

Sustainability

NON-FINANCIAL REPORT

Introduction

With this separate consolidated Non-Financial Report (NFR), Aurubis fulfills its obligation to disclose non-financial information for fiscal year 2018/19 pursuant to Sections 315b and 315c in conjunction with Sections 289c to 289e of the German Commercial Code (HGB).

At Aurubis, sustainability is a significant part of our conduct and therefore plays a key role in our activities. A responsible approach to employees, suppliers, customers, and neighbors is a matter of course for us, whether in direct business operations or in the surrounding areas. The same applies to our environment, as we are aware of the limits of natural resources and want to keep negative impacts from our business activities to a minimum.

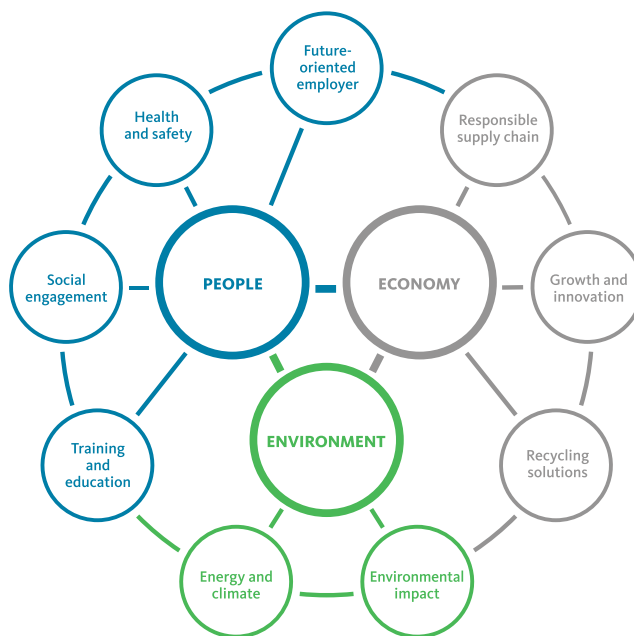
When introducing our company vision in 2017, we established the objective of developing Aurubis from a copper producer to a multi-metal group by 2025, and we enshrined this transformation in our Group strategy. Sustainability is an integral part of this Group strategy, which illustrates the high priority placed on responsible corporate governance at Aurubis.

We aim to enhance our sustainability achievements continuously, beyond the legal requirements. One contribution to this goal is the implementation of the Aurubis Sustainability Strategy, which outlines the action areas for the coming years.

Aurubis Sustainability Strategy

In 2018, the Aurubis Executive Board and Supervisory Board passed the Sustainability Strategy 2018–2023. Based on the aspects “People – Environment – Economy,” it comprises nine key action areas for a period of five years (see illustration). In turn, these areas include a total of 27 measures and nine targets. We established deadlines and key performance indicators (KPIs) for their implementation so that our sustainable company development can be measured and guided. The individual measures of the Sustainability Strategy 2018–2023 and the status of their implementation are in this report at the end of the description of each action area.

Aurubis Sustainability Strategy



The Sustainability Strategy 2018–2023 is the continuation of our first Sustainability Strategy, which was passed in 2013 and expired in 2018. In 2015, the main action areas of this first Aurubis Sustainability Strategy were reviewed to determine their relevance, refined, and developed in the course of a materiality analysis. The materiality analysis was based on a survey of internal and external stakeholders, as well as an analysis carried out by supervisors from all areas of the company. In the course of drafting the Sustainability Strategy 2018–2023, internal and external requirements and current developments were once again analyzed, and then the strategic action areas and accompanying targets and measures were established with the relevant departments in workshops.

As part of our responsible corporate governance, the topics of compliance and human rights also play a key role in addition to the nine actions areas, complementing the aspects “People – Environment – Economy.”

Aspects relevant for Aurubis

When selecting the aspects for the Non-Financial Report, we were guided by both the main action areas of the company's Sustainability Strategy and the non-financial topics that are required to understand the business development, the business result, the company's position, and the impacts of our activities on these aspects.

In summer 2019, the topics were reviewed again with regard to the materiality requirements of the CSR Directive Implementation Act [Q Glossary, page 194](#). Managers from four Aurubis divisions (Corporate Accounting & Consolidation, Investor Relations, Risk Management, and Sustainability) evaluated whether the topic clusters identified in 2015 and updated in the Sustainability Strategy 2018–2023 are material according to the CSR Implementation Act as well. This was also confirmed by the Executive Board. The topics identified as material in this process are assigned to the action areas of the Aurubis Sustainability Strategy in this Non-Financial Report. We present topics that have the same management approach in a consolidated format.

Overview of material topics

		Material according to CSR Directive Implementation Act	Material for Aurubis	Page in NFR
Employee-related matters	Future-oriented employer	✓	✓	Q 39
	Training and education	✓	✓	Q 41
	Health and safety	✓	✓	Q 43
Environmental matters	Energy and climate	✓	✓	Q 45
	Environmental impact	✓	✓	Q 47
	Recycling solutions	✓	✓	Q 50
Social matters	Social engagement		✓	Q 51
Human rights	Responsible supply chain	✓	✓	Q 53
Anti-corruption	Anti-corruption	✓	✓	Q 54

We also assume corporate responsibility in those instances in which the topics have no direct impact on our business development but are of considerable importance for us and our stakeholders. This is why the topic of social matters is part of our report and labeled as such.

Sustainability management

From an organizational perspective, the Sustainability department is part of the Investor Relations & Corporate Communications division; the vice president overseeing Investor Relations & Corporate Communications reports directly to the Executive Board chairman. The Sustainability department serves as the interface between the departments relevant for the topic of sustainability and coordinates all of the related processes in the Group, serving as a contact for the sites. At the same time, it is also responsible for continuously reviewing and developing the sustainability targets. In the process, the department supports the relevant divisions in the operational implementation of the measures.

We make our sustainability achievements transparent in a variety of ways. These include participation in sustainability rankings, involvement in the CDP (formerly the Carbon Disclosure Project) [Q Glossary, page 194](#), and the voluntary reporting of the past several years. This reporting is oriented to the standards of the Global Reporting Initiative (GRI) [Q Glossary, page 194](#). In this separate Non-Financial Report, we use the GRI Sustainability Reporting Standards as a guide in describing the concepts and selected KPIs. The GRI report is published every two years, most recently for fiscal year 2017/18. The KPIs are updated annually and released in a consolidated form.

We communicate regularly with our key stakeholders about sustainability-related topics. We believe it is important to maintain a dialogue with employees, customers, suppliers, politicians and society, capital market participants, the media, non-governmental organizations, and the scientific community.

Description of the business model and presentation of the Group structure

We are continuing to develop our business model consistently in alignment with the company vision. Today, Aurubis' main focus is on the production and processing of copper. Aurubis primarily processes copper concentrates [Q Glossary, page 194](#) that are mined from ores and sourced on the global market. The company purchases the necessary raw materials, as it doesn't have its own mines or stakes in mines. The processing of secondary raw materials plays an important role as well. Moreover, we are currently expanding our business model beyond copper and increasingly implementing a multi-metal approach. This means that, in addition to copper, other metals will be extracted from systematically purchased raw materials and intermediate products and then processed into marketable products with added value.

More information is available in the "Business model" section of the Combined Management Report. [Q Pages 64–67](#)

Aurubis AG is the parent company of the Aurubis Group and is based in Hamburg, with production sites in Hamburg and Lünen. For us, sustainability applies to the entire Group. Consequently, the action areas and measures are relevant for the Group and for Aurubis AG. The key indicators mentioned in this report are recorded at Aurubis in the individual departments, consolidated at Group level, and ultimately evaluated. When the following report mentions copper production, this refers to primary and secondary copper production at the Hamburg, Lünen, Olen, and Pirdop sites. Significant differences between Aurubis AG KPIs and Group KPIs are explained.

The main external factors influencing business development are described in the [Q Risk and Opportunity Report, page 96–103](#) of the Combined Management Report [Q Explanation of relevant risks, pages 97–100](#). Risks related to non-financial aspects beyond the company boundaries are also mentioned there. Risks were assessed in accordance with the German CSR Directive Implementation Act (CSR-RUG) [Q Glossary, page 194](#). In the process, no non-financial risks were identified that were very likely to cause a serious negative impact on employee and environmental matters, on respect for human rights, on the prevention of corruption and bribery, or on social matters within the meaning of Section 289c (3) of the German Commercial Code (HGB). Nevertheless, it is important to us to handle non-financial risks even if they are evaluated as non-material according to the strict definition of the CSR Directive Implementation Act. We have developed and implemented related management approaches to address these non-financial risks.

Employee-related matters

FUTURE-ORIENTED EMPLOYER

Competent, productive, and enthusiastic employees form the basis of the Aurubis Group's commercial success and further development.

We have set the target of creating a work environment for good, close cooperation and promoting involvement and creativity. We form a team that passionately works toward the company's progress.

All overarching activities related to our employees are managed at Group level by Human Resources (HR), whose management reports directly to the CEO. HR is particularly involved with the HR strategy of the entire Group, as well as the implementation and monitoring of the resulting strategic HR instruments, especially those related to organizational and staff development, compensation and fringe benefits, employer branding, and supporting change processes. The work of the local HR departments is oriented toward the standards of the central HR division and local conditions.

Our HR strategy is derived from the Group strategy and is based on the corporate values. It is developed continuously and takes changes, especially in the labor markets and in society, as well as trends that influence HR work into account. One particular focus is on the lack of qualified workers due to the demographic shift, as well as the search for young employees and apprentices, which is becoming more and more difficult.

To address these challenges, we offer our employees an attractive work environment and pay attention to the balance between work and leisure time. We enable modern and flexible working-time arrangements, as long as this is consistent with the individual work area. We regularly identify our employees' needs to develop modern and sensible working-time models. We prioritize good cooperation between all stakeholders in the company and offer attractive, gender-neutral compensation in line with the market. Our employees' compensation and fringe benefits are regulated in

collective wage agreements. Our employees' social security is regulated by law to a great extent because most of our production sites are located in Europe. At our only production site outside of Europe, Aurubis Buffalo, we assume 85% of the employees' health insurance contributions.

Compliance with the internationally recognized core labor standards of the International Labour Organization (ILO) is of fundamental importance. We also refer to them in our Group-wide Code of Conduct, which each employee receives with his or her employment contract. Our participation in the UN Global Compact [Q Glossary, page 195](#) underlines our commitment to the ILO core labor standards [Q Glossary, page 194](#).

Strong collaboration between our employees and the company management is the basis for the Group's success. Close, constructive cooperation with the unions active in the company and the elected works council members is thus an established principle for us. Our employees are informed regularly and promptly about current developments. We are committed to employee participation in decision-making. On the corporate level, the Executive Board and Supervisory Board, which also includes employee representatives, work closely together as the highest governing bodies. On the plant level, the interests of the employees are represented by works councils/unions according to country-specific regulations. An elected European Works Council has been in place at Aurubis since 2009 and represents all of the European sites.

In the United States, working conditions are subject to state and national labor laws. Because of the close cooperation between our site in Buffalo and the union active there (United Steelworkers International Union), an exclusively negotiated collective agreement specifies the working conditions.

Diversity in the personnel structure is important to us. We consider diversity to include not only cultural aspects and international representation, but also diversity in terms of specialized skills and age groups, as well as a gender balance.

The Code of Conduct and our corporate values serve as the basis for respectful cooperation.

Staff development and feedback are key elements of our leadership culture, which we are constantly working to improve. We concluded our 360° feedback program in 2018. Personal developmental targets and measures were derived from this program and documented in personal action plans in order to sustainably improve managerial performance. The personal plans are monitored in direct dialogue between employees and supervisors.

Key measures of the Sustainability Strategy 2018–2023 and their status in fiscal year 2018/19

» *Improving the “health” (OHI)¹ of the organization with strategically aligned HR instruments and services, as well as individual development tools*

The Transformation and Business Improvement department was set up in early 2017. The department’s Business Improvement Guides support internal projects and the implementation of the Aurubis Operating System (AOS) [Q Glossary, page 194](#) as internal consultants. Starting in fiscal year 2019/20, this department will be divided into the departments AOS and Group Process Management. AOS is a management system designed to improve processes continuously and sustainably. Programs introduced in the last several years, such as a workshop series to develop managers’ skills, continued during the reporting period. Within the scope of AOS, we are introducing so-called qualification matrices in different pilot areas to record required expertise and qualification needs in a structured manner. This will enable us to recognize potential for structural improvement in the training and continuing education of our employees and translate this into defined training programs.

» *Regularly identifying employees’ needs with respect to working-time arrangements*

The flextime program was developed further during the reporting period. Furthermore, a new shift model was initiated. A new planning process for personnel placement enables better shift planning. The home office and mobile work options, among other things, were expanded with the intention of improving the balance between work and family life. Overall, our working-time models are becoming progressively more flexible and modern. In the process, we are taking new laws, such as those regarding temporary part-time work in Germany, into account and training our supervisors accordingly. The proportion of part-time workers, including in production, is rising continuously and is supported by Aurubis as an employer.

» *Developing a diversity policy*

International teams are already working together as part of the reorganization and AOS. The development of a diversity policy (including age structure, international character, and gender distribution) is planned for the coming years. As the labor market is becoming increasingly international and globalized, we are recruiting employees from all over the world, leading to a broad representation of different nationalities at Aurubis that enriches our everyday work.

¹ The OHI indicates the “health” of a company, e.g., how well a company is equipped to react to changes in the market and thus to achieve economic success sustainably. Key influencing variables include leadership skills, innovation, and willingness to learn, as well as company culture and climate.

KPIs:

**Aurubis Group personnel structure
(as at the reporting date September 30)¹**

	Employees		Female		Male	
	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18
Aurubis Group	6,853	6,673	12 %	12 %	88 %	88 %
Blue collar	4,214	4,130	4 %	4 %	96 %	96 %
White collar	2,350	2,256	28 %	28 %	72 %	72 %
Apprentices	289	287	13 %	10 %	87 %	90 %

**Employee fluctuation in the Aurubis Group
(as at the reporting date September 30)^{1,2}**

	2018/19	2017/18
Fluctuation rate	7.8 %	6.6 %
Average length of employment in the company (in years)	14.2	15.3

**Age structure
(as at the reporting date September 30)^{1,2}**

	2018/19	2017/18
< 20	15	14
20–29	999	984
30–39	1,647	1,515
40–49	1,471	1,452
50–59	1,832	1,820
60–69	586	585
> 69	14	16

TRAINING AND EDUCATION

In order to achieve our vision and advance our strategy, we rely on a learning organization. The targeted personal development of our employees has high priority.

HR Development is responsible for staff development. It supports the other departments, in close coordination with the local HR managers, in building employees' skills in a directed way tailored to their needs. The objective is to meet current and future requirements and challenges. HR Development and vocational training are part of the HR Group department.

To fulfill future personnel requirements, we regularly assess demand for specific skills and trades, and offer apprenticeships accordingly. We also identify the demand for employee qualifications and successors for different positions in annual talks and in the yearly personnel planning process in order to develop and expand specialized skills and management expertise in a purposeful way.

¹ Permanent and temporary employment arrangements. In addition to the fully consolidated companies, the numbers include the employees of the non-consolidated companies Aurubis Metal Products (Shanghai) Co., Ltd., Aurubis Rus LLC (St. Petersburg), Aurubis Middle East FZE (Dubai), and Aurubis Turkey Kimya Anonim Sirketi (Istanbul), which had a combined total of ten employees in fiscal year 2018/19. Excluding Schwermetall Halbzeugwerk GmbH & Co. KG, in which Aurubis holds a 50% stake. It also includes ten independent sales employees at international sites [Q Sites and employees, page 65](#).

² Excluding apprentices.

We have developed and adjusted the training offerings in our leadership and qualification program according to the Group's needs. In particular, options for managers at the foreman level were a top priority. Employees are offered a number of technical training measures.

In addition to qualification and development programs geared to necessary skills, for example in the areas of the AOS and in project management, we also rely on platforms for networking and discussing best practices (e.g., expert panels and online learning groups). We have established a variety of new qualification offers: in our one- to two-hour micro-learning units, called "Learning Nuggets," participants learn and test new skills. The "Aurubis Essentials" series of short seminars presents important overarching topics to interested employees to promote a comprehensive understanding of the company.

We are proud of our high training and retention rate. This ensures that we have a sufficient number of qualified employees. At our site in Pirdop, Bulgaria, we have implemented a vocational training program based on the Swiss training model.

Aurubis Hamburg has been participating in the internship model AV 10-Plus since 2007. The model supports young people from a range of occupational groups, helping them to gain the qualifications required to begin apprenticeships. In 2018/19, five of the ten participants took on an apprenticeship at Aurubis. The remaining participants started external apprenticeships or have now gone on to higher education.

Recently, we invested in the construction of two modern vocational training centers in Lünen and Hamburg. In Lünen, the building next to the training workshop will also be home to the Occupational Safety and Technology divisions, while in Hamburg, Training and Research & Development (R&D) will be located in the Innovation and Training Center. The shared building emphasizes the even stronger cooperation expected between R&D and vocational training in the future.

Furthermore, we cooperate with partner universities, offer internships to students in Germany, and provide thesis projects and scholarships.

Key measures of the Sustainability Strategy 2018–2023 and their status in fiscal year 2018/19

- » *Regularly identifying qualification needs to expand project, process, and management expertise in a targeted way*
In fiscal year 2018/19, the Aurubis Leadership Behaviors were developed and introduced by bringing managers together in peer groups. To foster young talent, development centers were created to identify potential and thus select participants for the talent development program. Project management training is offered at an international standard including certification, and a "community of practice" – a group for employee dialogue focusing on project management – is under development.
- » *Starting the Group-wide introduction of the AOS pillar "Education and Training"*
During the reporting year, additional AOS basic training sessions took place and the pilot for AOS e-learning was concluded. Currently, three pilot projects are underway to introduce the qualification matrix in different areas within the Operations division. The pilot projects ran until September 30, 2019 and are now being evaluated. The modular training course to become an AOS Expert started at the Hamburg plant, and by the end of fiscal year 2019/20, a total of 5% of employees will have completed the entire training course and be AOS Experts. Equivalent AOS Expert qualifications are being planned at other plants and will be carried out locally according to the plants' specific needs.
- » *Establishing Group-wide knowledge management to identify, preserve, transfer, and enhance knowledge across functions*
The necessary personnel resources were provided during the reporting period. A structured process was drafted and the pilot phase for Group-wide knowledge management started.

KPIs:**Training and education**

	2018/19	2017/18
Apprenticeship rate in Germany	7.3 %	6.3 %
Apprentice retention rate in Germany	78.4 %	80 %
Average number of training hours per employee ¹		
Aurubis Group	15.2	11.5
Blue collar	13.6	9.7
White collar	18.3	15.1
Percentage of employees receiving training		
Aurubis Group	76 %	– ²
Blue collar	73 %	– ²
White collar	79 %	– ²

¹ Permanent and temporary employment arrangements. In addition to the fully consolidated companies, the numbers include the employees of the non-consolidated companies Aurubis Metal Products (Shanghai) Co., Ltd., Aurubis Rus LLC (St. Petersburg), Aurubis Middle East FZE (Dubai), and Aurubis Turkey Kimya Anonim Sirketi (Istanbul), which had a combined total of ten employees in fiscal year 2018/19. Excluding Schwermetall Halbzeugwerk GmbH & Co. KG, in which Aurubis holds a 50 % stake. It also includes ten independent sales employees at international sites [Q Sites and employees, page 65](#).

² We did not record this KPI in fiscal year 2017/18.

HEALTH AND SAFETY

As a responsible employer, it is a matter of course for Aurubis to take measures to maintain our employees' health and performance and to protect them from accidents and illness.

The responsibility of Group Health & Safety is to create conditions that prevent all work-related accidents and illnesses. In the long term, we want to achieve our Vision Zero, that is, to reduce work-related accidents, injuries, and illnesses to zero. Our goal for the medium term is to reduce the number of work-related accidents with at least one lost shift per one million hours worked (lost time injury frequency rate, LTIFR) [Q Glossary, page 194](#) to ≤ 1.0 by 2022.

The corporate department Group Health & Safety manages occupational health and safety and reports directly to the Executive Board. The department establishes minimum occupational safety standards for the entire Group by issuing process instructions in addition to the Corporate Policy on Occupational Health and Safety. Occupational safety management at the sites is currently being developed to conform to ISO 45001. Five sites (Avellino, Dolný Kubín, Pirdop¹, Pori, and Schwermetall Halbzeugwerk GmbH & Co. KG) are certified in accordance with OHSAS 18001 or ISO 45001. Our occupational safety approach applies to our employees, temporary workers, and external service providers.

The site managers play a central role in occupational health and safety. They are responsible for complying with applicable laws and ordinances on occupational health and safety, the relevant corporate policy, and the current process instructions. Furthermore, they gather and evaluate health risks and help implement suitable measures to protect employees.

The sites are in contact with each other via an organized network facilitated by Group Health & Safety. In this way, existing specialist knowledge can be used across the Group. Moreover, employee representatives are included in the topic of occupational health and safety: through the reporting line to the Executive Board, Group Health & Safety also reports to the general Works Council committee and the European Works Council. Group Health & Safety is directly invited to their committee meetings.

Our risk assessments include both current and future work processes in the company, including maintenance and repair procedures in addition to operations. Our risk assessments cover hazards in normal operations, special work assignments, and abnormal incidents.

Health hazards and individual requirements in the work area are systematically collected, evaluated, and documented. The risk assessment is guided by the current knowledge available, taking the type, extent, and probability or duration of the effect into account.

¹ The certificate for Pirdop is valid as of October 1, 2019.

Accidents are systematically investigated to determine their technical, organizational, and conduct-based causes. The key findings of accident investigations, the causes, and the measures derived from them are communicated throughout the Group. Furthermore, we strive to report and investigate every incident, even those that don't result in injury.

Smelter operations (heat, metal melt), hazardous substances in the production process, industrial machines, and internal logistics present the greatest accident risks. However, analyses show that accidents connected with these risks are rare. The most common causes of accidents are mechanical influences, mainly stumbles, slips, falls, and working with hand-operated tools.

As preventive measures to further avoid accidents, the 10 Golden Rules program was established and a Behavior-Based Safety (BBS) program was initiated in Pori, Emmerich, and Stolberg.

At least once per year, employees are informed about hazards in the workplace and are instructed about necessary preventive and protective measures, enhancing their awareness of these topics. Safety talks sensitize employees to current occupational safety issues and encourage them to use this knowledge safely in practice. External service providers are instructed about hazards, protective measures, and rules of conduct at the specific site before they start working.

Health checks are offered when new employees are hired, with routine occupational health checks provided thereafter.

In addition, we support employees in taking preventive measures to maintain their health. Our offerings in this respect extend from flu vaccinations and medical checks to addiction prevention, as well as supporting measures for the heart and circulatory system.

Key measures of the Sustainability Strategy 2018–2023 and their status in fiscal year 2018/19

- » *Preparing all sites for the introduction of the ISO 45001 standard for occupational health and safety (by fiscal year 2019/20)*
Our sites in Avellino and Pirdop were certified in accordance with ISO 45001 in early 2019 and September 2019, respectively, and our Pori, Dolný Kubín, and Schwermetall Halbzeugwerk sites are already certified in accordance with OHSAS 18001. To prepare for the introduction of ISO 45001 at the other sites, the requirements of ISO 45001 are being explained in workshops and gap analyses are being carried out to determine the current deviations from the requirements of the standard.
- » *Implementing Behavior-Based Safety across the Group (by fiscal year 2020/21)*
Behavior-Based Safety was initiated at our sites in Emmerich, Hamburg, Pori, and Stolberg in the reporting period. The campaign to introduce the 10 Golden Rules planned for October 2019 will support us in the process.

KPIs:

Occupational health and safety KPIs¹

	2018/19	2017/18	2016/17	2015/16	2014/15
Absolute number of accidents	59	60	47	45	63
LTIFR	5.8	6.1	4.8	4.6	6.3
Number of work-related fatalities	0	0	0	0	0
Number of work-related fatalities of third parties at our sites	0	0	0	1	0

¹ KPIs for consolidated sites with ten or more employees [9 Sites and employees, page 65](#). Excluding Schwermetall Halbzeugwerk GmbH & Co. KG, in which Aurubis holds a 50% stake.

Environmental matters

ENERGY AND CLIMATE

The individual production steps in our value chain are energy-intensive. For us, the efficient use of energy is thus an issue of ecological and economic responsibility. Energy consumption is the main source of CO₂ emissions in the Group. Taking the entire value chain into consideration, about half of the CO₂ emissions are upstream and downstream, i.e., they originate from our suppliers, customers, and service providers (Scope 3 emissions). Most of the Scope 3 emissions originate from the activities of mining companies.

At the same time, the products we manufacture contribute to reducing CO₂ emissions. They play a key role when it comes to renewable energies and e-mobility: electric cars contain significantly more copper than vehicles with conventional combustion engines, and building and connecting an offshore wind turbine to the energy grid requires up to 30 t of copper.

In our Corporate Energy & Climate Policy, we describe how we secure and optimize the supply and consumption of energy at Aurubis, and we explain the roles and responsibilities of the sites and Group departments in this area.

The Energy & Climate Affairs department coordinates the development of the energy management and monitoring systems across the Group, providing for a uniform approach and facilitating the exchange of expertise regarding best practice examples – for instance in the form of an internal energy efficiency network. The management of Corporate Energy & Climate Affairs develops and implements the Group-wide energy strategy and reports directly to the Executive Board chairman.

To prevent CO₂ emissions, we primarily focus on energy efficiency measures. We have also introduced energy management systems at our large production sites. Currently, eight sites are certified [Q Table, page 49](#) in accordance with ISO 50001 [Q Glossary, page 194](#). The plan is to introduce these systems across the Group as a measure of our Sustainability Strategy. The management systems contribute to efficiently managing energy consumption and identifying energy savings potential. During the reporting period,

the certifications were confirmed through routine surveillance visits or recertification. The energy management system at the Hamburg and Lünen sites is part of the integrated management system for quality, environmental protection, energy, and occupational safety.

The more steps that have already been implemented in energy efficiency in the past, the more challenging a further optimization is. Moreover, because there are limits to reducing energy consumption and emissions, the improvements being achieved today within the plant boundaries are only marginal compared to previous years. This is despite continued high levels of investment. For example, the use of complex recycling raw materials with comparably low metal contents requires more energy to be processed. Environmental protection already accounts for a large part of the energy consumption at Aurubis today. This includes the operation of facilities such as filters with fans and other suctioning equipment. For Aurubis, it is important to align environmental protection, resource conservation, and energy efficiency.

The use of renewable energies is a challenge for us since generating them is associated with energy supply fluctuations. However, our production processes require a constant energy supply. We are working on initiatives to make our energy needs more flexible in order to enable the use of renewables.

We also cover a portion of our energy needs with electricity we generate internally using excess heat from our processes. We installed steam turbines for this purpose in Hamburg, Lünen, and Pirdop. On top of that, we use waste heat from the production processes to secure the heat and process steam supply at the Pirdop, Lünen, and Hamburg sites. Demand there is largely covered by waste heat.

We report our CO₂ emissions on a voluntary basis each year as part of the CDP climate change program. This includes Scope 3 emissions, or emissions caused by services provided by third parties, for example transport, raw material mining, or the production of purchased materials. CDP gathers and evaluates data and information about companies' CO₂ emissions, climate

risks, and reduction targets and strategies, and assesses their responsibility in the supply chain [Q Page 53](#).

Key measures of the Sustainability Strategy 2018–2023 and their status in fiscal year 2018/19

» *Introducing the ISO 50001 standard for energy management across the Group*

In the reporting period, eight sites were certified in accordance with ISO 50001. At the other sites, the substance and scope of the energy management system (EMS) in accordance with ISO 50001 were introduced in an internal workshop. A project plan for introducing the EMS has already been developed for the Pirdop site. [Q Certifications by site, page 49](#)

» *Increasing flexibility in electricity purchasing (10% target by FY 2022/23)*

To enable the use of renewable energies, we are arranging a more flexible electricity feed-in to be able to react to fluctuating availability. We are participating in the project NEW 4.0, among others, which is funded by the German Federal Ministry for Economic Affairs and Energy. The goal of the project is to supply the entire region of Hamburg and Schleswig-Holstein with regenerative electricity in a safe, cost-effective, and environmentally sound manner. This calls for a flexible and intelligent network of electricity producers and consumers. As part of NEW 4.0, Aurubis commissioned a study to demonstrate the limits and the potential of making electricity consumption more flexible at the Hamburg plant. Furthermore, a power-to-steam facility (electrode boiler) was installed at the Hamburg plant. During periods of surplus renewable energy in the grid, the facility converts the energy into steam for internal processes. Over 10% flexibility has been achieved for the Hamburg plant already.

» *Reducing CO₂ emissions by 100,000 t through energy efficiency projects and internal electricity projects by 2022/23 (compared to FY 2012/13)*

Target achievement is at 74%.

» *Energy efficiency projects*

In October 2018, Hamburg's HafenCity East neighborhood began receiving CO₂-free industrial heat from the Aurubis plant in Hamburg. Each year, about 160 million kWh of heat is extracted from the processes, equivalent to a more than 20,000 t reduction in CO₂ annually. Roughly half of this reduction comes from saving the natural gas that was previously required to produce steam on the plant premises. The other half of the CO₂ reduction comes from the transmission of external heat to the HafenCity East neighborhood, which replaces the conventional fuels used to generate district heating. The Industrial Heat project has already garnered a great deal of recognition among expert circles, receiving the following honors in the past year:

- » Energy Efficiency Award 2018 from the German Energy Agency, in the category "Energy Transition 2.0"
- » German Renewables Award 2018 from the Renewable Energy Hamburg Cluster, in the category "Project of the Year"
- » Flagship Project for Energy-Efficient Waste Heat for the German Energy Agency since 2017
- » ener.CON Europe Award 2019 from we.CONECT
- » First prize in the 2019 Responsible Care competition of the northern German branch of the Chemical Industry Association (VCI Nord)
- » EU Sustainable Energy Award 2019 finalist

» *Investigating processes and electricity consumption in relation to the German government's Climate Action Plan 2050 and analyzing the requirements for new investments (starting fiscal year 2018/19)*

Studies at association level and at company level have been commissioned and are currently underway.

KPIs:**Energy consumption¹**

in million MWh	2018	2017	2016
Primary energy consumption	1.75	1.66	1.72
Secondary energy consumption	1.77	1.88	1.73
Total energy consumption	3.51	3.54	3.45

CO₂ emissions¹

in 1,000 t CO ₂	2018	2017	2016
Scope 1 (emissions produced as a direct result of burning fuels in the company's own facilities) ²	522	517	508
Scope 2 (emissions related to purchased energy, e.g., electricity)	936	1,048	1,014
Total (Scope 1+2)	1,459	1,565	1,522

¹ Aurubis reports the energy KPIs and CO₂ emissions for the production sites that are majority-owned (> 50 %) by Aurubis [Q Sites and employees, page 65](#). This reflects most of the energy consumption because the volume at the sales offices is negligible in comparison. In contrast to the Non-Financial Report for fiscal year 2017/18, the KPIs reported this year don't include Schwermetall Halbzeugwerk GmbH & Co. KG, in which Aurubis holds a 50 % stake.

² Emissions from diesel vehicles in accordance with the emission trading system are not included in the direct CO₂ emissions. However, they make up a very small percentage compared to other sources.

PROTECTION FROM ENVIRONMENTAL IMPACT

As a producer of copper and other metals, we are aware of our environmental responsibility. We have therefore set ourselves the target of conserving resources and maintaining a clean environment for future generations. This applies not only to our own processes but to those along the value chain as well [Q Human rights, pages 52–53](#).

The chief operations officer and Corporate Environmental Protection management are responsible for the strategic positioning of environmental protection in the Group. Environmental officers oversee the environmental protection duties at the individual production sites [Q Sites and employees, page 65](#).

The principles of our Corporate Environmental Protection Guidelines provide a framework for safeguarding our uniform, Group-wide environmental standards. They are enshrined in the Corporate Policy on Environmental Protection. We have set Group-wide targets in environmental protection. We implement corresponding local measures at the production sites to achieve these targets. Environmental performance is monitored and controlled using key environmental parameters, which are regularly recorded at the production sites and verified by external inspectors.

The main standards for our production processes are outlined in the permits issued by the governmental authorities. The baseline includes European regulations on immissions, emissions, water, waste, and disruptions, as well as their implementation in national law, plus the European chemical regulation REACH.

Most of our sites have environmental management systems in accordance with ISO 14001/EMAS [Q Glossary, page 194 Q Certifications by site, page 49](#). At the Hamburg and Lünen sites, these are part of the integrated management system for quality, environmental protection, energy, and occupational safety. During the reporting period, the certifications were confirmed through routine surveillance visits or recertification.

In addition to fulfilling legal requirements, the management systems help us improve our environmental performance. They assist us in recognizing potential improvements and, in the case of deviations from specified targets, in initiating corrective actions. We continuously inform our employees about environmental and energy-related topics and train them accordingly. Moreover, emergency drills are carried out regularly, which we document and evaluate.

Our efforts are paying off, with specific dust emissions for primary and secondary copper production [Q Glossary, page 195](#) having been reduced by 95% compared to the reference year 2000. The emission reduction programs of the last few years will continue. In addition to reducing emissions to air, we have also made significant improvements in water pollution control. We have reduced metal emissions to water in copper production processes from 7.2 to 1.1 g per t of copper output since 2000. This is a decline of 85%.

In early 2019, the Hamburg Environmental Authority published that measurements taken at the Veddel measuring station in 2018 exceeded the target for arsenic in particulate matter in the ambient air. As in past years, our Hamburg plant adhered to and fell significantly below the legal limits prescribed for all of the emissions permitted for the operation of our facilities. Nevertheless, we will continue to actively implement additional emission reduction measures to ensure that the measurements at the Veddel measuring station continue to fall below the targets, even in unfavorable climate conditions (as in 2018).

Dialogue with governmental authorities and the public is important to us, which is why we are involved in public projects. For example, since 2013 we have participated in the EU projects Organisation Environmental Footprint and Product Environmental Footprint, which seek to achieve an environmental balance in organizations and products. In 2018, the two pilot projects we participated in were successfully concluded when the results were accepted by the official supervisory bodies. We plan to take part in the next phase of the Environmental Footprint as well and contribute our experience in this area. Furthermore, we carried out a life cycle analysis for copper cathodes and published the results in the Aurubis AG Environmental Statement. The numbers show that the footprint of the Aurubis cathodes is smaller than the average cathode produced by the members of the International Copper Association (ICA)¹.

Key measures of the Sustainability Strategy 2018–2023 and their status in FY 2018/19

» *Introducing the ISO 14001 standard for environmental management systems across the Group*

Twelve sites were certified in accordance with ISO 14001 in fiscal year 2018/19 [Q Certifications by site, page 49](#).

» *Reducing specific metal emissions to water in multi-metal production with site-specific projects and individual measures*

Status in 2018: 52% reduction (target: 40% by 2022, base year: 2012)

One measure to reduce metal emissions to water was to install a new sand filter in the existing treatment plant for industrial wastewater at the Pirdop site. Commissioning is expected in late 2019. This should reduce emissions from undissolved substances.

» *Reducing specific dust emissions to air in multi-metal production with site-specific projects and individual measures*

Status in 2018: 13.4% reduction (target: 15% by 2022, base year: 2012)

For example, a new facility for cooling converter slag in pots was built at the site in Pirdop, Bulgaria. Commissioning is expected in late 2019. This project contributes to a further reduction in fugitive emissions.

» *Reducing specific SO₂ emissions to air with planned site-specific projects and individual measures*

The new facility for cooling converter slag mentioned above also contributes to reducing SO₂ emissions.

¹ ICA – International Copper Association: Copper Environmental Profile, Sept. 2017.

KPIs:**Specific emissions from copper production**

in g/t of copper output	2018	2017	2016	2015	2014	2013
Dust emissions ¹	63	56	60	55	55	52
Metal emissions to water ²	1.1	1	1.1	1	1.3	1.8

¹ The KPIs relate to the copper production sites, i.e., to primary and secondary copper production at the Hamburg, Lünen, Olen, and Pirdop sites.

² In our reporting, we refer to the copper production sites that discharge directly into water. These sites are Hamburg, Olen, and Pirdop. In Lünen, wastewater is directed to the public sewer system after being treated on the plant premises.

Certifications by site

Site	EMAS	ISO 14001	ISO 50001	ISO 9001	IATF 16949	Efbv	ISO 45001/ OHSAS 18001 ³
Hamburg, headquarters (DE)	✓	✓	✓	✓			
Lünen (DE)	✓	✓	✓	✓		✓	
Pirdop (BG)		✓		✓			✓ ⁴
Olen (BE)		✓		✓			
Emmerich, Deutsche Giessdraht (DE)		✓	✓	✓			
Avellino (IT)	✓	✓		✓			✓
Fehrbellin, CABLO (DE)		✓	✓	✓		✓	
Nersingen, Strass, CABLO (DE)		✓	✓	✓		✓	
Hamburg, E. R. N. (DE)		✓	✓	✓		✓	
Röthenbach, RETORTE (DE)				✓			
Hamburg, Peute Baustoff (DE)				✓ ¹			
Buffalo (USA)				✓	✓		
Zutphen (NL)		✓		✓	✓		
Pori (FI)		✓		✓			✓
Stolberg (DE)			✓	✓	✓		
Stolberg, Schwermetall (DE) ²	✓	✓	✓	✓			✓

¹ For the sale of iron silicate granules used to produce blasting abrasives.

² Not majority-owned by Aurubis (50% stake).

³ The slitting center in Dolný Kubín is also certified in accordance with OHSAS 18001.

⁴ Valid starting October 1, 2019.

Explanation:

EMAS: system of specifications for environmental management systems.

ISO 14001: standard for environmental management systems.

ISO 50001: standard for energy management systems.

ISO 9001: standard for quality management systems.

IATF 16949: standard for quality management systems in the automotive industry, based on ISO 9001.

Efbv: Ordinance on Specialized Waste Management Companies (German certificate).

ISO 45001: standard for occupational safety management systems.

OHSAS 18001: standard for occupational safety management systems.

RECYCLING SOLUTIONS

We invest in our multi-metal recycling and, in this way, contribute to a circular economy and thus to the conservation of natural resources beyond our key expertise in copper recycling.

In addition to the processing of copper concentrates, the recycling of copper scrap, copper alloy scrap, and other secondary raw materials is a key business area at Aurubis. Copper is a metal that can be recycled as often as desired without a loss of quality. This means that copper of the highest purity can be produced from recycling materials again and again. Furthermore, copper is one of the base metals used to recover or extract a number of other accompanying elements such as gold, silver, nickel, tin, lead, or zinc.

Among the secondary raw materials we process are complex materials [Q Glossary, page 194](#) from end-of-life products. These come from sources such as electronic devices, vehicles, and other items used daily and consist of material combinations that include plastics, ceramic, or glass. Separating them into material and product streams by type in order to reuse them is a significant challenge. We utilize highly developed mechanical, physical, and metallurgical separating and refining processes in different combinations for this purpose as part of our multi-metal recycling.

Our Commercial division is responsible for sourcing recycling materials for the Group. This is divided into the areas Recycling Raw Materials (which handles the material supply for the smelters), Marketing Cathodes (which supplies the production facilities with cathodes and “direct melt” raw materials), and Product Sales & Marketing with the function Customer Scrap Solutions.

This organization aligns with our recycling approach: we use secondary materials from production and from end-of-life products as raw materials. Especially in the marketing of our products and in our customer relationships, we include the return of the metals in our thinking. We provide individualized solutions for taking back recycling materials that accumulate in the processing of our copper products as well as other metals in

the different value-added stages that take place with our product customers and their customers. Depending on the value-added stage, materials are accumulated with very high copper contents, such as Millberry scrap, which can be immediately directed to the copper production process, or more complex or alloyed recycling raw materials that can also be smelted, such as copper- and precious metal-bearing stamping waste, alloy scrap, slags from foundries, and other industrial residues like used catalysts and galvanic slimes.

As part of our “closing-the-loop” activities, we build up partnerships through which we not only sell our products but also take back recycling raw materials customers accumulate, in addition to other service offerings.

Aurubis processes recycling materials at different sites. The managers of these sites report to the chief operations officer. Smaller subsidiaries such as CABLO, Elektro-Recycling Nord (E. R. N.) and RETORTE report to the management of the Recycling Raw Materials and/or Precious & Minor Metals departments in the Commercial division.

Our sites in Lünen (Germany) and Olen (Belgium) specialize in processing recycling raw materials, which are the primary feedstock at our largest recycling plant, the Aurubis recycling center in Lünen.

The plant in Lünen was certified by TÜV Nord in accordance with the WEEE End Processor Standard in 2015 (WEEE = Waste Electrical and Electronic Equipment). This is a voluntary standard for the processing of WEEE materials containing copper and precious metals, such as circuit boards. We helped develop the standard and thus support the installation of organized recycling and disposal processes through compulsory standards. Since December 2018, the plant has been certified through WEEELABEX in accordance with the related European series of standards EN 50625.

Moreover, we have two companies with unique recycling expertise within the Group: our subsidiary CABLO specializes in recycling cable production waste and end-of-life cable scrap, while E. R. N. focuses on recycling electrical appliances and electronic devices of all kinds.

The Hamburg and Pirdop sites also process recycling raw materials to produce cathode copper and precious metals. Though the primary smelters utilize copper concentrates as their main feed material, they also use copper scrap to a certain extent because it is ideal for process cooling and therefore enables particularly energy-efficient processing.

We and 22 national and international partners are participating in the European research project FORCE – Cities Cooperating for Circular Economy. The project's goal is to develop new concepts to avoid and treat waste, specifically when it comes to the material streams related to plastic, biomass, end-of-life electrical appliances, and wood. As a multi-metal recycler, Aurubis supports the project with its expertise for the purpose of improving the recycling of strategic metals (e.g., copper and gold) through the best possible collection and dismantling system for waste electrical and electronic equipment.

Key measures of the Sustainability Strategy 2018–2023 and their status in fiscal year 2018/19

- » *Increasing the volume of complex recycling materials sourced*
Raw material sourcing and processing are changing due to the rising complexity of the raw materials; we consider this fact both a challenge and an opportunity and address it with our own preparation techniques and collaboration with partners who operate their own processes to enrich metals in raw materials.
- » *Establishing and developing “closing-the-loop” systems as a result of new or intensified cooperation with original equipment manufacturers (OEMs), retailers, or copper product customers*
We integrated this target in our strategic approach in the Product Sales & Marketing department in the past fiscal year.

Q Magazine 2018/19, pages 28–32

Social matters

SOCIAL ENGAGEMENT¹

Social engagement is a fixed component of our company identity. We fulfill our responsibility within society – as an employer, as a business partner, as a neighbor, and as a member of society – throughout the entire value chain.

We have set the target of contributing to a livable environment for future generations, focusing on areas of action that are linked with Aurubis' key areas of expertise. We want to promote enthusiasm for our company and for our work and present ourselves as a responsible, committed company.

Projects and partners are selected according to established criteria outlined in our Sponsoring Policy, which also defines responsibilities in the Group. The Event Management & Sponsoring division is responsible for our social engagement and reports to the vice president overseeing Investor Relations & Corporate Communications. This function then reports directly to the Executive Board chairman so that he is included in our social activities and related budget decisions. A Sponsoring Committee made up of appointed members from Event Management & Sponsoring, Communications, Sustainability, and Corporate Compliance makes decisions about project support that exceeds a certain level set internally.

Apart from projects at Group level, our sites also get involved at the local level using their own budgets. Our Sponsoring Policy applies to these projects as well, which, in addition to the three Group-wide focuses, also concentrate on culture, sports, or our core business.

¹ Topic not material for Aurubis within the meaning of the CSR Implementation Act.

Key measures of the Sustainability Strategy 2018–2023

- » *Developing and implementing the sponsoring concept “together we care” for social engagement at Group level (by fiscal year 2018/19)*

In fiscal year 2018/19, we adopted and released our new strategy for social engagement, called “together we care.”

We are focusing our involvement on the areas of knowledge, the environment, and participation, in line with our company strategy. www.aurubis.com/togetherwecare

Project examples in the reporting period

In Hamburg, we support the project Bridge & Tunnel. A key aspect of the project is the recycling of reusable materials. Old textiles and leftover material are processed into accessories, clothing, and home textiles in Hamburg-Wilhelmsburg. Bridge & Tunnel creates permanent jobs for people who are not employed on the primary labor market for various reasons and for individuals with an immigration background. www.bridgeandtunnel.de/en

Aurubis Bulgaria supported the renovation of a convent in Zlatitsa during the reporting period. The support provided is part of Aurubis Bulgaria’s local sponsoring strategy of helping restore cultural and historic places in the region in order to develop a local network of tourist destinations. The purpose of this network is to promote regional development.

Aurubis Belgium supports the local social organizations Welzijnsschakels and Sociale dienst Olen, which have the shared goal of providing assistance to prevent poverty in Belgium, particularly among older people and families.

www.welzijnsschakels.be/regios/groepen/antwerpen/welzijnsschakel-olen
www.desocialekaart.be/ocmw-olen-sociale-dienst-525670

Starting in the past fiscal year, Aurubis has also been involved in key supply countries in South America, especially Peru and Chile.

In Peru, Aurubis supports a holistic education program of the foundation Fundación Niños del Arco Iris in the Urubamba District. In addition to conveying knowledge and directly including the families involved, the project also focuses on health issues.

www.ninosdelarcoiris.com/en

Near Arequipa in Peru, Aurubis supports a water project in the Salinas y Aguada Blanca National Reserve. The goal of the project is to use natural resources sustainably and to maintain and protect biodiversity with the direct involvement of local citizens.

www.descosur.org.pe/rnsab/

In Chile, Aurubis supports the development of dual occupational training for agriculture following the German model at the Liceo Jean Buchanan school in the O’Higgins Region (Chile).

chile.ahk.de/es/infocenter/noticias/noticias/aurubis-ag-firma-acuerdo-con-camchal-para-fomentar-la-capacitacion-tecnica-en-liceo-de-peumo/

Human rights

Aurubis respects human rights and advocates for their protection. We reject any form of discrimination, forced labor, or child labor.

We respect the rights of indigenous populations. Compliance with the internationally recognized core labor standards of the International Labour Organization (ILO) are of fundamental significance. This is enshrined in our Code of Conduct. The entire Executive Board bears responsibility for the respect of human rights in our business activities.

We have been committed to the United Nations Global Compact since 2014 and thus to working on implementing its Ten Principles related to human rights, labor, the environment, and anti-corruption. These Ten Principles are derived from the Universal Declaration of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention against Corruption.

Our Code of Conduct and the company values, PRIMA [Q Glossary](#), [page 195](#) are the basis for our responsible conduct, including with regard to human rights. PRIMA stands for Performance, Responsibility, Integrity, Mutability, and Appreciation. We call on all employees to report cases of discrimination to their HR departments or the chief compliance officer. Our employees and business partners can report these types of cases anonymously through our whistle-blower hotline as well.

Our efforts regarding respect for human rights focus on our supply chain.

RESPONSIBLE SUPPLY CHAIN

In our view, our responsibility to uphold human rights extends to the supply chain. Aurubis sources metal-bearing raw materials worldwide. In some cases, our metals come from countries with a higher risk of human rights violations, non-compliance with social and environmental standards, or corruption. One of our objectives is to manage our global sourcing of primary and secondary raw materials responsibly, taking the respective impact on the social environment, the natural environment, and economic aspects into account.

We have implemented Aurubis Business Partner Screening to fulfill our due diligence obligation. This tool enables us to analyze our business partners' integrity in relation to social and ecological criteria. The focus of the process is on the topics of compliance, corruption, human rights violations, and the environment. Based on this assessment, management decides on possible contracts or restrictions. For existing business partnerships, the analysis is repeated regularly depending on the original risk. The screening is

based on the principles of the OECD. Since 2013, Aurubis' gold production has been annually certified as conflict-free according to the standards of the London Bullion Market Association (LBMA). The certificate verifies the effectiveness of our due diligence process with regard to gold production. Suppliers of other raw materials go through a comparable process as those who supply gold-bearing raw materials.

Key measures of the Sustainability Strategy 2018–2023 and their status in FY 2018/19

- » *Introducing the Aurubis Business Partner Code of Conduct across the Group (by FY 2018/19)*

The Code of Conduct was introduced.

- » *Implementing Aurubis Business Partner Screening across the Group*

The screening has already been expanded to include the key sites Olen and Pirdop.

- » *Including human rights, environmental protection, and safety clauses¹ in supply contracts for primary raw materials*

During fiscal year 2018/19, the percentage of contracts with primary raw material suppliers including the corresponding clause was over 80 % (target: 100 % by FY 2022/23).

- » *Identifying a suitable sector solution*

Aurubis is a member of the International Copper Association (ICA). In 2019, the ICA introduced the concept of the Copper Mark, which will entail a review of the sustainability standards of copper production sites including mines, smelters, and refineries. We support the initiative and are actively monitoring the development process as a member of the ICA.

¹ We expect our suppliers of primary raw materials to follow not only local laws but also UN sanctions and trade restrictions, as well as UN conventions related to human rights, environmental protection, and safety.

Anti-corruption

Corporate governance and the principles of responsible and sustainable company management determine Aurubis' actions. More information is available in the section [Q Corporate Governance](#), pages 17–35.

Anti-corruption measures are established in Aurubis' compliance management. Compliance management forms the basis for observing legal regulations. Compliance with all legal and company guidelines and policies is our objective. Violating the law can have serious consequences – for our employees, for Aurubis as a group, and for our business partners. For us, compliance also means that we act in accordance with ethical principles and our defined company values, as well as with internal corporate policies.

Together with the Executive Board, our compliance employees promote a compliance culture and actively strive to strengthen awareness for following rules and laws in the Group. Compliance management establishes the main targets, develops the corresponding organization, and identifies, analyzes, and communicates significant compliance risks. Our compliance program introduces principles and measures to limit risks and prevent violations. The chief compliance officer reports regularly (and as the circumstances may require) to the Executive Board and Audit Committee with regard to the compliance management system, compliance violations, and compliance-related measures. He works together closely with the employees responsible for Risk Management and Internal Audit. Within Aurubis' internal

control system, the chief compliance officer reviews potential compliance risks together with the Executive Board, the plant managers, and the heads of corporate and central functions.

The company's chief compliance officer is the central point of contact for all compliance-relevant questions and reports directly to the Executive Board. At the larger Group sites, local compliance officers are available as a point of contact for employees.

Measures include prevention, monitoring, and sanctions. Preventive measures at Aurubis comprise internal policies, guidance, and particularly the training of employees.

One of the central topics in our compliance activities is preventing corruption in our business activities. The anti-corruption measures are also established in our compliance management. The Corporate Anti-Corruption Compliance Policy and the Code of Conduct for employees, both of which apply Group-wide, are at the core of the anti-corruption efforts in our business activities.

The Aurubis Code of Conduct is given to every employee. They all confirm that they have received the Code of Conduct by signing the employment contract. Training on anti-corruption and antitrust law is carried out regularly throughout the Group. As part of compliance management, the corruption risks at our sites are identified and documented by Risk Management.

Employees and business partners can make anonymous reports regarding legal violations via a whistle-blower hotline. It is also open to all of our external stakeholders. This hotline is operated by external, independent attorneys. Any tips they receive, for example regarding possible cases of corruption, discrimination, or incidents in the supply chain, are investigated. If any wrongful acts are actually proven, they can lead to warnings, dismissals, and/or damage claims. The hotline is available in English, German, and Spanish.

Key measures

- » *Providing employees for whom the topics of anti-corruption and antitrust law are relevant due to their responsibilities with training on these topics about every three years, regardless of their level in the company hierarchy*

In the past few years, this applied to 730 employees for anti-corruption training and to around 320 employees for antitrust law training.

KPI

We are not aware of any antitrust or corruption cases in the reporting period.

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

To the Supervisory Board of Aurubis AG, Hamburg

We have performed an independent limited assurance engagement on the non-financial report of Aurubis AG, Hamburg (further „Aurubis“) as well as the by reference qualified parts "Foundations of the Group" and "Risk and Opportunity Report" of the Combined Management Report (further: „Report“) according to §§ 315b and 315c in conjunction with 289c to 289e German Commercial Code (HGB) for the business year from October 1, 2018 to September 30, 2019.

MANAGEMENT'S RESPONSIBILITY

The legal representatives of Aurubis are responsible for the preparation of the Report in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB.

This responsibility of the legal representatives includes the selection and application of appropriate methods to prepare the Report and the use of assumptions and estimates for individual disclosures which are reasonable under the given circumstances. Furthermore, this responsibility includes designing, implementing and maintaining systems and processes relevant for the preparation of the Report in a way that is free of – intended or unintended – material misstatements.

¹ Our engagement applied to the German version of the Report. This text is a translation of the Independent Assurance Report issued in the German, whereas the German text is authoritative.

INDEPENDENCE AND QUALITY ASSURANCE ON THE PART OF THE AUDITING FIRM

We are independent from the entity in accordance with the requirements of independence and quality assurance set out in legal provisions and professional pronouncements and have fulfilled our additional professional obligations in accordance with these requirements.

Our audit firm applies the national statutory provisions and professional pronouncements for quality assurance, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (Institut der Wirtschaftsprüfer, IDW) regarding quality assurance requirements in audit practice (IDW QS 1).

PRACTITIONER'S RESPONSIBILITY

Our responsibility is to express a conclusion on the Report based on our work performed within our limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information" published by IAASB. This Standard requires that we plan and perform the assurance engagement to obtain limited assurance whether any matters have come to our attention that cause us to believe that the Report of the entity for the business year October 1, 2018 to September 30, 2019 has not been prepared, in all material respects, in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB. We do not, however, provide a separate conclusion for each disclosure. In a limited assurance engagement the evidence gathering procedures are more limited than in a reasonable assurance engagement and therefore significantly less assurance is obtained than in a reasonable assurance engagement. The choice of audit procedures is subject to the auditor's own judgement.

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

- » Inquiries of personnel on corporate 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 boundaries of Aurubis
- » A risk analysis, including a media search, to identify relevant information on Aurubis sustainability performance in the reporting period
- » Reviewing the suitability of internally developed Reporting Criteria
- » Evaluation of the design and implementation of the systems and processes for determining, processing and monitoring disclosures relating to environmental, employee and social matters, respect for human rights, and combating corruption and bribery, including the consolidation of the data
- » Inquiries of personnel on corporate level who are responsible for determining disclosures on concepts, due diligence processes, results and risks, for conducting internal controls and consolidation of the disclosures
- » Evaluation of selected internal and external documentation
- » Analytical evaluation of data and trends of quantitative information which are reported by all sites for consolidation on corporate level
- » Evaluation of local data collection, validation and reporting processes as well as the reliability of reported data based on a sample of the site in Lünen (Germany)
- » Assessment of the overall presentation of the disclosures

CONCLUSION

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the Report of Aurubis for the business year from October 1, 2018 to September 30, 2019 is not prepared, in all material respects, in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB.

RESTRICTION OF USE/CLAUSE ON GENERAL ENGAGEMENT TERMS

This report is issued for purposes of the Supervisory Board of Aurubis AG, Hamburg, only. We assume no responsibility with regard to any third parties.

Our assignment for the Supervisory Board of Aurubis AG, Hamburg and professional liability is governed by the General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2017 (www.kpmg.de/bescheinigungen/lib/aab_english.pdf). By reading and using the information contained in this report, each recipient confirms notice of provisions of the General Engagement Terms (including the limitation of our liability for negligence to EUR 4 million as stipulated in No. 9) and accepts the validity of the General Engagement Terms with respect to us.

Hamburg, 10.12.2019

KPMG AG
Wirtschaftsprüfungsgesellschaft

Laue
Wirtschaftsprüfer
(German Public Auditor)

ppa. Mathias