

Sustainability

NON-FINANCIAL REPORT

Introduction

At Aurubis, sustainability is a significant part of our conduct, enshrined in our company strategy, and therefore plays a key role in our business 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 the environment, as we are aware of the limits of natural resources and want to keep negative impacts from our business activities to a minimum.

With this separate Non-Financial Report (NFR), Aurubis fulfills its obligation to disclose non-financial information for fiscal year 2019/20 pursuant to Sections 315b and 315c in conjunction with Sections 289b to 289e of the German Commercial Code (HGB). We use the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) [Q Glossary, page 207](#) as a guide in describing the concepts and selected KPIs.

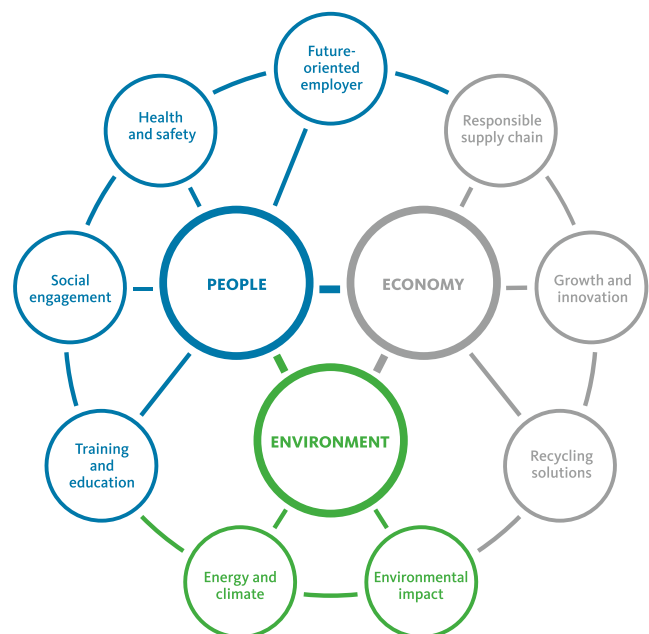
The main external factors influencing business development are described in the Risk and Opportunity Report of the Combined Management Report. Risks related to non-financial aspects beyond the company boundaries are also mentioned there. Risks were assessed in accordance with Section 289c (3) of the German Commercial Code (HGB). 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. 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 HGB. We have developed and implemented management approaches accordingly.

Aurubis Sustainability Strategy

Since introducing the company vision in 2017, Aurubis has developed into a multimetal group. This transformation is firmly established in the corporate strategy, which also includes sustainability as an integral pillar. We aim to enhance our sustainability achievements continuously, beyond the legal requirements.

In 2018, the Aurubis Executive Board and Supervisory Board passed the Sustainability Strategy 2018–2023, the continuation of the Sustainability Strategy passed in 2013. Based on the aspects “People – Environment – Economy,” it comprises nine action areas for a period of five years ([Q see illustration](#)). These are translated into concrete targets and measures for which we have established implementation deadlines and key performance indicators (KPIs) so that our sustainable company development can be measured and guided. During the reporting year, we subjected our Sustainability Strategy to an interim review. The updated strategy should be passed and published by the Executive Board in the new fiscal year. The individual measures of the current Sustainability Strategy and the status of their implementation are in this report at the end of the description of each action area.

Aurubis Sustainability Strategy



As part of our responsible business conduct, the topics of compliance and human rights also play a key role in addition to the nine action areas, complementing the key aspects of “People – Environment – Economy.” Furthermore, we address

other significant interdisciplinary topics such as sustainable finance [Q Glossary, page 208](#). Aurubis supports the work of the EU Action Plan on Sustainable Finance at European level and the German federal government's Sustainable Finance Committee at national level. These deal with political issues regarding the classification of sustainable products or possible liability regulations for risks in the supply chain, for example. Because it affects several of our sustainability activities, such as climate protection, protection and respect for human rights, and the circular economy, sustainable finance extends across multiple action areas of the Sustainability Strategy and therefore cannot be clearly classified under the matters outlined in Section 289c (3) of the German Commercial Code (HGB). Notably, Aurubis itself is active in utilizing sustainable financing instruments: in the reporting year, we were the first European company in the basic materials industry to place an ESG-linked *Schuldschein* loan [Q Glossary, page 207](#), to finance the acquisition of the recycling company Metallo and other general company financing needs.

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.

One proven tool in our strategy work used to determine the relevant reporting issues is the materiality analysis [Q Glossary, page 208](#). To prepare the first Non-Financial Report in 2018, the action areas of the Sustainability Strategy were reviewed to ensure that they fulfilled the materiality criteria in accordance with the definitions of the German Commercial Code (HGB). We updated the materiality analysis in the reporting year with the assistance of internal experts. This was based on a revised list of potentially material topics that included new sustainability aspects in our industry that are more relevant for the future.

The resulting list of material topics and focuses of the strategic action areas didn't change fundamentally as a result of the analysis. The Executive Board confirmed the results. The topics identified as material in this process are assigned to the action areas of the Aurubis Sustainability Strategy in the Non-Financial Report. We present topics that have the same management approach in a consolidated format below. The analysis also provided an impetus for the strategy update.

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.

Overview of material topics

		Material according to German Commercial Code	Material for Aurubis	Page in NFR
Employee-related matters	Future-oriented employer	✓	✓	Q 50
	Training and education	✓	✓	Q 52
	Health and safety	✓	✓	Q 54
Environmental matters	Energy and climate	✓	✓	Q 56
	Protection from environmental impact	✓	✓	Q 58
	Recycling solutions	✓	✓	Q 62
Social matters	Social engagement		✓	Q 64
Human rights	Responsible supply chain	✓	✓	Q 66
Anti-corruption	Anti-corruption	✓	✓	Q 67

Sustainability management

From an organizational perspective, the Sustainability department is part of the Corporate Communications, Investor Relations & Sustainability division, whose supervisor reports directly to the Executive Board chairman, who in turn bears the overall responsibility for the issue of sustainability in the Aurubis Group. 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 and supporting the operational implementation of the measures with the relevant divisions. Moreover, the department manages sustainability reporting and communication. It is therefore the point of contact for ESG rating agencies. Furthermore, it assists with supplier screening based on sustainability criteria.

We make our sustainability achievements transparent in a variety of ways. These include participation in sustainability rankings and ratings such as the CDP [Q Glossary, page 207](#) (a non-profit organization that advocates for climate reporting), and the voluntary reporting of the past several years. Our Sustainability Reports are guided by the GRI Standards and are released every two years, with the next one in spring 2021 covering fiscal year 2019/20. In the years without a Sustainability Report, the KPIs are updated and released separately 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's Vision 2025. Today, Aurubis' main focus is on the production and processing of copper and other non-ferrous metals. Aurubis primarily processes copper concentrates that are mined from ores and sourced on the global market. The company purchases the necessary raw materials, as it doesn't own any mines or stakes in mines. The processing of secondary raw materials plays an important role as well. Corresponding to our vision, we are purposefully expanding our business model towards a broader multimetal approach. This means that, in addition to copper, other metals are extracted from raw materials and intermediate products and then processed into marketable products with added value.

Corporate governance and the principles of responsible and sustainable company management determine Aurubis' actions. Additional information is available in the sections [Q Corporate Governance, pages 18–46](#).

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 and consolidated at Group level. All environmental and energy KPIs are reported for calendar year 2019, not fiscal year 2019/20.¹ As a result, the Metallo sites are not included in these KPIs. The inclusion of the Metallo KPIs from 2019 had no significant impact on the relative environmental KPIs reported here. Metallo will be fully integrated in the KPIs shown in this report in the coming year. When the following report mentions copper production in the context of environmental KPIs, this refers to primary and secondary copper production [Q Glossary, page 208](#) at the Hamburg, Lünen, Olen, and Pirdop sites. Significant differences between Aurubis AG KPIs and Group KPIs are explained.

¹ The KPIs are primarily used for internal management purposes and governmental reporting, for which the calendar year is prescribed as the reporting period. Reporting on calendar year and fiscal year figures in parallel could lead to confusion and ambiguities.

Employer-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 ourselves the target of creating a work environment for good, close cooperation and promoting involvement and creativity. We form a team that works toward the company's progress – even in challenging times.

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 improvement and 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, taking labor market changes, societal transitions, and trends in HR work into consideration. One 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. Current topics that are picking up momentum influenced HR strategy work during the reporting period, such as the progress in digitalization and trials with different ways of working that arose or sped up due to individual ad hoc solutions in the course of the coronavirus pandemic.

Furthermore, HR work during the reporting year also concentrated on the current Performance Improvement Program focused on cost reduction. In the course of this program, we will cut approximately 210 full-time equivalent (FTE) positions in the Corporate Functions and the Hamburg plant until fiscal year 2022/23. The job cuts will follow socially responsible principles. For example, we will try to prevent as many redundancies as possible by not filling certain open positions, offering an improved early retirement scheme, and facilitating internal job changes. The employee representatives were and are involved in the process. Another focus was on structuring and supporting organizational changes such as the Metallo integration, the acquisition of the IT company azeti, and the closure of the CABLO site in Strass.¹

Diversity in the personnel structure is important to us. The Code of Conduct and our corporate values serve as the basis for respectful cooperation.² For us, a diverse workforce is conducive to company success thanks to the knowledge transfer, different viewpoints, and open collaboration that it fosters. 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. Our objective is to prevent these and other aspects of diversity such as religious or political views, sexual orientation, or disabilities from playing a role in hiring decisions or in an individual's continued career. Consequently, compensation also depends on the job performed, the quality of the work, and the level of professional experience. One of our goals is to increase the proportion of female managers – independently of legal stipulations, which we fulfill by defining concrete target parameters for the first and second management levels under the Executive Board. More information about the diversity concept is available in the [Q Corporate Governance Report, pages 20–21](#).

¹ The Cablo site had to be discontinued for economic reasons. Eleven salaried employees had to be made redundant as a result.

² The current Code of Conduct of the Metallo sites that were acquired in 2020 is fundamentally similar to Aurubis' Code of Conduct. The final harmonization of Metallo's policies and commitments with those of Aurubis, including the Code of Conduct, is still pending.

We offer our employees an attractive work environment and support them by offering options allowing them to establish a good work/life balance. In this regard, making working-time models more flexible and modern is of high importance. In connection with the coronavirus crisis, for instance, the start and end times of shifts were made more flexible and options for remote work were further expanded. The experience gained in the process will be used in the further development of a modern work organization that takes employee needs into account.

We prioritize good cooperation between everyone in the company and offer attractive compensation in line with the market. Compensation and fringe benefits are regulated in collective wage agreements. At our only production site outside of Europe, Aurubis Buffalo, where social security isn't comprehensively regulated by law, we assume 86% of the employees' health insurance contributions.

To read more about our training and employee qualification activities, refer to the section [Q Training and education, page 52](#). Information about codetermination in the company is provided in the section [Q Human rights, page 65](#).

Key measures of the Sustainability Strategy 2018–2023 and their status in fiscal year 2019/20

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

During the process to update the Sustainability Strategy, which is still underway, a decision was made to discontinue this aspect as a separate target. The related development instruments and measures are now in the targets of the training and education action area.

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

A number of solutions were expanded significantly in both individual and collective agreements. In connection with the coronavirus crisis, for instance, the start and end times for shift employees were made more flexible and the remote work option was expanded considerably. The flextime program is reviewed and developed continuously.

- » *Developing a diversity policy*

In the course of updating the Sustainability Strategy, this target is being revised and additional measures are being established.

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 reports the employee KPIs for all consolidated sites (as at the reporting date of September 30, 2020), excluding Schwermetall Halbzeugwerk GmbH & Co. KG, in which Aurubis holds a 50 % stake.

Aurubis Group personnel structure

as at the reporting date September 30

	Employees			Female			Male		
	2019/20	2018/19	2017/18	2019/20	2018/19	2017/18	2019/20	2018/19	2017/18
Aurubis Group ¹	7,236	6,831	6,650	13 %	12 %	12 %	87 %	88 %	88 %
Blue collar	4,356	4,214	4,130	3 %	4 %	4 %	97 %	96 %	96 %
White collar ¹	2,561	2,328	2,233	29 %	28 %	28 %	71 %	72 %	72 %
Apprentices	319	289	287	12 %	13 %	10 %	88 %	87 %	90 %

¹ Prior-year figures have been adjusted.

Employee fluctuation in the Aurubis Group

as at the reporting date September 30

	2019/20	2018/19	2017/18
Fluctuation rate ¹	7.4 %	7.8 %	6.6 %
Average length of employment in the company (in years) ²	14.1	14.3	14.8

¹ Excluding apprentices.

² Prior-year figures have been adjusted.

Age structure

as at the reporting date September 30¹

	2019/20	2018/19	2017/18
< 20 years	11	15	14
20–29 years	990	997	981
30–39 years	1,806	1,642	1,509
40–49 years	1,583	1,467	1,445
50–59 years	1,912	1,824	1,814
60–69 years	602	584	584
> 69 years	13	13	16

¹ Excluding apprentices. Prior-year figures have been adjusted.

TRAINING AND EDUCATION

In order to achieve our company vision and advance our strategy, we rely on a learning organization. The ongoing individual development of our employees and sound training for young talents have high priority in this regard.

HR 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.

To secure qualified personnel in the long term, 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.

We are continuing and expanding the training offerings in our leadership and qualification program according to the Group's needs. In particular, options for managers at the foreman level remain a top priority. Employees are offered a number of technical training measures as well as options for personal development.

In addition to qualification and development programs geared to necessary skills, for example in the areas of the Aurubis Operating System (AOS) [Q Glossary, page 207](#) and in project management, we also rely on platforms for networking and discussing best practices (e.g., expert panels and online learning groups). We frequently evaluate the different qualification options and adjust them as needed. Since the last reporting year, we have successfully carried out our one- to two-hour micro-learning units called Learning Nuggets, in which participants learn and test new skills. The short Aurubis Essentials seminars educate interested colleagues about interdisciplinary topics, promoting a uniform, company-wide understanding of these issues.

Our goal is to continue fostering digital and self-guided learning as well as innovative learning methods within the Group. Thanks to digital training formats, many Aurubis Essentials and Learning Nuggets took place online during the coronavirus pandemic. The insights from using the digital learning formats are valuable for the ongoing development of our learning organization.

Aurubis is one of the largest training companies in the chemical industry in Germany. We are proud of our training and retention rate, which makes an important contribution to securing a qualified workforce. At our site in Pirdop, Bulgaria, we implemented a vocational training program based on the Swiss training model a few years ago.

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 2019/20, seven of the ten participants took on an apprenticeship at Aurubis. The remaining participants started external apprenticeships or have gone on to pursue higher education.

In 2019, we inaugurated two modern training centers in Lünen and Hamburg. In Lünen, the ATASI building is home to the divisions Training (including the training workshop), Occupational Safety and Technology. In Hamburg, the Training and Research & Development (R&D) divisions are located in the Innovation and Training Center (IAZ). The new buildings lay the foundation for increasing the number of apprenticeships.

The coronavirus pandemic posed a significant challenge for vocational training during the reporting year. With the help of digital learning supports and communication formats, vocational training continued almost seamlessly while taking the necessary precautions into account. The experience from working digitally will be considered in vocational training work in the future. Aurubis maintains its plans to increase the company's number of apprentices.

Aurubis takes part in educational marketing at fairs and school events. To better address potential applicants, the vocational training website was revamped and new video clips about apprenticeship trades were produced during the reporting year. Furthermore, we cooperate with partner universities, offer internships to students in Germany, and facilitate thesis projects.

Key measures of the Sustainability Strategy 2018–2023 and their status in fiscal year 2019/20

- » *Regularly identifying qualification needs to expand project, process, and management expertise in a targeted way*
In the reporting year, the gradual rollout of the skills matrix started in all of the plants to systematically record qualification needs, and qualification planning for technical and specialized training began accordingly. Moreover, the establishment of Group-wide project management standards was initiated, with the introduction of a learning path to provide project managers with the appropriate qualifications. Our Group process managers were certified in accordance with these standards; additional employees in the company will be introduced to the standards as well.

» *Group-wide introduction of the AOS pillar “Education and Training”*

The AOS pillar was integrated in the AOS Operations area. At the Hamburg plant, employees were qualified as AOS experts in a modular training program. The planning for equivalent AOS expert qualifications at the other plants is underway and this will be carried out as needed.

» *Establishing Group-wide knowledge management to identify, preserve, transfer, and enhance knowledge across functions*

The knowledge transfer pilot phase was successfully concluded. Due to the participants' positive experience, knowledge transfer was established as a knowledge management method as part of succession planning at Aurubis AG. The knowledge transfer process is enshrined in the company's succession arrangements. A review is currently taking place to determine whether there is a need for knowledge transfer Group-wide.

KPIs

Aurubis reports employee KPIs for all consolidated sites (as at the reporting date of September 30, 2020), excluding Aurubis Product Sales GmbH and Schwermetall Halbzeugwerk GmbH & Co. KG, in which Aurubis holds a 50% stake.

Training and education

	2019/20	2018/19	2017/18
Apprenticeship rate in Germany	7.7 %	7.3 %	6.3 %
Apprentice retention rate in Germany	71.2 %	78.4 %	80 %
Average number of training hours per employee ^{1,2}			
Aurubis Group	12.0	15.2	11.5
Blue collar	10.2	13.6	9.7
White collar	15.2	18.3	15.1
Percentage of employees receiving training			
Aurubis Group	67 %	76 %	– ³
Blue collar	66 %	73 %	– ³
White collar	69 %	79 %	– ³

¹ Our KPI results are lower compared to the previous year due to the global coronavirus pandemic.

² For fiscal year 2019/20, the numbers were estimated for the Buffalo site. The two Metallo sites were included for the entire fiscal year 2019/20.

³ We did not record this KPI in FY 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.

Occupational Health and Safety (OHS) in the Group creates the overall conditions to prevent work-related accidents and illness. 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 208](#)) to ≤ 1.0 .

The corporate department Group Health & Safety manages OHS and establishes minimum occupational safety standards for the entire Group by issuing process instructions in addition to the Corporate Policy on Occupational Health and Safety. The department's management reports directly to the Executive Board member overseeing the Operations division. Our occupational safety approach applies to our employees, temporary workers, and external service providers. Occupational safety management at the sites is currently being developed to conform to the requirements of ISO 45001 [Q Glossary, page 208](#). Six sites (Avellino, Berango, Dolný Kubín, Pirdop, Pori, and Mortara) are already certified in accordance with ISO 45001, while Schwermetall Halbzeugwerk is certified in accordance with OHSAS BS 18001. All Aurubis production sites should be certified in accordance with ISO 45001 by June 2021.¹

The site managers play a key role because 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 so that existing knowledge can be used Group-wide. Moreover, employee representatives are included in the topic of OHS: through the reporting line to the Executive Board, Group Health & Safety also reports to the general Works Council committee and the European Works Council during committee meetings.

¹ With the exception of the newly acquired Metallo site in Belgium (certification by March 2022 planned).

Our risk assessments include both current and future work processes in the company, including maintenance and repair procedures in addition to operations. The 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. For this purpose, OHS management software is being used more and more at the sites; among other things, the software enables experiences to be shared internally. In this way, we record potential health risks for each work area and derive measures from these insights.

Accidents are systematically investigated to determine their technical, organizational, and conduct-based causes. The causes determined from accident investigations and the measures derived from them are communicated throughout the Group. There is a monthly process for reporting accidents and incidents, and every accident is immediately reported to the Executive Board. Because of our preventive measures, the accidents typical for industry such as those involving molten metals, hazardous substances, and heavy loads are rare. Comparable to other industries, the main causes of injuries are stumbling, slipping, or falling.

In addition to technical and organizational precautions, the occupational safety conduct of every individual is essential. A preventive measure to avoid accidents, the Group-wide OHS campaign 10 Golden Rules (10forZero) was initiated with the objective of positively influencing occupational safety conduct. In addition, the sites in Hamburg, Lünen, Avellino, Emmerich, Pori, and Stolberg have a program for behavior-based safety (BBS). Legal compliance audits were also introduced to achieve internal improvements. Furthermore, AOS was implemented at the Hamburg, Lünen, Emmerich, Avellino, Pirdop, and Olen sites to continue structuring and standardizing Group-wide occupational safety processes – one of the measures that strengthens our Vision Zero.

Employees are informed about risks in the workplace and are instructed about necessary preventive and protective measures, enhancing their awareness of these topics. Safety talks sensitize employees to current OHS 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.

Internal company doctors are available at the Hamburg, Lünen, and Pirdop sites. At all of the other sites, freelance occupational physicians are commissioned with carrying out obligatory and optional checkups. Health checkups are offered when new employees are hired and routine occupational health checkups are provided.

In addition, we support employees in taking preventive measures to maintain their health. The offerings of the plant medical offices extend from flu vaccinations and medical checkups to addiction prevention, as well as supporting measures for the heart and circulatory system. There are a number of activities to promote health – for example, with respect to topics like integration management for employees who have been ill, and healthy leadership. A task force is currently recording these activities for the Hamburg headquarters and transferring them to a systematic, integrated concept for company health management.

At the start of the coronavirus pandemic, a crisis team was established at Group and site level that met online regularly, together with the entire Executive Board. In this way, specific emergency plans and measures were quickly established to prioritize protecting employees' health while keeping operations up and running.

Key measures of the Sustainability Strategy 2018–2023 and their status in fiscal year 2019/20

- » *Preparing all sites for the introduction of the ISO 45001 standard for occupational health and safety (by fiscal year 2019/20)*

The adoption of ISO 45001 at all production sites and slitting centers should be concluded by June 2021, with the exception of the newly added Metallo site in Belgium (certification scheduled to take place by March 2022).

Avellino, Pirdop, Pori, Dolný Kubín, Mortara, and Metallo Berango are already certified.

🔍 [Certifications by site, page 61](#)

- » *Implementing programs to promote occupational safety conduct (until fiscal year 2020/21)*

Continued introduction of the Group-wide 10 Golden Rules at eleven sites thus far. Conclusion of the first Group-wide run-through of all 10 rules expected at the end of fiscal year 2020/21. The inclusion of the newly acquired Metallo sites has been scheduled.

Continuing the Behavior-Based Safety (BBS) program at the sites in Hamburg, Lünen, Avellino, Emmerich, Pori, and Stolberg.

KPIs

Aurubis reports occupational safety KPIs for all consolidated sites with ten or more employees, excluding Schwermetal Halbzeugwerk GmbH & Co. KG, in which Aurubis holds a 50% stake. 🔍 [Sites and employees, page 79](#)

Occupational health and safety KPIs

	2019/20	2018/19	2017/18	2016/17	2015/16
Absolute number of accidents	51 ¹	61 ²	60	47	45
LTIFR	5.4 ¹	6.0 ²	5.9 ²	4.8	4.6
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 Absolute number of accidents including Metallo starting June 1, 2020.

LTIFR: Metallo included for the entire fiscal year so that KPIs can be compared.

² Prior-year figures adjusted.

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. The use of energy is the main source of CO₂ emissions in the Group. Taking the entire value chain into consideration, over 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 the mining companies from which we source ore concentrates.

At the same time, the products we manufacture contribute to reducing CO₂ emissions because they play an important role in renewable energies and electric vehicles. Electric cars contain nearly four times 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. Our metals can therefore contribute to the low-CO₂ technologies of the future.

Determining climate-related opportunities and risks and deriving related measures are two issues that link our risk management and our energy and environmental strategy. When doing this, we consider (pending) legal requirements, technological developments, and compliance-related, reputational, and physical risks. More information is available in the Risk and Opportunity Report of this Annual Report under “Energy and climate,” as well as in our publicly available CDP report www.aurubis.com/cdp. CDP gathers and evaluates data and information about companies’ CO₂ emissions, climate risks, and reduction targets and strategies, assessing their responsibility in the supply chain in the process. We voluntarily report our CO₂ emissions annually as part of the CDP climate change program.

With our affirmation of the Science-Based Targets initiative, we are committed to setting a science-based climate target to reduce our CO₂ emissions and thus contribute to limiting global warming to 1.5 °C in accordance with the Paris Agreement on climate change. sciencebasedtargets.org

Our Group-wide Corporate Energy & Climate Policy outlines how Aurubis secures and optimizes the energy supply, energy consumption, and CO₂ avoidance. In this context, the policy also defines the roles and responsibilities of the sites and corporate departments.

The head of Corporate Energy & Climate Affairs develops and implements the Group-wide energy strategy and reports directly to the Executive Board chairman. The corporate department also 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 energy efficiency network for the German Aurubis sites' energy management officers and a regular international Aurubis workshop.

To prevent CO₂ emissions, we primarily focus on energy efficiency measures. Furthermore, we are increasingly considering measures to replace fossil fuels with alternatives, for example by commissioning the 10 MW power-to-steam plant. Assuming that 100% of the power supply comes from renewable energies, this plant alone could cut about 4,000 t of CO₂ annually. The reduction of greenhouse gas emissions is taking a higher priority in investment decisions as well.

Our large production sites have energy management systems (EMS); nine sites are currently certified in accordance with ISO 50001 [Q Glossary, page 208](#). The management systems contribute to efficiently steering energy consumption and identifying energy savings potential. The EMS is being implemented across the Group: most of the sites that are still missing have started with the implementation of an EMS or their integration in existing environmental and/or quality management systems. The EMS at the Hamburg and Lünen sites is 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.

The more steps that have 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 the same or higher levels of investment, which were already high to begin with. For example, complex recycling raw materials with relatively low metal contents and complex ore concentrates require more energy to be processed. As a result, we focus not only on further increasing efficiency but also on solutions that save energy and thus prevent CO₂ outside of our plant – such as the Industrial Heat project in Hamburg – as well as on projects that contribute to the energy shift. Examples include the wind turbine in Olen, the flexible mode of operation in the production facilities in Hamburg, Lünen, and Olen, and the photovoltaic project planned in Pirdop for 2021. Environmental protection already accounts for a large part of the energy consumption at Aurubis today. This includes the operation of filters with fans and other suctioning equipment, for instance. This shows how important it is for Aurubis to align environmental protection, resource conservation, and energy efficiency.

www.aurubis.com/industrialheat

The use of renewable energies on a large scale 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 therefore working on measures to make our energy uptake more flexible so that we can react to fluctuating energy availability and thus use more renewable energies. In 2017, for instance, Metallo commissioned the largest arc plasma furnace in the world. In the furnace's reactor, metals are evaporated from the slags of plant processes. The slag is cleaned through this procedure and transformed into usable metals and minerals. In contrast to other furnaces in the industry, the furnace is electrically operated, which makes the use of renewable energies possible.

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. The calculated savings potential is 30,000 t of CO₂ per

year. The savings during the reporting period were lower, mainly due to temporary outages or maintenance measures related to the steam turbines and their surrounding areas. 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 efficiently use waste heat potential on a smaller scale, too, for instance by feeding waste heat from the air compressors into the heating system at the Stolberg site.

Key measures of the Sustainability Strategy 2018–2023 and their status in fiscal year 2019/20¹

- » *Introducing the ISO 50001 standard for energy management at all sites*

The Olen and Pori sites were certified in accordance with ISO 50001 for the first time during the reporting period.

Q [Certifications by site, page 61](#)

By the end of fiscal year 2019/20, a milestone plan was drafted for all production sites and a gap analysis was carried out for most of them.

- » *Increasing flexibility in electricity purchasing (target of 10% by fiscal year 2022/23)*
Flexible electricity output amounted to 17% in the reporting period.
- » *Implementing projects to enhance energy efficiency and reduce emissions, with a total project-related reduction of 100,000 t CO₂*
A total of 87.9% of the target has been achieved, or 89.3% when including reductions made outside of the plant (particularly through the use of our industrial heat as district heating in the Hamburg HafenCity East district).
- » *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)*
In fiscal year 2019/20, we affirmed the Science-Based Targets initiative and committed to setting a science-based climate target to reduce our CO₂ emissions. Within this context, the Sustainability Strategy target will be adjusted in the coming years.

¹ The Metallo sites are not included in the following KPIs.

KPIs

Aurubis reports the energy KPIs and CO₂ emissions for the production sites that are majority-owned (> 50%) by Aurubis, excluding the two Metallo sites. This reflects most of the energy consumption because the volume at the slitting centers and sales offices is negligible in comparison. Q [Sites and employees, page 79](#)

Energy consumption¹

in million MWh	2019	2018	2017
Primary energy consumption ¹	1.69	1.75	1.66
Secondary energy consumption ²	1.78	1.77	1.88
Total energy consumption within the organization	3.47	3.51	3.54

¹ Including energy consumption for on-site vehicle traffic.

² Including electricity for oxygen generation.

CO₂ emissions¹

in 1,000 t CO ₂	2019	2018	2017
Scope 1 (emissions produced as a direct result of burning fuels in internal facilities)	503	522	517
Scope 2 (emissions related to purchased energy, e.g., electricity) ²	941	936	1,048
Total (Scope 1 + 2)	1,444	1,459	1,565
Scope 3³ (other indirect emissions)	1,917	2,081	1,901

¹ Aurubis reports its CO₂ emissions using the methods of the "European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MRR) – General guidance for installations" and "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)." Emissions from diesel vehicles in accordance with the emissions trading system are not included. However, they make up a very small percentage compared to other sources. Scope 2 emissions are reported here according to the market-based Q [Glossary, page 208](#) method. For the CDP, we report Scope 2 emissions according to both the market-based and the location-based Q [Glossary, page 208](#) methods.

² Emissions from electricity for oxygen generation are not included.

³ Some Scope 3 emissions have been extrapolated. Scope 3 emissions were externally audited for the first time in 2019.

PROTECTION FROM ENVIRONMENTAL IMPACT

As a multimetal group, Aurubis assumes responsibility for protecting the environment. Environmental and climate protection and resource efficiency have been components of our company culture for many years. Aurubis views the value chain as a whole and strives to strike a balance between the economy, the environment, and people. Q [Human rights, pages 65–67](#)

Our goal is to minimize the environmental impact of our business activities. Key concerns in the company's environmental protection efforts are maintaining water, air, and soil quality in our plants and the surrounding areas, as well as handling waste responsibly.

The head of Corporate Environmental Protection is responsible for the strategic positioning of environmental protection in the Group and reports to the chief operations officer. Environmental officers oversee the environmental protection duties at the individual production sites. [Q Sites and employees, page 79](#)

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 [Q Glossary, page 208](#).

Most of our sites have environmental management systems [Q Certifications by site, page 61](#) in accordance with ISO 14001/EMAS [Q Glossary, page 207](#). At the Hamburg and Lünen sites, these are part of the integrated management system (IMS) 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 according to the site-specific

environmental issues. Moreover, emergency drills are carried out regularly, which we document and evaluate. Furthermore, extensive environmental risk assessments are conducted at every production site.

Our efforts are paying off. Specific dust emissions for primary and secondary copper production [Q Glossary, page 208](#) have been reduced by 95 % since 2000. At the same time, we reduced sulfur dioxide emissions per ton of copper output in primary copper production by 87 % in the same period. 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 1.0 g/t of copper output since 2000, an 86 % decrease.¹

After the target level for arsenic in fine particulates in the ambient air was slightly exceeded at the Veddel measuring station in Hamburg in 2018, the value measured for arsenic was well below the target level again in 2019. www.aurubis.com/environmental-statement

Waste management is one of the central pillars of industrial environmental protection for a company of the basic materials industry such as Aurubis. In this respect, processed raw materials and intermediate products should be brought into the economic cycle as completely as possible, and unavoidable waste recycled or harmlessly disposed of. A special feature of our business model is the fact that a substantial amount of process residues is directly used internally in metallurgical processes and thus directly recycled. [Q Recycling solutions, page 62–64](#)

The New York State Department of Environmental Conservation (NYSDEC) identified environmental deficiencies at the Aurubis site in Buffalo, USA, and initiated legal proceedings in 2018. The deficiencies were related to the handling of hazardous substances and wastewater treatment. To remedy these issues, the site implemented an action plan, increased its number of environmental management personnel and modified organizational structures. Close monitoring should also contribute to further minimizing risks. At the end of the 2019/20 reporting period, the legal proceedings with the responsible environmental authority were about to conclude.

¹The previous figures do not include Metallo.

Within the context of our stakeholder dialogue, Aurubis is also involved in publicly funded projects. For example, since 2013, we have participated in the EU projects Organisation Environmental Footprint and Product Environmental Footprint for copper cathodes, projects that 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 will take part in the next phase of the Environmental Footprint and contribute our experience in this area. Furthermore, we carried out a life cycle analysis [Q Glossary, page 208](#) for copper cathodes. The results show that the footprint of the Aurubis cathodes in the environmental aspects considered, for example global warming and acidification (measured in sulfur dioxide equivalents), is in some cases substantially smaller than the worldwide industry average¹ (i.e., the members of the International Copper Association, ICA copperalliance.org). The detailed results are published in the Aurubis AG Environmental Statement www.aurubis.com/environmental-statement. The ICA is currently working on updating the study that Aurubis actively supports. The collection of the data required for the study started in 2020.

Key measures of the Sustainability Strategy 2018–2023 and their status in fiscal year 2019/20²

- » *Introducing the ISO 14001 standard for environmental management at all production sites*

The existing certifications were confirmed during the reporting period through surveillance audits or recertification.

[Q Certifications by site, page 61](#)

A pilot gap analysis was carried out at the Peute Baustoff site in Hamburg. Additional gap analyses are planned at the other sites in 2021.

- » *Our goal is to maintain the low level of specific metal emissions to water and to continue improving them with technical measures. A 50% reduction since 2012 should be achieved in 2022 as well, equivalent to 1.1 g/t of copper output.*
We have reduced metal emissions to water in copper production processes from 2.2 to 1.0 g/t of copper output since 2012. This is a decline of 54%.

At the site in Pirdop, Bulgaria, a new sand filter was installed in the facility for cleaning process wastewater in 2019. This reduces the discharge of undissolved substances into bodies of water.

- » *Our goal is to maintain the low level of specific dust emissions to air and to continue improving them with technical measures. A 15% reduction since 2012 should be achieved in 2022 as well, equivalent to 61 g/t of copper output.*

In 2019, dust emissions per ton of copper output in copper production were reduced by 18% compared to 2012.

To reduce fugitive emissions, a new facility for cooling converter slag [Q Glossary, page 207](#) in pots was built at the site in Pirdop, Bulgaria, and was commissioned in 2019. At the Hamburg site, approximately € 100 million will be invested in measures for continued emission reduction in the primary smelter (ridge turret suctioning to capture the remaining fugitive emissions).

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

The new facility for cooling converter slag mentioned above also contributes to reducing SO₂ emissions. The plan is to expand the project to include the processing of slags from the flash smelter. The expansion is scheduled to begin in fiscal year 2021/22.

KPIs:

The environmental KPIs are reported for calendar year 2019, not fiscal year 2019/20. The specific values are related to copper production, i.e., at the Hamburg, Lünen, Pirdop, and Olen sites. The Metallo sites aren't included yet.

Specific emissions from copper production

in g/t copper output	2019	2018	2017
Specific dust emissions	60	63	56
Metal emissions to water ¹	1.0	1.1	1.0

¹ In this table, we refer to the copper production sites that discharge directly into water. In Lünen, wastewater is directed to the public sewer system after being treated on the plant premises and therefore isn't included.

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

² The Metallo sites are not included in the following KPIs.

Certifications by site

Site	EMAS	ISO 14001	ISO 50001	ISO 9001	IATF 16949	EfbV	ISO 45001/ OHSAS 18001
Production sites							
Hamburg, headquarters (DE)	✓	✓	✓	✓			
Lünen (DE)	✓	✓	✓	✓		✓	
Olen (BE)		✓	✓	✓			
Pirdop (BG)		✓		✓			✓
Avellino (IT)	✓	✓		✓			✓
Beerse, Metallo (BE)		✓		✓			
Berango, Metallo (ES)		✓		✓			✓
Buffalo (USA)				✓	✓		
Emmerich, Deutsche Giessdraht (DE)		✓	✓	✓			
Fehrbellin, CABLO (DE)		✓	✓	✓		✓	
Hamburg, E.R.N. (DE)		✓	✓	✓		✓	
Hamburg, Peute Baustoff (DE)				✓ ¹			
Pori (FI)		✓	✓	✓			✓
Röthenbach, RETORTE (DE)				✓			
Stolberg (DE)			✓	✓	✓		
Stolberg, Schwermetall Halbzeugwerk (DE) ²	✓	✓	✓	✓			✓
Zutphen (NL)		✓		✓	✓		
Slitting centers							
Dolný Kubín (SK)		✓		✓			✓
Mortara (IT)				✓			✓
Smethwick/Birmingham (UK)				✓			

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

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

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 [Q Glossary, page 208](#): standard for occupational safety management systems

RECYCLING SOLUTIONS

Aurubis is a world leader in recycling non-ferrous metals such as copper, precious metals, and other non-ferrous metals. With our multimetal recycling, we actively take part in the modern circular economy, promote the efficient and environmentally friendly use of valuable resources, and contribute to raw material security.

Aurubis plays a vital role in the recycling chain: thanks to our integrated smelter network, we are able to process a broad range of materials, from industrial waste that accumulates directly from our production or our customers, to complex materials [Q Glossary, page 207](#) from end-of-life products. From these materials, we produce metals that can be directly used in new products.

In addition to the processing of copper concentrates, the recycling of copper scrap and complex recycling raw materials such as circuit boards is a key business area at Aurubis. Non-ferrous metals like copper 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, complex recycling raw materials contain not only copper but a number of other accompanying elements that can be recovered, such as gold, silver, nickel, tin, lead, and zinc.

To us, complex recycling raw materials include industrial residues, slimes, and shredder materials, as well as end-of-life materials that for instance originate from electronic devices, vehicles, and other everyday items. These consist of increasingly diversified 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. Furthermore, because of miniaturization, smaller and smaller amounts of metal are contained in end-of-life electronic devices, for instance. We utilize highly developed mechanical and metallurgical separating and refining processes in different combinations as part of our multimetal expertise. With our subsidiary Metallo, acquired in 2020, non-ferrous metals such as tin and zinc will be recovered even more efficiently in the expanded smelter network.

The Commercial division is responsible for sourcing recycling materials for the Group. This is divided into the departments 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 (which supplies the smelters and production facilities with production waste from our copper product customers). This organization aligns with our recycling approach: we use secondary materials from production and from end-of-life products as raw materials and view this as a closed loop.

In the marketing of our products and in our customer relationships, we therefore 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, they accumulate materials with very high copper contents, such as Millberry scrap, which can be immediately directed to the copper production process, or more complex or alloyed production waste that can also be smelted, such as copper-, tin-, lead-, and precious metal-bearing stamping waste, slags from foundries, and other industrial residues like used catalysts and galvanic slimes. This demonstrates that thanks to our integrated smelter network, we find solutions, even for significant metallurgical challenges, and are thus able to serve customers from a variety of sectors – from smaller scrap traders to global industrial companies and customers of the recycling industry, all of which make up our broad base of recycling raw material suppliers.

As part of our “closing-the-loop” activities [Q Glossary, page 207](#), 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. For example, we process scrap that comes back to us from product customers with what are referred to as tolling contracts. The raw material cycle comes full circle.

Aurubis processes recycling materials at different sites. The managers of these sites report to the chief operations officer. Our sites in Lünen (Germany) and Olen (Belgium), as well as the newly acquired Metallo sites in Beerse (Belgium) and Berango (Spain), specialize in processing recycling raw materials. Recycling raw materials are nearly the only feedstock at our largest recycling plant, the Aurubis recycling center in Lünen. The Lünen plant is certified through WEEELABEX in accordance with the European series of standards EN 50625. The certificate confirms that waste electrical and electronic devices are efficiently treated and disposed of in a way that minimizes environmental impacts and emissions of harmful substances. Aurubis participated in the development of the standards that preceded the series of standards. The Metallo plants process about 315,000 t of complex secondary raw materials each year to recover not only copper, tin and lead, but also metal intermediates such as nickel sulfate solution and zinc oxide. Metallo follows a “zero waste” strategy with the goal of transforming as many scrap materials as possible into valuable products. The company fosters this strategy with its “Furnace of Innovation” approach, recycling increasingly complex raw materials and investing in technological innovations for the refining process. Metallo therefore has a forerunner role in metal recycling and optimally complements Aurubis’ similar approach.

Moreover, we have two companies with unique expertise within the Group: our subsidiary E.R.N. specializes in recycling electrical and electronic devices of all kinds, while CABLO specializes in recycling our copper customers’ cable production waste and cable scrap. In November 2020, Aurubis and the recycling company TSR Recycling signed an agreement to establish a recycling joint venture. The company’s objective is to bundle the cable dismantling activities of Aurubis subsidiary CABLO and TSR. Aurubis will hold 40% of the joint venture, which will go by the name of Cabo GmbH in the future. The review by the responsible merger control authorities is expected to conclude in fiscal year 2020/21.

The Hamburg and Pirdop sites also process recycling raw materials. 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 are one of 22 national and international partners 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 in the material streams related to plastic, biomass, end-of-life electrical appliances, and wood. As a multimetal 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 [Q Glossary, page 209](#). Aurubis and Stadtreinigung Hamburg (the city of Hamburg’s municipal waste management service) carried out a recycling project to investigate the advantages of manual pre-dismantling compared to machine-dismantled devices. In a life cycle assessment comparing the two recycling processes, manual dismantling is better when it comes to the impact categories related to environmental and resource protection, from a purely ecological standpoint. Taking the time requirement into account, however, 100% manual pre-dismantling proved to be inefficient under the current conditions. Design for recycling can be an important manufacturer contribution to making today’s recycling even more efficient. www.aurubis.com/environmental-statement

Key measures of the Sustainability Strategy 2018–2023 and their status in fiscal year 2019/20

- » *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*
Over the past several years, we have established over 50 “closing-the-loop” arrangements in which our customers also became suppliers of secondary materials.

» *Analysis of market conditions and future opportunities of sustainable products*

During the reporting period, we carried out a survey on product sustainability among key customers of our semi-finished products such as wire rod [Q Glossary, page 207](#), shapes [Q Glossary, page 207](#), bars, and profiles. The goal of the survey was to gain representative insights into participants' views on sustainability, procurement practices, and requirements for a sustainable product portfolio. On the one hand, the assessment confirmed our belief that sustainability is becoming increasingly important, especially in terms of the products' CO₂ footprint and proportion of recycling material. On the other, it was clear that our customers are not only interested in sustainable products, but also expect a company to conduct itself responsibly overall. Additional steps are being derived based on the survey.

Social matters

SOCIAL ENGAGEMENT¹

Social engagement is a fixed component of our company identity. We have set the target of contributing to a livable world for current and 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 be a responsible, committed company.

Projects and partners are selected according to established criteria outlined in our Social Engagement Policy, which also defines responsibilities in the Group. The Event Management & Social Engagement division is responsible for our social engagement and reports to the head of Corporate Communications, Investor Relations & Sustainability. Due to this department's direct reporting line to the Executive Board chairman, the chairman is included in our social activities and related budget decisions. A committee made up of appointed members from Event Management & Social Engagement, Communications, Sustainability, and Corporate Compliance makes decisions about project support that exceeds a certain level set internally.

The new strategy for social engagement passed in fiscal year 2018/19, "together we care," was successfully implemented and brought to life during the reporting year. The strategy's focus areas are knowledge, the environment, and participation. Within the scope of this strategy, we started supporting three international social projects in South America in the reporting year.

Apart from projects at Group level, our sites also get involved at the local level using their own budgets. Our 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.

The coronavirus crisis posed significant challenges for our project partners. One of our particular concerns was providing quick, pragmatic, and customized emergency assistance to support our existing projects and thus continue to be a good partner even in times of crisis.

Key measure of the Sustainability Strategy 2018–2023 and its status in fiscal year 2019/20

- » *Developing and implementing the "together we care" strategy for social engagement at Group level (by fiscal year 2018/19)*
- We established the "together we care" strategy for social engagement at Group level. We will set a new target in the course of updating the Sustainability Strategy.

www.aurubis.com/de/togetherwecare

Project examples in the reporting period

Within the context of "together we care," we are involved in the local communities surrounding our sites, at the national level, as well as internationally in our supply countries.

¹ Not material for Aurubis within the meaning of the German Commercial Code (HGB).

We support a variety of local organizations in Hamburg. The social design label Bridge & Tunnel and the organization Hanseatic Help enable integration and participation with unique approaches. The Elbphilharmonie Audience Orchestra and the Inclusion Days carried out at schools by the BG Baskets wheelchair basketball team are additional examples of projects sponsored in Hamburg. Aurubis Belgium sponsors two local social organizations, Welzijnsschakels and Sociale dienst Olen. Aurubis Bulgaria is involved with partner companies from the region, for example in a dual education program at the technical university in Zlatitsa and at summer schools to promote musical and technical instruction near the site. Our Metallo site in Spain is active in a sponsorship project for traffic education and fostering enthusiasm for cycling among children and young adults.

At the national level, Aurubis is a partner in the “Haus der kleinen Forscher” (Little Scientists’ House) network, which encourages children to take an interest in MINT subjects (math, IT, natural sciences, and technology).

The three new international projects in South America are especially close to our hearts. In Peru, Aurubis contributes to a holistic education program for elementary school children in the Urubamba region. Furthermore, Aurubis supports a water project in a national park near Arequipa, which is also in Peru. In neighboring Chile, our involvement extends to the development of dual occupational training for agriculture following the German model at a school in the O’Higgins Region. The three projects started successfully, and we have made progress on site at regular intervals.

You can read more about these and other sponsored projects, as well as our support during the coronavirus crisis, on our website:

www.aurubis.com/de/togetherwecare

www.aurubis.com/de/corona

Human rights and fair working conditions

LABOR STANDARDS AND FAIR EMPLOYMENT

Aurubis itself has become more international and has grown in the last few decades; our purchasing activities have taken place on local and global markets from the very beginning. Aurubis doesn’t operate its own mines, but it receives about 3% of the world’s copper concentrate output. We take on the challenges that come with this: sustainable conduct and economic activities are integral components of the company strategy.

We respect human rights and advocate for their protection. In the process, we follow the United Nations Guiding Principles on Business and Human Rights [Q Glossary, page 209](#) in accordance with the “Protect, Respect and Remedy” framework and view human rights due diligence as a responsibility shared by all participants in the value chain in question, including nations and economic actors.

Respect for human rights is reflected in our company values and is included in our Code of Conduct, which every employee receives with his/her employment contract. In May 2020, we published the Aurubis Human Rights Commitment, summarizing Aurubis’ understanding of its due diligence obligation regarding human rights, as well as the key elements of this obligation. It is aimed at all employees, business partners, and other partners of the Aurubis Group. The Aurubis Code of Conduct for Business Partners, on the other hand, specifically applies to business partners.¹ www.aurubis.com/humanrightscommitment

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.

The Executive Board bears responsibility for the respect of human rights in our business activities. All Aurubis employees are obligated through the Code of Conduct to respect human rights in their daily work and in all business decisions no matter what.² Supervisors serve as role models in this regard. We call on all employees to report justified suspicion of discrimination or

¹ The current management approach of the Metallo sites that were acquired in 2020 is similar to Aurubis’ fundamental approaches. The final harmonization of Metallo’s policies and commitments with those of Aurubis, including the Code of Conduct, is still pending.

² The Metallo employees are not yet obligated to follow the values of the Code of Conduct.

other human rights violations. We expect this from our business partners as well. Anyone can report these types of violations confidentially and anonymously via the Compliance Portal, also known as the whistleblower hotline, which is publicly accessible on our website. Every report is investigated. www.aurubis.com/compliance

We reject any form of discrimination, forced labor, or child labor and respect the rights of indigenous populations. Compliance with the internationally recognized core labor standards of the International Labour Organization (ILO) [Q Glossary, page 207](#) are of fundamental importance. We are committed to the principle of codetermination in the company and place a high priority on good communication between our employees and the company management. 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 – during the coronavirus pandemic when contact restrictions were in place, the Works Council held a virtual informational event at the Hamburg site, for instance.

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, these raw materials come from countries with a higher risk of human rights violations, non-compliance with social and environmental standards, or corruption. Our objective 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. Using this tool, we structure our business partners in a screening process and analyze them with regard to their integrity in relation to social and ecological criteria. The focus of the process is on the topics of compliance, corruption, human rights violations, and environmental and

climate protection. 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) [Q Glossary, page 208](#). The certificate verifies the effectiveness of our due diligence process with regard to gold production. This certification option has been available for silver since 2019, and Aurubis has been certified as conflict-free in this area since then as well. Suppliers of other raw materials go through a comparable process as those who supply gold- and silver-bearing raw materials.

We would like to promote respect for human rights along our value chain, which is one reason why we support appropriate industry solutions like the Copper Mark. Aurubis Bulgaria is the company's first primary smelter to commit to this standard. The Copper Mark is an initiative that entails a review of the sustainability standards of copper production sites including mines, smelters, and refineries. With this standard, we want to foster responsibility throughout the value chain, boosting and verifying our own sustainability performance with an external certification from an independent body. coppermark.org

During the reporting year, we identified serious cases of environmental pollution caused by one of our suppliers, which nevertheless aren't directly connected to the products we supply. We contacted the supplier's management to try to understand the incidents and the measures to curb this pollution and prevent future incidents. We are observing the course of the improvements in short intervals and receiving reports from the supplier's management regularly. If the supplier doesn't make sufficient progress, we reserve the right to end the business relationship as a final consequence, but until then, we will take the business partner's commitments and willingness to cooperate at face value, including with regard to external assessments.

As a large company in the raw material industry with smelter operations in Europe and purchasing activities worldwide, we are continually a focus of public interest. We are active in the political dialogue and therefore gladly and constructively fulfilled the request to take part in the German federal government's monitoring survey on the National Action Plan on Business and Human Rights (NAP) in spring 2020.

During the reporting year, the coronavirus pandemic also impacted the people in copper production countries such as Peru and Chile, two of our largest procurement markets for primary raw materials. We kept the channels of communication with our suppliers open to stay informed about the situation on site.

Key measures of the Sustainability Strategy 2018–2023 and their status in fiscal year 2019/20

- » *Implementing Aurubis Business Partner Screening across the Group*
Business Partner Screening is used at Aurubis AG and at the key sites Pirdop and Olen. Further expansion is currently in the evaluation phase and, in some cases, the implementation phase.
- » *Including human rights, environmental protection, and safety clauses in supply contracts for primary raw materials*
During fiscal year 2019/20, the percentage of contracts with primary raw material suppliers including the corresponding clause was over 80 % (target: 100 % by fiscal year 2022/23).
- » *Identifying a suitable sector solution*
We have identified the Copper Mark as a suitable sector solution. Aurubis Bulgaria is the first primary smelter in the company to commit to this standard and started the multi-stage review process during the reporting year. We are actively supporting the standard's continued development by participating in a Copper Mark committee.

Anti-corruption

For Aurubis, preventing anti-competitive behavior and corruption in our business dealings is a key aspect of corporate responsibility and one of the central topics of our compliance activities.

Anti-corruption measures are established in our compliance management. To us, compliance means that we follow laws and align our actions with ethical principles, our values, and company policies. In this context, 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.

The company's chief compliance officer is the central point of contact for all compliance-relevant issues and reports directly to the entire Executive Board. At the individual Group sites, local compliance officers are available as a point of contact for employees. 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 of the Supervisory Board with regard to the compliance management system, compliance violations, and compliance-related measures. He works closely with the employees responsible for Risk Management and Internal Audit. Within our 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. As part of compliance management, the corruption risks at our sites are also identified and documented by Risk Management.

The compliance measures include prevention, monitoring, and sanctions. Preventive measures at Aurubis comprise the risk analyses previously mentioned, internal policies, guidance, and particularly the training of employees. The Corporate Anti-Corruption Compliance Policy and the Code of Conduct for employees, both of which apply Group-wide, are at the core of our anti-corruption efforts.¹ Every employee receives the Aurubis Code of Conduct and confirms that it has been received by signing the employment contract. Training on anti-corruption and antitrust law is carried out regularly throughout the Group.

Employees and business partners can make confidential and anonymous reports regarding legal violations and breaches of our codes and standards via our Compliance Portal, the whistleblower hotline. The hotline is available in English, German, and Spanish and is open to all external stakeholders as well. It is operated by external, independent attorneys. www.aurubis.com/compliance 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.

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 three years, this applied to 457 employees for anti-corruption training and to 343 employees for antitrust law training.

KPI

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

¹ The compliance approach of the Metallo sites acquired in 2020 fundamentally aligns with that of Aurubis. Metallo's final harmonization with Aurubis' policies and commitments is pending.

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

To the Supervisory Board of Aurubis AG, Hamburg

We have performed an independent limited assurance engagement on the non-financial group 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, 315c in conjunction with 289b to 289e German Commercial Code (HGB) for the business year from October 1, 2019 to September 30, 2020.

MANAGEMENT'S RESPONSIBILITY

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

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, 2019 to September 30, 2020 has not been prepared, in all material respects, in accordance with §§ 315b, 315c in conjunction with 289b 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.
- » 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 Pirdop (Bulgaria).
- » 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, 2019 to September 30, 2020 is not prepared, in all material respects, in accordance with §§ 315b, 315c in conjunction with 289b 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, 08.12.2020

KPMG AG
Wirtschaftsprüfungsgesellschaft

Laue
Wirtschaftsprüfer
(German Public Auditor)

ppa. Mathias