
In-kind giving product or services donations, projects/partnerships or similar	0.4	16.8
Time employee volunteering during paid working hours	0.0	0.3
Management overhead	0.1	4.4
Total	2.7	100.0

Fiscal year 2022 was dominated by the ongoing war in Ukraine. The employees and Management Board of ams OSRAM are greatly moved by the situation of the people affected, and a global fundraising campaign was set up for two aid organizations. Employees could choose between special Ukraine programs run by the German Red Cross and the Austrian organization SOS Kinderdorf. The amount of every employee donation was doubled centrally by ams OSRAM, resulting in a rounded donation total of EUR 500,000. Each organization received half of this sum. The donated funds were used to purchase urgently needed aid supplies and to organize emergency accommodation and medical assistance, for example. We were also able to support several refugee camps with a range of donated items, such as branded towels, backpacks, drinking bottles and similar.

As well as donating funds and items for Ukraine, ams OSRAM was involved in a host of activities in fiscal year 2022 to support a) education, b) art, culture, sport and c) social issues.

Examples of Our Social Engagement



Education Category

- For example, ams OSRAM began partnering with “Production Futures”, an organization that offers young people the opportunity to receive further training and build networks. The support it provides includes help in embarking on a career in the production and events industry, from music events and theater to television, radio and film. As well as this, ams OSRAM contributed its expertise at various educational events staged by British universities for young lighting designers.
- In Malaysia, by supporting the Penang Skills Development Centre, ams OSRAM contributed to developing young tech talents. The STEM School Program based there teaches students the abilities and skills that are in demand for future employment in the industry. As well as donating funds, the participating companies also offer company visits and information sessions.
- In 2022, as a Premium Sponsor ams OSRAM took part in the “Nacht.Schafft.Wissen” (Night. Creates.Knowledge) event in Regensburg (Germany). At this event, companies gave interested visitors the opportunity to learn about the many and varied applications of their technologies, with a range of talks, guided tours and interactive experiments. Employees gave an insight into how LEDs are part and parcel of everyday life and how they are made.



Arts, Culture and Sport Category

- At the “Homeless World Cup” (HWC), an alternative soccer world cup in Graz (Austria), homeless people and those who live on the fringe of society participate in a week-long street soccer tournament. ams OSRAM once again supported the HWC in fiscal year 2022 – this year by kitting out the women’s soccer team.
- Through its involvement in the O’Reilly Charity Golf Classic (USA), as a main sponsor ams OSRAM supported the “Community Foundation of the Ozarks” organization in fiscal year 2022. This organization helps low-income and vulnerable households to find permanent accommodation or modify/renovate existing accommodation. The majority of the organization’s funding is raised through the golf tournament.



Social Engagement Category

As well as the activities launched in connection with the Ukraine war, ams OSRAM supported a number of other social organizations, including.

- A monetary donation to the Migrant Workers’ Centre in Singapore to help migrant workers meet their accommodation costs. This non-governmental organization is committed to fair employment practices and the well-being of workers from a migrant background.
- Leftover branded materials, such as promotional items and clothing, were donated to children receiving support from the childhood cancer charity “Steirische Kinderkrebshilfe”, to the LKH University Clinic in Graz and to the Clemens-Maria Children’s Home in Munich.
- ams OSRAM also made a financial donation to the charity “American Cancer Society” (USA) in 2022. This organization focuses on research into the causes of and treatment for cancer, as well as being dedicated to heightened public awareness and knowledge of cancer and cancer prevention.



Responsibility to Employees

6.0

Our Human Resources Work

Occupational Health and Safety

Diversity and Equality of Opportunities

Employee 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.

Currently, we see two important challenges as a company: Internally, the process of integrating ams with OSRAM is leading to extensive changes to working processes, which is why the harmonization of job gradings and remuneration systems was playing a key role in fiscal year 2022. Externally, there is a persistent and increasingly acute shortage of qualified employees, particularly engineers and in countries such as Malaysia. As far as our HR work was concerned, the Covid-19 pandemic only played an occasional role in the past year and we were able to use the proven processes and procedures from the pre-pandemic years.

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 labor conditions in a work atmosphere that is free of 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 human resources work in principle. The Head of Global HR assumes overall global responsibility for HR matters. She reports directly to the CEO and, as a member of the Management Team, has 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 hiring, diversity & inclusion, talent acquisition, development, training, remuneration and benefits. Mandatory requirements were documented in a group-wide HR guideline in fiscal year 2022, in order to define and communicate standards for human resources work worldwide as part of the integration process. The underlying sub-guidelines have also been reviewed and revised in the context of the combined Company as a whole.

Merger and Integration

The planned reduction in personnel due to the merger and integration of ams and OSRAM based on works agreements made in 2021 continued in fiscal year 2022. In this context, statements made in the previous year remain valid: Compulsory redundancies, for example, could be waived where job cuts were necessary. Above all, the measures were on a voluntary, socially responsible basis. Early retirement played a particularly important role alongside termination agreements. In Germany, jobs

were affected as planned by the integration. Globally, jobs were lost in Singapore, for instance, owing to the consolidation of two sites.

Fluctuation (see table below) was lower in 2022 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 fluctuation rate at short intervals. In summer 2022 we also 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, had increased by 2% as at December 31, 2022, to 364 (previous year: 357).

As at the end of the fiscal year, total headcount at ams OSRAM was 22,461 employees (previous year: 24,499).



Employees by Contract Type

	EMEA		Americas		Asia/Pacific		Total	
	2021	2022	2021	2022	2021	2022	2021	2022
Employees with permanent contracts	9,183	9,010	1,478	1,008	9,974	9,085	20,635	19,103
thereof female	2,963	2,951	447	299	5,113	4,616	8,523	7,866
Employees with temporary contracts	201	247	0	1	3,663	3,110	3,864	3,358
thereof female	92	115	0	1	2,168	1,803	2,260	1,919
Total	9,384	9,257	1,478	1,009	13,637	12,195	24,499	22,461
thereof female	3,055	3,066	447	300	7,281	6,419	10,783	9,785
Workers outside the Company								
Temporary workers		271		2		91	357	364
thereof female		95		1		45		141

Employees by Age Category, Gender, and Region

	EMEA						Americas						Asia/Pacific						Total					
absolute figure and proportion of workforce	2020		2021		2022		2020		2021		2022		2020		2021		2022		2020		2021		2022	
Male	6,979	65%	6,329	67%	6,191	67%	1,633	55%	1,031	70%	709	70%	7,310	45%	6,356	47%	5,776	47%	15,922	53%	13,716	56%	12,676	56%
<30 years	637	6%	499	5%	487	5%	251	8%	134	9%	76	8%	1,419	9%	984	7%	870	7%	2,307	8%	1,617	7%	1,433	6%
30–49 years	4,123	38%	3,534	38%	3,382	37%	828	28%	413	28%	257	25%	5,317	33%	4,646	34%	4,120	34%	10,268	34%	8,593	35%	7,759	35%
>49 years	2,219	21%	2,296	24%	2,322	25%	554	19%	484	33%	376	37%	574	4%	726	5%	786	6%	3,347	11%	3,506	14%	3,484	16%
Female	3,767	35%	3,055	33%	3,066	33%	1,346	45%	447	30%	300	30%	8,806	55%	7,281	53%	6,419	53%	13,919	47%	10,783	44%	9,785	44%
<30 years	356	3%	237	3%	244	3%	288	10%	54	4%	34	3%	2,652	16%	1,815	13%	1,479	12%	3,296	11%	2,106	9%	1,757	8%
30–49 years	2,136	20%	1,712	18%	1,700	18%	659	22%	184	12%	118	12%	5,601	35%	4,832	35%	4,321	35%	8,396	28%	6,728	27%	6,139	27%
>49 years	1,275	12%	1,106	12%	1,122	12%	399	13%	209	14%	148	15%	553	3%	634	5%	619	5%	2,227	7%	1,949	8%	1,889	8%
Total	10,746	100%	9,384	100%	9,257	100%	2,979	100%	1,478	100%	1,009	100%	16,116	100%	13,637	100%	12,195	100%	29,753 ¹	100%	24,499	100%	22,461	100%

¹ The total number deviates slightly from the detailed information above due to system harmonization and integration.

New Hires by Age Category, Gender, and Region

absolute figure and proportion of workforce	EMEA						Americas						Asia/Pacific						Total					
	2020		2021		2022		2020		2021		2022		2020		2021		2022		2020		2021		2022	
Male	400	70%	365	61%	350	65%	251	48%	295	56%	108	68%	1,465	49%	670	47%	955	53%	2,116	52%	1,330	52%	1,413	57%
<30 years	90	16%	124	21%	85	16%	84	16%	119	23%	40	25%	789	26%	316	22%	378	21%	963	23%	559	22%	503	20%
30–49 years	254	44%	202	34%	227	42%	129	24%	125	24%	42	27%	632	21%	325	23%	538	30%	1,015	25%	652	26%	807	32%
>49 years	56	10%	39	7%	38	7%	38	7%	51	10%	26	16%	44	1%	29	2%	39	2%	138	3%	119	5%	103	4%
Female	175	30%	231	39%	188	35%	276	52%	228	44%	50	32%	1,536	51%	759	53%	841	47%	1,987	48%	1,218	48%	1,079	43%
<30 years	55	10%	72	12%	62	12%	140	27%	98	19%	12	8%	817	27%	393	28%	445	25%	1,012	25%	563	22%	519	21%
30–49 years	106	18%	129	22%	107	20%	114	22%	92	18%	24	15%	659	22%	351	25%	379	21%	879	21%	572	22%	510	20%
>49 years	14	2%	30	5%	19	4%	22	4%	38	7%	14	9%	60	2%	15	1%	17	1%	96	2%	83	3%	50	2%
Total	575	100%	596	100%	538	100%	527	100%	523	100%	158	100%	3,001	100%	1,429	100%	1,796	100%	4,103	100%	2,548	100%	2,492	100%

Employee Turnover by Age Category, Gender, and Region

absolute figure and proportion of workforce	EMEA						Americas						Asia/Pacific						Total					
	2020		2021		2022		2020		2021		2022		2020		2021		2022		2020		2021		2022	
Male	639	9%	1,047	17%	474	8%	249	15%	583	57%	327	46%	1,295	18%	1,764	28%	1,319	23%	2,183	14%	3,394	25%	2,120	17%
<30 years	88	14%	161	32%	76	16%	54	22%	121	90%	63	83%	550	39%	567	58%	333	38%	692	30%	849	53%	472	33%
30–49 years	345	8%	580	16%	266	8%	120	14%	294	71%	141	55%	668	13%	1,050	23%	883	21%	1,133	11%	1,924	22%	1,290	17%
>49 years	206	9%	306	13%	132	6%	75	14%	168	35%	123	33%	77	13%	147	20%	103	13%	358	11%	621	18%	358	10%
Female	361	10%	965	32%	222	7%	257	19%	270	60%	131	44%	2,036	23%	2,277	31%	1,493	23%	2,654	19%	3,512	33%	1,846	19%
<30 years	55	15%	129	54%	30	12%	83	29%	74	137%	14	41%	989	37%	944	52%	531	36%	1,127	34%	1,147	54%	575	33%
30–49 years	195	9%	423	25%	129	8%	110	17%	103	56%	58	49%	965	17%	1,235	26%	832	19%	1,270	15%	1,761	26%	1,019	17%
>49 years	111	9%	413	37%	63	6%	64	16%	93	44%	59	40%	82	15%	98	15%	130	21%	257	12%	604	31%	252	13%
Total	1,000	9%	2,012	21%	696	8%	506	17%	853	58%	458	45%	3,331	21%	4,041	30%	2,812	23%	4,837	16%	6,906	28%	3,966	18%

6.2 Occupational Health and Safety

ams OSRAM is committed as part of its EHS policy 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 responsibility to society as a whole and reduce economic losses.

Responsibilities, Structures and Processes

Overall responsibility for environmental protection, occupational health and safety within the Group lies with the Chief Technology Officer (CTO), who has delegated tasks and managerial authority to the head of the corporate Environmental Protection, Health and Safety department (EHS). 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 Ang Mo Kio and Tampines locations (both Singapore), the locations in Wuxi, Kunshan DO and Foshan (all China), Penang and Kulim (both Malaysia), Calamba (Philippines) and Treviso AMLS (Italy) as well as the co-headquarters in Munich (Germany) are externally certified according to the ISO 45001 standard for occupational health and safety management. During the year under review, six 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 plant in Foshan was again additionally certified to amfori BSCI, an internationally recognized standard for social accountability (formerly Business Social Compliance Initiative).

Development and sales locations with more than 50 employees operate a reduced management system but also contribute data to the health and safety indicators. 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 the procurement of the same 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 instructed to report hazardous situations (and can do so without fear of reprisals) and can put 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 they may be exposed to. 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 work. We therefore voluntarily offer health insurance for our employees in most countries in which we operate and where such insurance is not legally mandated.

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 EHS. Selected suppliers are also asked to undergo Corporate Responsibility audits → [5.2 Supply Chain Management](#). We place greater 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 key metrics 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 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 2022. Local examples of these measures include the following:

- More EHS days were held at the locations in Kulim (Malaysia) and Calamba (Philippines), sharing detailed information with employees about potentially hazardous sources.
- In Kulim, an EHS workshop was also held at which the EHS teams from Penang and Kulim discussed best practices for continuously refining their activities.
- At the Bruntál location (Czech Republic), the logistics area underwent safety improvements.
- At the site in Regensburg (Germany) the spotlight turned to safety on traffic routes at the site. This involved signposting hazard sources and issuing new rules on the modern work environment.

- At the Munich location, the workstations were relocated to a new building designed along flexi-office lines. In addition to the new risk assessment, an evacuation exercise was carried out for the first time since the outbreak of the Covid-19 pandemic.
- In the year under review a global survey of employees was conducted covering issues such as psychological stress in general, and specifically during the pandemic. The results were evaluated with external scientific support, revealing the need for a global working group. This group started its program with the aim of contributing to a corporate culture with a focus on the mental health, well-being and resilience of employees. Initial measures such as special training for employees and managers have already been rolled out.

The global target for LTIFR for fiscal year 2022 was not met. This parameter was well above the target figure despite the number of accidents being on a par with the previous year.

Of the accidents reported, one was so serious that the employee affected had not recovered, or was not expected to recover, within six months.

The SR, however, was below the target and lower than in the previous year. Compared with the previous year, this indicator was less affected by longer-term cases from prior years.

Occupational Health and Safety Key Figures

	2020	2021	2022	Target 2022
Global LTIFR ¹	0.31	0.23	0.27	0.22
LTIFR EMEA	0.34	0.39	0.47	
LTIFR Americas	0.47	0.30	1.01	
LTIFR Asia/Pacific	0.28	0.13	0.10	
Global SR ¹	5.0	7.4	4.7	7.0
SR EMEA	9.6	13.2	9.4	
SR Americas	15.4	14.6	7.0	
SR Asia/Pacific	1.4	3.0	1.9	
Number of accidents resulting in absence from work	87	63	64	
Number of high-consequence accidents ²	2	3	1	
Number of cases of recognized occupational illness ³	0	3	0	

¹ 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.

² 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.

³ 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 in the previous year, there were no deaths in the last fiscal year resulting from an accident at work or an occupational illness among our own employees or those of subcontractors at our locations.

In fiscal year 2022, no relevant penalties or fines amounting to more than EUR 10,000 were imposed on ams OSRAM for breaches of occupational safety regulations.

Dealing with the Covid-19 Pandemic

From March 2021 onwards, ams OSRAM faced up to the challenges of the Covid-19 pandemic with a joint global task force team at headquarters and local crisis management teams or task forces at the locations. In the context of health and safety at the workplace, the focus was on preventing clusters of infection. Local rules and regulations were observed and implemented to this end. The implementation of the measures was supported by regular communications to keep employees informed.

In light of dwindling occurrences of infection and the easing of official regulations, the global task force and the majority of the local crisis management teams were disbanded as of December 31, 2022.

The Covid-19 pandemic meant that other activities regarding occupational health and safety in the locations once again had to be given less priority.

As a global company with subsidiaries in 49 countries, diversity and inclusion are of great importance to us. As at the end of fiscal year 2022, employees of 85 (previous year: 79) different nationalities were employed at ams OSRAM. We firmly believe that diversity & inclusion has a positive effect on our business in the various markets. Not only do relationships with international customers and suppliers require cultural awareness and flexibility, but we also find that diverse teams have a strong ability for innovation. We define diversity not only with regard to the employees' cultural background, age, sexual identity, gender, physical limitations, religion, and beliefs, but also in terms of the skills they possess.

Guidelines, Structures and Processes

To put these beliefs into practice, OSRAM signed the "Charta der Vielfalt" (Diversity Charter) in 2013, a voluntary commitment by German companies which ams OSRAM is continuing. ams OSRAM also signs up to other voluntary initiatives aimed at reinforcing the importance of this issue within the Company.

We respect the human and personal rights of all employees and, in particular, respect the personal dignity and privacy of our employees, business partners and customers. In accordance with our corporate principles and the employment laws of the countries in which we operate, we do not tolerate discrimination of any kind, sexual harassment, workplace bullying or other personal attacks on individuals. These principles are defined in our ams OSRAM Code of Conduct → [3.1.1 Corporate Values](#), which is intended to exclude the possibility of any employee being discriminated against because of one of the aforementioned characteristics and to promote equality of opportunity.

The principle of equality of opportunity is also reflected in our human relations work → [6.1 Our Human Resources Work](#): For the recruitment process, the performance management process (PMP) → [6.5 Attractiveness as an Employer, Employee Satisfaction and Remuneration](#), selection for talent programs → [6.4 People Development](#) and the classification of applicants, the principle of dual control applies as a minimum requirement, to avoid any possible unequal treatment.

Diversity & inclusion is one of a number of factors that are used at ams OSRAM in recruitment and in making internal appointments. 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.

The principle of the same pay for the same work (equal pay) applies at ams OSRAM. At the end of fiscal year 2022, a gender pay gap analysis was undertaken. From 2023, this analysis is to be carried out annually.

Share of Female Employees

	First management level ¹			Second management level ²			Total		
	2020 ³	2021	2022	2020 ³	2021 ³	2022 ⁴	2020 ³	2021	2022
Total	352	347	351	2,173	2,217	4,161	28,406	24,499	22,461
<30 years		1	1		10	26		3,723	3,190
30–49 years		115	118		1,313	2,595		15,321	13,898
>49 years		231	232		894	1,540		5,455	5,373
thereof female	50	47	45	439	482	890	13,446	10,783	9,785
Share (in %)	14%	14%	13%	20%	22%	21%	47%	44%	44%
<30 years		0	0		6	10		2,106	1,757
30–49 years		18	16		334	661		6,728	6,139
>49 years		29	29		142	219		1,949	1,889

¹ Senior managers who belong to the executive level of the organization

² Managers above pay scale

³ The employee figures for fiscal year 2020 do not include the employees of the Automotive Lighting business.

⁴ 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	2021	2022	2021	2022	2021	2022
Full-time employees	8,301	8,186	1,456	976	13,637	12,195	23,394	21,357
thereof female	2,368	2,380	440	290	7,281	6,419	10,089	9,089
Part-time employees	1,083	1,071	22	33	0	0	1,105	1,104
thereof female	687	686	7	10	0	0	694	696
Total	9,384	9,257	1,478	1,009	13,637	12,195	24,499	22,461
thereof female	3,055	3,066	447	300	7,281	6,419	10,783	9,785

Objectives, Action Taken, Results and KPIs

As part of our diversity & inclusion strategy, we aspire to further 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 for the proportion of women in the first two management levels of the Group as a whole at 25% in fiscal year 2021. This target is to be achieved by the end of 2026. In 2022, the figure was 21% (previous year: 21%).

To attract young female staff, ams OSRAM exploits its cachet as a technology company in Germany to participate in activities – such as dedicated job fairs and events – that aim to make technology careers more attractive to women.

In line with our strategy, more special diversity & inclusion programs and initiatives are to be firmly established in our corporate culture. We have appointed Diversity Ambassadors in the business units and regions to help implement them. This initiative will help embed diversity & inclusion throughout the Company. Employee groups provide an opportunity for all employees to discuss particular topics or diversity aspects, such as the “flexwork Community”, the “Women Network” and “Generation Tomorrow”, which seeks to give a voice to the young generation. We also held another successful Diversity Day (or Month) in 2022.

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 (aOU).

ams OSRAM has established a performance management process (PMP) for employee development, which involves a regular and structured dialog between employees and line managers. 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 and implementing development targets.

Objectives, Action Taken, Results and KPIs

Our objective is to introduce appropriate measures to enable employees to develop, thereby also enhancing our attractiveness as an employer and developing a pool of talents for the various career paths.

Apprenticeships

Our apprenticeships play a major role in securing the next generation of employees. We currently provide training in 13 recognized technical trades, two commercial occupations and eight degree apprenticeships. In fiscal year 2022, 161 (previous year: 192) young people were employed at ams OSRAM as part of their training or degree apprenticeship.

Career Paths

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, 2022, 11,924 (previous year: 12,390) employees were assigned to the various career paths.

Management Development

Implementation of our leadership principles and core values plays a key role in the Leadership career path. We offer participants the opportunity, depending on their experience, to work through different programs to hone their management skills. In addition to individual coaching, the focus is on entrepreneurship, innovation, strategic decision-making, performance management, nurturing of talent and change management. 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.

Talent Programs (Cross-Career Path)

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 and personal development, these programs focus on preparing staff for future roles at local or global level and give them the opportunity to gain cross-functional and cross-cultural experiences. Participants benefit from targeted development measures, such as technical and personality-related training and coaching to identify their own strengths and the opportunity to expand their network. In addition to Germany, China and Malaysia, local talent programs have been run in Austria and Singapore since 2022. In fiscal year 2022, a total of 148 (previous year: 136) employees took part in the local and global talent programs, which equates to 2% of indirect employees.

Breakdown by Career Paths

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

Recruitments to Management Positions

	2020 ³	2021		2022	
	Total	Total	thereof female	Total	thereof female
Number of recruitments					
Senior management positions ¹	65	33	3	63	10
thereof internal recruitments	41	18	1	47	7
Management positions ²	259	213	60	520	139
thereof internal recruitments	187	146	44	286	85
Total management positions	324	246	63	583	149
thereof total internal recruitments	228	164	45	333	92

¹ Senior managers who belong to the executive level of the organization
² Managers above pay scale
³ The employee figures for the 2020 financial year do not include the employees of the Automotive Lighting business.

Talents are identified and may be nominated for the talent programs in the annual performance management process (PMP) → [6.5 Attractiveness as an Employer, Employee Satisfaction and Remuneration](#).

Key Expert Program

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. This structure is regularly reviewed and adjusted if necessary. In addition to outstanding knowledge in the defined fields, our key experts are strong in communication and networking so that they can share their knowledge within the Company, advise management on technological issues, and thus also influence decisions. As of December 31, 2022, 236 Key Experts had been identified and appointed worldwide.

ams OSRAM University (aOU)

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. The aim is to make training content easily accessible against the backdrop of new forms of working.

In fiscal year 2022, ams OSRAM spent a total of EUR 7.6 million (previous year: EUR 6.2 million) on training its employees. Each employee received 6.4 hours of training over the course of the year (previous year: 7.1 hours). The increase in training expenses is attributable to the further expansion in the range of online training opportunities.

Average Hours of Training per Employee by Function

	Production and service			Research and development			Administration and selling			Total workforce		
	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
Number of employees by function (in FTE)	21,665	18,423	16,479	3,732	3,445	3,453	4,634	4,262	3,389	30,031	26,130	23,322
Average hours of training per employee			4.83			12.12			8.25	5.0	7.1	6.4
Average hours of training per female employee			3.12			16.44			10.20			4.99

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 are convinced that the satisfaction of our employees and our attractiveness as an employer are indicators of how we deal with 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](#). Information on expenses in connection with remuneration and benefits can be found in the [ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, 4 Expenses](#).

Guidelines, Structures and Processes

Attractiveness as an Employer

Attractiveness as an Employer is becoming increasingly important, even more so in view of the severe global shortage of skilled specialists. In 2022, we developed a new employer positioning that is aligned with our corporate goals and provides a strategic framework for our HR work. We intend to describe our employer promise in an Employer Branding Guide in fiscal year 2023 to establish uniform standards throughout the Group.

ams OSRAM also regularly takes part in or supports training days, graduate fairs and other relevant events to present ams OSRAM as an employer of choice. Because of the Covid-19 pandemic, some of these events were still held online, and others face-to-face in compliance with the applicable safety measures.

Employee Satisfaction and Remuneration

We use surveys or pulse surveys to gather feedback from employees on organizational and other topics. In 2022, we carried out the first worldwide employee survey of ams OSRAM to measure employees' satisfaction, engagement and loyalty. A two-year cycle is planned for employee surveys, to enable us to evaluate the relevant KPIs on an ongoing basis.

To create opportunities for dialogue, we regularly hold town hall meetings with our management and organize webcasts and round tables 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 the [ams OSRAM Annual Report, Management Report, 5 Employees](#) and about personnel expenses in the [ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, 4 Expenses](#).

With regard to fair pay, we view it as self-evident that we comply with local legal requirements. We encourage our employees' performance with a clear system of incentives. At ams OSRAM in Germany¹, the collectively agreed remuneration system forms the basis for equal pay for workers covered by this scheme. Roles that are above the pay scale are also treated equally thanks to the non-discriminatory criteria used. The previous processes for assessing roles were revised and harmonized in the course of fiscal year 2021. The new approach has been applied in the Group as a whole since January 2022. 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.

We also see the right to freedom of association and the opportunity to conclude collective agreements on matters such as remuneration as aspects of fair labor conditions.

Objectives, Action Taken and Results

Attractiveness as an Employer

To enhance our attractiveness as an employer, for fiscal year 2022 we set ourselves the goal of developing a framework for positioning ams OSRAM as an employer in a consistent manner worldwide. This involved standardizing our media activities and overhauling our careers website including the jobs fair, creating an attractive presence for potential applicants wherever they are. The onboarding process for familiarizing new employees has also been harmonized.

In 2022 we also made greater use of our social media channels to increase our visibility among potential employees. In December 2022 we had over 480,000 followers, which means we reached 33% more users than in the previous year.

Employee Satisfaction and Remuneration

A global employee survey was conducted during the summer. To ascertain the mood among the widest possible cross-section of employees, our target for the anonymous survey was a participation rate of at least 75%. In the end, 78% took part. The results vary depending on location, business unit, position and teams. Around 80% of all respondents said they are committed for the long term, which is in line with other companies in our sector. Compared with companies that are undergoing a similar transformation, ams OSRAM was rated better in all areas.

Collective bargaining agreements are in place at our European companies² with the largest numbers of employees. At the end of fiscal year 2022, 99% 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. 55% of employees at German ams subsidiaries were covered by such agreements. In Austria, 100% of the employees of ams OSRAM subsidiaries were covered.

¹ i.e. at former OSRAM companies

² In Germany, Austria, Slovakia, Italy and the Czech Republic



7.0 Appendix

Assurance Report

GRI, UN Global Compact and SASB Index

EU Taxonomy

TCFD Recommendations

Imprint and Contact

7.1 Assurance Report

To the Management Board
ams-OSRAM AG,
Premstätten

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 consolidated non-financial report according to GRI Standards (“NFI report”) for the financial year 2022, which has been published as Sustainability Report 2022 of **ams-OSRAM AG, Premstätten** (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” 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 sustainabil-

ity 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, which are published as part of sustainability reporting.

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” in all material respects. The audit of the disclosures included in the NFI report in accordance with the EU Taxonomy Regulation (Annex 7.3) and the disclosures related to the TCFD-recommendations (Annex 7.4) is not part of our engagement.

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;
- 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” 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 of 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 26, 2023

KPMG Austria GmbH
Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

Mag. Peter Ertl
Wirtschaftsprüfer
(Austrian Chartered Accountant)

7.2 GRI Index and SASB¹

GRI 1: Foundation 2021				ams OSRAM has reported in accordance with the GRI Standards for the period 1.1.–31.12.2022.	
STANDARD	INDICATOR		PAGES	COMMENT	
2	2-1	Organizational details	6		
2	2-2	Entities included in the organization's sustainability reporting	4, 6		
2	2-3	Reporting period, frequency and contact point	4, 69		
2	2-4	Restatements of information	4		
2	2-5	External assurance	54/55		
2	2-6	Activities, value chain and other business relationships	6, 27–29		
2	2-7	Employees	44/45		
2	2-8	Workers who are not employees	44/45		
2	2-9	Governance structure and composition	9–11	No underrepresented groups are represented on the Management Board or the Supervisory Board. Different competencies and also “stakeholder” perspectives are covered by the elected Supervisory Board members; these can be viewed in the CVs https://ams-osram.com/about-us/supervisory-board .	
2	2-10	Nomination and selection of the highest governance body	9/10	Voting results for the Supervisory Board election can be viewed on the Company's website	
2	2-11	Chair of the highest governance body	11		
2	2-12	Role of the highest governance body in overseeing the management of impacts	11	Due to our listing on the stock exchange, we generally pursue a congruent information policy. Information for all stakeholders is available on the Company's website	
2	2-13	Delegation of responsibility for managing impacts	9/10, 12		
2	2-14	Role of the highest governance body in sustainability reporting	12		
2	2-15	Conflicts of interest	11		
2	2-16	Communication of critical concerns	18		
2	2-17	Collective knowledge of the highest governance body	10		
2	2-18	Evaluation of the performance of the highest governance body	10		
2	2-19	Remuneration policies	11		
2	2-20	Process to determine remuneration	11	In the current remuneration policy, references from shareholders/shareholders and their implementation are presented (Appendix). Chapter 3.0/3.1: The current remuneration of the members of the Management Board and the Supervisory Board is based on the remuneration principles, respectively the Remuneration Policy , resolved by the Company's Annual General Meeting on June 2, 2021. An external independent consultant regularly supports the Remuneration Committee. When commissioning this advice, the specified independence requirements for remuneration consultants are strictly observed. For details, see ams OSRAM Annual Report, Remuneration Report . Voting results of the Annual General Meeting, including on remuneration	
2	2-21	Annual total compensation ratio	—	The remuneration report for fiscal year 2022 ams OSRAM Annual Report, Compensation Report is generally based in 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.	

¹ Sustainability Accounting Standards Board (SASB) Industry Standard “Semiconductors”

STANDARD	INDICATOR		PAGES	COMMENT
2	2-22	Statement on sustainable development strategy	3	
2	2-23	Policy commitments	3, 9, 34	
2	2-24	Embedding policy commitments	3, 9, 34	
2	2-25	Processes to remediate negative impacts	9, 19, 34	
2	2-26	Mechanisms for seeking advice and raising concerns	19	
2	2-27	Compliance with laws and regulations	20, 24	
2	2-28	Membership associations	16/17, 29	<p>Our political involvement is limited to memberships in industry associations. In terms of contributions and the significance of our activities, the following associations are the most relevant:</p> <ul style="list-style-type: none">— German Electrical and Electronic Manufacturers’ Association (Zentralverband der Elektrotechnik- und Elektronikindustrie Deutschland – ZVEI) We are active in the Semiconductor and Lighting sections of this association. There we participate in the development of industry positions that are essential for our business activities. We pay particular attention to the effects of the EU Green Deal, ensuring that we can comply with legal requirements (directives/regulations), especially on issues relating to take-back and recycling and/or repair as well as materials (RoHS, REACH). In addition, we are represented on the board of the Lighting Association until the end of 2022.— LightingEurope Here, we are particularly concerned with specific topics in the lighting sector of the EU. We are currently represented on the Managing Board and in the most important working groups “Sound Product Rules”, “Value of Light” and “Sustainability”. This membership will be transferred to the acquirer OPTOTRONIK GmbH on January 1, 2023 as part of the sale of the DI DS division. ams OSRAM will then no longer be a member of LightingEurope.— VDA – Verband der Automobilindustrie Deutschland, Herstellergruppe III (German Association of the Automotive Industry, Manufacturer Group III) Through this association, among other things, technical specifications and standards are developed in the automotive sector, which are very significant for the development of our products and solutions. Apart from acquiring such information/authorizations/certificates, we are not active in this association.— ASSIL – Associazione Nazionale Produttori Illuminazione (Italy) Our activities here are limited to the provision of technical expertise for the preparation of dressing positions. Apart from that, it is the platform for light-specific information in Italy and Europe. We also have comparable memberships in France, Austria and the United Kingdom.— Obligatory memberships in employers’ and business associations We do not take an active role in these associations, but follow the resolutions and general information provided by these associations. In Germany, for example, we thus subject ourselves to collective bargaining agreements.
2	2-29	Approach to stakeholder engagement	3, 16/17	
2	2-30	Collective bargaining agreements	52	
3	3-1	Process to determine material topics	12/13	
3	3-2	List of material topics	13	



STANDARD	INDICATOR		PAGES	COMMENT																													
MATERIAL TOPICS																																	
Integrity & Responsibility																																	
3 - Management of material topics	3-3	Management of material topics	18/19	b. In fiscal year 2022, no corresponding corporate communications on business relationships and their potential negative effects were published at https://ams-osram.com/about-us/investor-relations/financial-news/financial-news-2022 .																													
203 - Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	7, 40/41																														
	203-2	Significant indirect economic impacts	7, 40/41																														
205 - Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	—	a. With the upcoming introduction of reporting according to CSRD, ams OSRAM will examine a possible extension of reporting.																													
	205-2	Communication and training about anti-corruption policies and procedures	19/20	<p>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 2022 as required by GRI.</p> <table><tr><th colspan="5">Compliance Training by Region</th></tr><tr><th>Number of employees</th><th>Compliance (Basic)¹</th><th>Anti-Corruption²</th><th>Antitrust²</th><th>Data Privacy²</th></tr><tr><td>Employees trained in 2022</td><td>3,847</td><td>1,734</td><td>1,720</td><td>1,934</td></tr><tr><td>thereof EMEA</td><td>2,181</td><td>712</td><td>677</td><td>793</td></tr><tr><td>thereof Americas</td><td>229</td><td>83</td><td>74</td><td>111</td></tr><tr><td>thereof Asia/Pacific</td><td>1,437</td><td>939</td><td>969</td><td>1,030</td></tr></table> <p>¹ Classroom-based training ² Online training</p>	Compliance Training by Region					Number of employees	Compliance (Basic) ¹	Anti-Corruption ²	Antitrust ²	Data Privacy ²	Employees trained in 2022	3,847	1,734	1,720	1,934	thereof EMEA	2,181	712	677	793	thereof Americas	229	83	74	111	thereof Asia/Pacific	1,437	939	969
Compliance Training by Region																																	
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thereof Americas	229	83	74	111																													
thereof Asia/Pacific	1,437	939	969	1,030																													
	205-3	Confirmed incidents of corruption and actions taken	20	c. We plan to expand our reporting in this area as part of the German and European Supply Chain Sourcing Obligations Act.																													
206 - Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	20																														
415 - Public Policy 2016	415-1	Political contributions	—	Expenditure on political campaigns and political organizations: EUR 0.																													
418 - Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	21																														
Geopolitics																																	
3 - Management of material topics	3-3	Management of material topics	17, 37	The risks listed in chapter → 3.2.5 Risk management and geopolitical risks 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 ams OSRAM Annual Report, Notes to the consolidated financial statement and → 5.2 Supply Chain Management for material procurement.																													
	201-2	Financial implications and other risks and opportunities due to climate change	7, 65–68	For details, see → 7.3 EU Taxonomy .																													

STANDARD	INDICATOR		PAGES	COMMENT
Climate Change				
3 - Management of material topics	3-3	Management of material topics	23/24, 26/27	
305 - Emissions 2016	305-1	Direct (Scope 1) GHG emissions	7, 27	Tools of the Bavarian State Office for the Environment
	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	
	305-4	GHG emissions intensity	27	
	305-5	Reduction of GHG emissions	27	
	305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	26/27	
Energy				
3 - Management of material topics	3-3	Management of material topics	23–25	
302 - Energy 2016	302-1	Energy consumption within the organization	25	g. Source: Bavarian State Office for the Environment
	302-2	Energy consumption outside of the organization	25	We intend to expand our reporting on this indicator in the medium term in connection with the preparation of LCAs (LCAs enable detailed Scope 3 tracking via the Company Carbon Footprint (CCF)).
	302-3	Energy intensity	25	
	302-4	Reduction of energy consumption	25	With the upcoming introduction of reporting according to CSRD, ams OSRAM will examine a possible extension of reporting.
	302-5	Reductions in energy requirements of products and services	—	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).
Use of Resources & Circular Economy				
3 - Management of material topics	3-3	Management of material topics	23, 29	We intend to expand our reporting on this indicator in the medium term in connection with the preparation of LCAs.
306 - Waste 2020	306-1	Waste generation and significant waste-related impacts	30/31	
	306-2	Management of significant waste-related impacts	30/31	
	306-3	Waste generated	31	
	306-4	Waste diverted from disposal	31	
	306-5	Waste directed to disposal	31	In the case of waste, we do not yet record the data separately everywhere, but we do distinguish between hazardous and non-hazardous waste for disposal.

STANDARD	INDICATOR		PAGES	COMMENT
Water				
3 - Management of material topics	3-3	Management of material topics	31/32	
303 - Water and Effluents 2018	303-1	Interactions with water as a shared resource	31/32	
	303-2	Management of water discharge-related impacts	31	
	303-3	Water withdrawal	31/32	
	303-4	Water discharge	31/32	
	303-5	Water consumption	31/32	
Human Rights				
3 - Management of material topics	3-3	Management of material topics	35	
204 - Procurement Practices 2016	204-1	Proportion of spending on local suppliers	38	
414 - Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	38	
	414-2	Negative social impacts in the supply chain and actions taken	—	In the context of the German and European supply chain due diligence act, we plan to expand our risk analysis, implement a reporting system, and report accordingly.
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	34	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	34	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	34	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	37	
	308-2	Negative environmental impacts in the supply chain and actions	—	Within the framework of the German and European Supply Chain Due Diligence Act, we are planning to expand our risk analysis and possible remedial measures and corresponding reporting.
Product Stewardship				
3 - Management of material topics	3-3	Management of material topics	38–40	
416 - Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	39	
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	24, 48	

STANDARD	INDICATOR		PAGES	COMMENT
Working Conditions				
3 - Management of material topics	3-3	Management of material topics		
401 - Employment 2016	401-1	New employee hires and employee turnover	45	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	—	With the upcoming introduction of reporting according to CSRD, ams OSRAM will examine a possible extension of reporting.
	401-3	Parental leave	—	With the upcoming introduction of CSRD reporting, ams OSRAM plans to expand its reporting in this regard.
403 - Occupational Health and Safety 2018	403-1	Occupational health and safety management system	46	
	403-2	Hazard identification, risk assessment, and incident investigation	46/47	
	403-3	Occupational health services	46	
	403-4	Worker participation, consultation, and communication on occupational health and safety	46	
	403-5	Worker training on occupational health and safety	46	
	403-6	Promotion of worker health	46	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	46	
	403-8	Workers covered by an occupational health and safety management system	46	
	403-9	Work-related injuries	46/47	Our responsibility for occupational safety also includes the employees of external companies at our sites. However, because we do not specifically record their numbers or working hours, the figure only includes our own permanent employees.
	403-10	Work-related ill health	47/48	Our responsibility for occupational safety also includes the employees of external companies at our sites. However, because we do not specifically record their numbers or working hours, the figure only includes our own permanent employees.
404 - Training and Education 2016	404-1	Average hours of training per year per employee	51	
	404-2	Programs for upgrading employee skills and transition assistance programs	50/51	
	404-3	Percentage of employees receiving regular performance and career development reviews	—	With the upcoming introduction of CSRD reporting, ams OSRAM plans to expand its reporting in this regard.
405 - Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	10, 44, 49	
	405-2	Ratio of basic salary and remuneration of women to men	—	With the upcoming introduction of reporting according to CSRD, ams OSRAM will examine a possible extension of reporting.
406 - Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	20	
402 - Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	—	With the upcoming introduction of reporting according to CSRD, ams OSRAM will examine a possible extension of reporting.

SASB	ACCOUNTING METRIC	CODE	COMMENT
Greenhouse Gas Emissions	① Gross global Scope 1 emissions and	TC-SC-110a.1	→ 4.2.3 Greenhouse Gas Emissions, Objectives, Action Taken, Results and KPIs, table
	② Amount of total emissions from perfluorinated compounds		→ GRI Index, 305-2
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions,	TC-SC-110a.2	→ 4.2.3 Greenhouse Gas Emissions, Objectives, Action Taken, Results and KPIs
	emissions reduction targets, and an analysis of performance against those targets		
Energy Management in Manufacturing	① Total energy consumed (Gigajoules (GJ))	TC-SC-130a.1	Reported in MWh, not in GJ; → 4.2.1 Energy Efficiency at the Group's own Locations, Objectives, Action Taken, Results and KPIs, table
	② percentage grid electricity,		→ 4.2.1 Energy Efficiency at the Group's own Locations, Objectives, Action Taken, Results and KPIs, table
	③ percentage renewable		
Water Management	① Total water withdrawn,	TC-SC-140a.1	→ 4.3.4 Water, Objectives, Action Taken, Results and KPIs, table
	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), → 4.3.4 Water, Objectives, Action Taken, Results and KPIs
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, by far the bigger share) → 4.3.3 Waste, Objectives, Action Taken, Results and KPIs, table
Employee Health & Safety	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	TC-SC-320a.1	→ 6.2 Occupational Health and Safety, Guidelines, Responsibilities, Structures and Processes
	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	→ 6.2 Occupational Health and Safety, Objectives, Action Taken, Results and KPIs
Recruiting & Managing a Global & Skilled Workforce	Percentage of employees that are	TC-SC-330a.1	
	① foreign nationals and		→ 2.1 Our Company, “ams OSRAM at a Glance”, table
	② located offshore		
	Disclosure shall include a description of potential risks of recruiting foreign nationals and/or offshore employees, and management approach to addressing these risks.		→ 5.1 Respect for Human Rights (management approach)
Product Lifecycle Management	Percentage of products by revenue that contain IEC 62474 declarable substances.	TC-SC-410a.1	→ 4.3.1 Resource Efficiency ; 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	→ 4.3.2 Conflict Minerals, Guidelines, Responsibilities, Structures and Processes, incl. Cobalt and Mica

7.3 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 first, voluntary EU Taxonomy Report for fiscal year 2022.

At present, ams OSRAM is not obliged to apply the EU Taxonomy rules; our statutory reporting duty starts with fiscal year 2025.

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. Next, it must be established whether an eligible activity fulfills the stipulated criteria

for making a substantial contribution to one of the six stated environmental objectives, does no significant harm to any other environmental objective, and complies with minimum social safeguards. Only if all criteria are met is an activity considered as aligned and, therefore, “environmentally sustainable”. The EU has to date published one Delegated Act which, thus far, only sets out business activities and criteria for the first two environmental objectives: (1) Climate change mitigation and (2) Climate change adaptation.

Simplified requirements apply to the initial report following the entry into force of the Taxonomy Regulation, which are required to report on eligibility only. In this first report, ams OSRAM will make use of these eased requirements. According to the Delegated Act on Article 8 of the EU Taxonomy Regulation 2020/852, three KPIs must be reported: revenues, capital expenditure (CapEx) and operating expenditure (OpEx).

EU Taxonomy KPIs

In accordance with Section 245a para. 1 Austrian Companies Code (“Unternehmensgesetzbuch”, UGB), 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 dedicated project team of product and technical experts at ams OSRAM assessed the portfolios’ 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 2022 ([ams OSRAM Annual Report, Notes](#)

[to the Consolidated Financial Statements, Note 2](#), EUR 4,819 million). These revenues comprise revenues from contracts with customers pursuant to IFRS 15, from which are deducted the Group companies not covered in the EU Taxonomy Report (EUR 803 million). The revenue denominator for Taxonomy purposes for fiscal year 2022 is therefore EUR 4,016 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. A detailed analysis of our products’ areas of application provided the basis for assigning revenues to eligible activities. This was done for product families in each area of application. The numerator is total revenues from eligible activities for fiscal year 2022, which total EUR 1,054 million. They are generated from the activities 3.4 “Manufacture of batteries”, 3.5 “Manufacture of energy efficiency equipment for buildings” and 3.6 “Manufacture of other low carbon technologies”.

The allocation formulas used when calculating the KPIs for capital and operating expenditure were based on revenues from defined eligible activities. 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 intangible assets ([ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, Number 12](#)) and to property, plant and equipment ([ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, Note 11](#)), including rights of use ([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 884 million). Group

companies not covered in the EU Taxonomy Report (EUR 148 million) were deducted. The CapEx denominator for Taxonomy purposes for fiscal year 2022 is therefore EUR 736 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. 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 436 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 that the OpEx components of the Taxonomy Regulation were sufficiently detailed in regard to building renovation measures as well as maintenance and repair expenditure, including other direct expenditure on the regular maintenance of property, plant and equipment, data was retrieved via query from the Group companies and consolidated in the EU Taxonomy Report. For fiscal year 2022, the Taxonomy OpEx denominator is EUR 743 million.

The OpEx KPI reflects the share of operating expenditure for EU Taxonomy purposes that relates to a described CapEx plan or the production or acquisition of products and services from an eligible activity, or that relates to 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. 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 125 million.

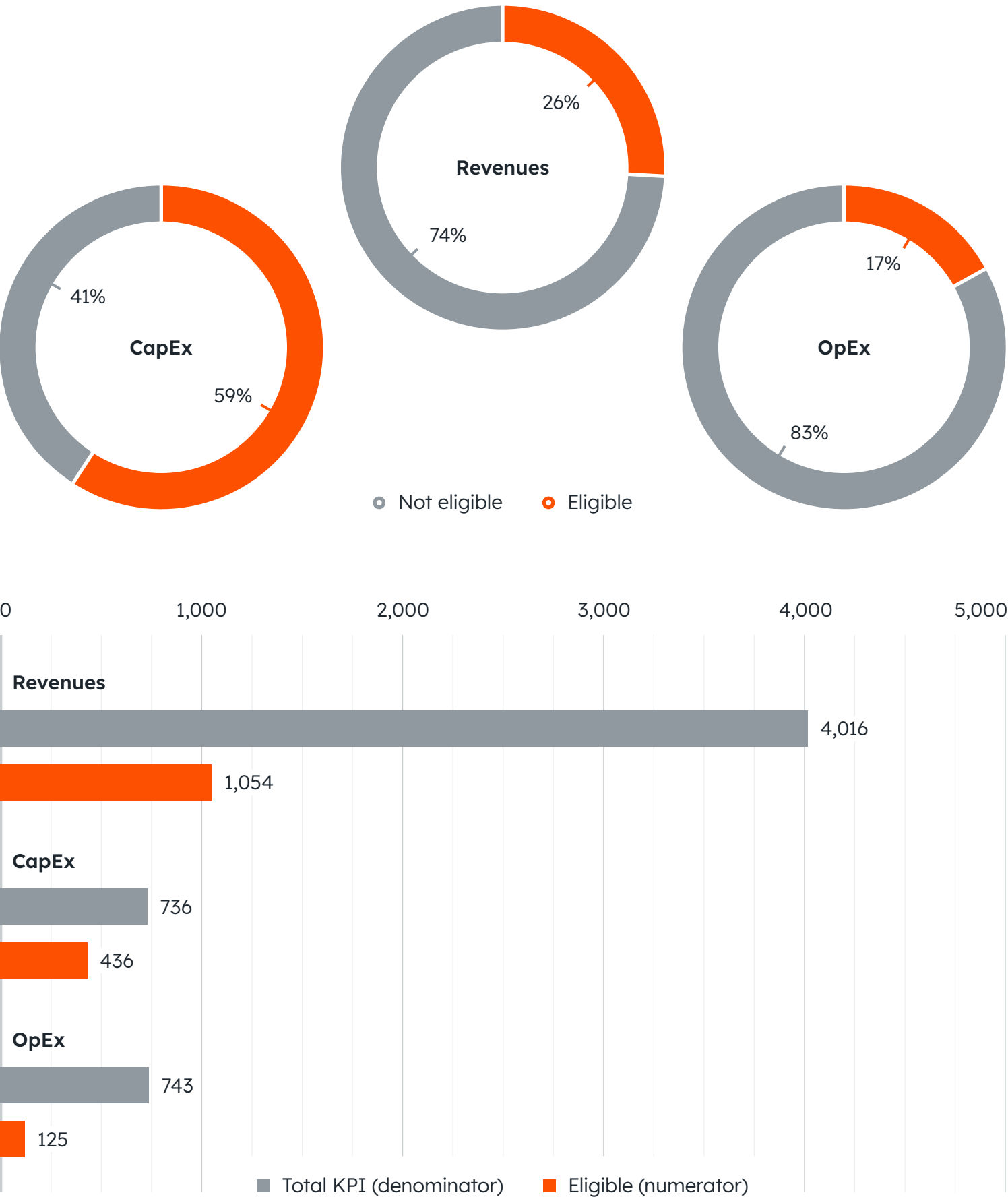
Overview

The analyzed revenues, CapEx and OpEx have been classified according to the activities described in Delegated Regulation Annex I. Products in the ams OSRAM portfolio can be assigned to the activities 3.4 “Manufacture of batteries”, 3.5 “Manufacture of energy efficiency equipment for buildings” and 3.6 “Manufacture of other low carbon technologies” and, as such, 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 Annex II.

Eligible Activities in the Context of the ams OSRAM Portfolio

As a leading provider of optical technologies, we offer our customers a broad product portfolio. Our portfolio and our innovations address global challenges such as climate change, scarcity of resources or urbanization and enable intelligent, safe and energy-efficient solutions. Much of the operational side of our business is concentrated in the two segments Semiconductors and Lamps & Systems, which serve our customers in the consumer, automotive and industrial & medical technology markets.

Overview



Product portfolios based on light emitting diode (LED) technology and sensor solutions are most relevant to the activities currently published in the Taxonomy Regulation. The ams OSRAM semiconductor portfolio is the primary source of eligible amounts, related to applications for automotive lighting as well as drive and building management.

The portfolio of products for an energy-efficient design of buildings and rooms of all kinds comprises product families related to activity 3.5 “Manufacture of energy efficiency equipment for buildings”. In this sphere, ams OSRAM supplies LEDs, spectral and ambient light sensors that can be used at workplaces, in educational establishments, in hospitals or in domestic settings to modulate the lighting mood and to detect presence and perform distance measurements. They therefore help reduce overall energy consumption and increase building efficiency.

We also offer solutions for the automotive industry that support both battery management and, directly or indirectly, the reduction of greenhouse gas emissions. Therefore, these relate to 3.4 “Manufacture of batteries” and 3.6 “Manufacture of other low carbon technologies”. Both conventional combustion engines and modern electric drives require position and angle sensors to guarantee accurate and reliable position detection at higher revs and thus optimize engine efficiency. Sensor-based battery components used for drive management in electric vehicles are also included in this area of our portfolio.

Furthermore, ams OSRAM is a leading provider of automotive lighting components, with a portfolio ranging from LED replacement or LED retrofits to complete LED solutions. With its “heatsinkless LEDs”, ams OSRAM is revolutionizing conventional headlamps for high beam/low beam and is aiming to replace energy-intensive technologies on the market. The high electric efficiency of our LEDs, coupled with simple heat man-

agement, enables us to design particularly energy-efficient light systems that complete the portfolio under activity 3.6 “Manufacture of other low carbon technologies”.

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 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, depending on 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 which display vivid, razor-sharp content for maximum realism.

7.4 TCFD Recommendations

ams OSRAM’s reporting on “Greenhouse Gases and Climate Change” is based on the GRI Standards and the recommendations of the [„Task Force on Climate-related Financial Disclosures \(TCFD\)“](#), a committee of experts from G20 member states 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](#). This means that the Management Board is responsible for the climate strategy and its implementation. In fiscal year 2022 the developed climate strategy was approved by the Management Board.

As part of its remit as a governance body, the Supervisory Board deals with climate protection as well as other sustainability-related topics. In fiscal year 2022 the new climate strategy was also presented to the Supervisory Board. The newly formed ESG Committee begins operating at the start of 2023, and its tasks will include overseeing implementation of the climate strategy [→ 3.1.2 Executive Bodies of the Company](#).

To reinforce sustainability as an issue throughout the Company, a Sustainability Council has been formed [→ 3.2.1 Organization and Structures](#). The Council carries out strategic assessments of climate-related and other topics. It examines the trends, risks, and opportunities and, where necessary, embeds appropriate measures within the organization.

Specialist coordination is the responsibility of the Sustainability department, in collaboration with the relevant specialist departments and business units. The Sustainability department is embedded in the reporting line of the Chief Financial Officer (CFO), who is responsible for sustainability within the Management Board and brings about any decisions required by the Management Board as a whole.

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

In fiscal year 2022, transition risks were systematically assessed for the first time, by internal experts, and the findings were embedded in existing risk management methods.

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:

- 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

When scoring the potential risks, the levels used for enterprise risk management (ERM) to indicate impact and probability were applied for transition risks. No scenarios were used, since this was the first analysis of transition risks. The focal topics were “Energy consumption and emissions” and “Water”.

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

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

Highest-rated Climate-related Transition Risks

TRANSITION RISKS	FOCUS	DESCRIPTION OF IMPACT	RISK MITIGATION STRATEGY
Policy and Legal: 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).
Technology: 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.
Market: 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 → 7.3 EU Taxonomy ; Scope 3 target adopted to reduce carbon footprint in the supply chain.

As a company whose energy-efficient, intelligent products can make a contribution to tackling climate change, there are also business opportunities for ams OSRAM here → [2.0 Company Profile](#); → [7.3 EU Taxonomy](#).

Highest-rated Climate-related Transition Opportunities

TRANSITION OPPORTUNITIES	DESCRIPTION	STRATEGY FOR CAPITALIZING ON THE OPPORTUNITIES
Resource Efficiency and Energy Sources: <ul style="list-style-type: none">— Use of more efficient production processes— Use of clean energy	Lowering operating costs (e.g. through efficiency improvements and cost reductions) Increased production capacity, leading to higher revenues	<ul style="list-style-type: none">— The industry’ first 8-inch LED manufacture with highly automated production using state-of-the-art material handling and operating system powered by clean energy; Gold LEED standard for the building.— Change in site structure: In spring 2022 the Company announced plans to consolidate production over two sites in Singapore. As part of this, the obsolete Woodlands location will be shut down.
Products and Services: Development and/or expansion of portfolios of energy-efficient products through R&D and innovation	Increased revenue stream from demand for lower-emission products	→ 2.2 Our Portfolio , → 2.2.2 Our Products’ Contribution to the SDGs , → 4.2.4 Green Tech Development ; this is one of our defined key issues. → 7.3 EU Taxonomy
Resilience: Ability to develop replacement products or energy-efficient products	Guaranteed revenue stream from demand for lower-emission products	<ul style="list-style-type: none">— Substantial investment in R&D → ams OSRAM Annual Report, Management Report, 3 Research and Development.— Development of energy-efficient products and systems based on semiconductors— LED-based solutions for the automotive spare parts business as a substitute for halogen lamps → 2.2.2 Our Products’ Contribution to the SDGs.

These physical risks were identified in a two-stage analysis carried out in 2020 and 2021 and 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: DI and Semi: low ¹ 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	

¹ 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 process (ERM) and, since fiscal year 2022, 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 at present 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 [ams OSRAM Annual Report, Management Report, 8 Risk](#)

[Management](#) and [ams OSRAM Annual Report, Notes to the Consolidated Financial Statements, 1 General Principles](#).

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.

For more information, see also [CDP](#) (ams OSRAM Climate Change Rating, Chapter C2).

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

To reduce our CO₂ footprint and implement the target for carbon neutrality for our own activities that we set in 2021, a climate strategy was developed in fiscal year 2022. This strategy is guided by the Paris Climate Agreement, with the addition of a Scope 3 target (“Purchased goods and services” category) [→ 4.2.3 Greenhouse Gas Emissions](#). A progress review, similar to an interim target, will take place in 2025/2026. To achieve our targets, we are focusing primarily on switching to green electricity and on energy efficiency measures. 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 28, 2023. The editorial deadline was April 24, 2023.

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, i.e. statements about events that lie in the future rather than the past. These are based on information available today and on assumptions based on current forecasts, which means they are subject to various risks and uncertainties. Accordingly, forward-looking statements should not be relied upon as a prediction of actual results.

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