

CORPORATE RESPONSIBILITY

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Actively Shaping Sustainability

We aim to cooperate actively on the transformation of industry and global value chains and thus to foster the transition to a more sustainable world. We are therefore continuously enhancing our organizational structures and management tools – always with the objective of making the best possible use of human, natural, and financial resources in the interests of sustainable development. We thus create a measurable benefit for our company and for society.

Thinking and acting sustainably and in an integrated manner supports our business goals in a variety of different ways – from higher resource efficiency to good relationships with our stakeholders, increased risk awareness, and permanently advantageous cost structures. However, the quality of our company is not expressed merely in business success. It is also demonstrated by the social impact of our entrepreneurial activities. Our facilities, locations, and products must have a measurable, sustainable benefit for the community. This principle is the starting point for our thought and action.



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Several internationally recognized standards and frameworks give us valuable guidance in this thought and action:

- › With the “2030 Agenda for Sustainable Development,” the United Nations has established the basis for global economic progress in harmony with social justice and within the earth’s ecological limits. The specific goals of the Agenda are set out in the Sustainable Development Goals (SDGs).
- › The U.N. Global Compact is the world’s biggest and most important initiative for responsible corporate governance. Based on ten universal principles, it pursues the vision of an inclusive and sustainable global economy for the benefit of all people, communities, and markets. As a signatory, we recognize these principles as inalienable rights. We renewed our commitment to the U.N. Global Compact again for 2019.
- › The term Responsible Care® stands for the chemical industry’s goal of achieving progress with safety and environmental protection, regardless of the legal specifications. We have documented our commitment to the visions and ethical concerns of this initiative from the International Council of Chemical Associations (ICCA) by signing the Responsible Care® Global Charter. With our internal guidelines, we integrate the principles of the Charter into our guiding principles and corporate strategy.
- › Among the internationally recognized principles of business activity to which we are committed are the employment standards of the International Labor Organization, an agency of the United Nations. These are aimed at upholding globally recognized social standards and thereby improving working and living conditions for all people.

The Ten Principles of the U.N. Global Compact

Area	 Human rights	 Labor	 Environment	 Anti-corruption
Principle	<p>1 Businesses should support and respect the protection of internationally proclaimed human rights.</p> <p>2 Businesses should make sure they are not complicit in human rights abuses.</p>	<p>3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.</p> <p>4 Businesses should uphold the elimination of all forms of forced and compulsory labor.</p> <p>5 Businesses should uphold the effective abolition of child labor.</p> <p>6 Businesses should uphold the elimination of discrimination in respect of employment and occupation.</p>	<p>7 Businesses should support a precautionary approach to environmental challenges.</p> <p>8 Businesses should undertake initiatives to promote greater environmental responsibility.</p> <p>9 Businesses should encourage the development and diffusion of environmentally friendly technologies.</p>	<p>10 Businesses should work against corruption in all its forms, including extortion and bribery.</p>

 Detailed information on our impact assessment concept can be found in the Responsibility/Societal Added Value section of the LANXESS website.

The Sustainable Development Goals in particular are increasingly being taken into account throughout the Group in order to translate the social “2030 Agenda” into appropriate structures, processes and goals for us as a company. To do so, we must understand precisely how our priorities – formulated in the material topics – relate to the priorities of the international community.

We therefore pressed ahead with the development of corresponding analytical processes and tools intensively again in the reporting year. Besides contributions to the achievement of the SDGs, we specifically examined for the first time what impact we are currently having on the aspects underlying the SDGs.

Sustainable Development Goals – Contributions and Impact

		<ul style="list-style-type: none"> Salaries, social security contributions and taxes contribute to the reduction of poverty.
		<ul style="list-style-type: none"> Health and wellbeing are of central importance in the production and use of LANXESS products.
		<ul style="list-style-type: none"> LANXESS supports the continuous qualification and training of its employees and provides education initiatives at its sites around the world.
		<ul style="list-style-type: none"> Contribution to water stress at some sites due to the use of water in production. Water stress analyses and production-related risk assessments. Development of products and technologies for water purification.
		<ul style="list-style-type: none"> When performing their tasks, some of our employees are exposed to the risk of work-related injuries. Our global safety initiative Xact aims to reduce the LTIFR by > 50% by 2025 (base year: 2016). LANXESS's activities create value, growth and employment.
		<ul style="list-style-type: none"> Social security contributions and taxes help reduce inequality through transfer payments and fund government structures.
		<ul style="list-style-type: none"> LANXESS's business activities cause emissions in the air and water. LANXESS supports development toward resource- and energy-efficient production and sustainable products.
		<ul style="list-style-type: none"> LANXESS's business activities cause greenhouse gas emissions from its own operations or from purchased energy. LANXESS takes climate action seriously. Our company is to be climate neutral by 2040.
		<ul style="list-style-type: none"> We see our engagement for ethical business activity and the performance of tax obligations as our contribution to a well-functioning society.

■ Current negative impacts ■ Contribution to the achievement of the SDG ■ Current positive impacts

The results show that we are creating societal value and have a positive impact on many SDGs. However, the challenges are made equally clear – for example in the fields of climate protection and occupational safety. We are tackling these challenges in a consistent and transparent manner, as we have importantly demonstrated with our ambitious target of climate neutrality by 2040. In doing so, we are pursuing active dialog involving both internal and external stakeholders – for we are firmly convinced that a dialog-oriented approach encourages integrated thinking and improves the quality of our business decisions.

ACTIVE STAKEHOLDER DIALOG

Relevant stakeholders for LANXESS are groups, institutions, or individuals with whom we maintain a direct or indirect relationship through our business activities and who therefore have an interest in our actions. Our main stakeholder groups are customers, capital market representatives, suppliers, the media, and representatives from politics, public authorities, and non-government organizations (NGOs). We engage in intensive dialog with all of these groups. Firstly, to promote mutual understanding and build trust with an open and constructive exchange of views. And secondly, to continuously identify topics that are important in view of our environment and our corporate responsibility.

Detailed information can be found in the Responsibility/ Societal Added Value section of the LANXESS website.

NFR Audited disclosures of the LANXESS Group that are included in the 2019 non-financial Group report.

The World Business Council for Sustainable Development (WBCSD), which we joined on January 1, 2020, is an important new dialog forum for LANXESS. The WBCSD is a global, CEO-led organization committed to accelerating the pace of change toward a more sustainable world. At the core of the network are six work programs, in which economic concepts and business models are developed to conserve the world's resources while feeding a growing population and ensuring future-proof mobility and livable cities. The WBCSD's approximately 200 member companies represent 19 million employees and USD 8.5 trillion in sales. Thanks to our membership, we will cooperate actively on the transformation of industry and global value chains and can thus align our business strategies at an early stage.

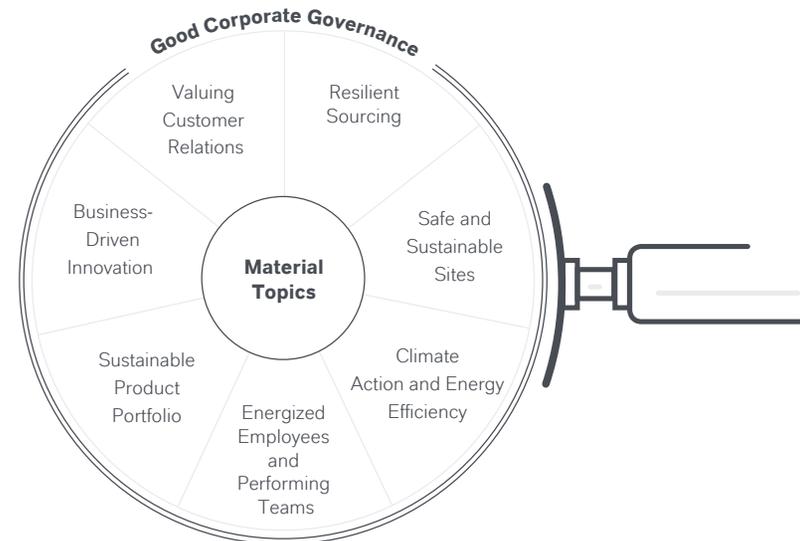
An overview of the main topics and dialog forums for each relevant stakeholder group and other specific activities in the reporting year is provided in the Responsibility section of the LANXESS website.

NFR **SYSTEMATIC PRIORITIZATION OF SUSTAINABILITY TOPICS**

Identifying the main effects of our actions and incorporating our stakeholders' concerns into our strategy forms the basis of our sustainability management. Our materiality analysis in line with the requirements of the Global Reporting Initiative (GRI) is a key tool for systematically prioritizing the wide range of action areas and using resources as effectively as possible. The results also influence the structure of our external reporting on the topic of corporate responsibility.

NFR We performed our last materiality analysis in fiscal year 2017. This was based on four principles: sustainability context, materiality, completeness, and inclusion of stakeholders. As a result, we defined seven material sustainability topics that were again confirmed by the Board of Management and the Corporate Responsibility Committee in 2019 and thus formed the relevant management framework. The topic of good corporate governance forms the basis for all of our business activities. [A detailed description of our process for determining material topics](#) can be found in the Corporate Responsibility/Material Topics section of the LANXESS website.

Material Topics





Further information can be found in section "About this Report" on [page 226](#).



In addition to our materiality analysis, we came up with a definition of materiality for the non-financial Group report – the contents of which are integrated into this section of the Annual Report – in accordance with Section 289c, Paragraph 3, Sentence 1 of the German Commercial Code (HGB). The relevant disclosures in this context are those that are necessary in order to understand the business performance, the business results, the position of the Group, and the effects of our activities on non-financial aspects. For us, this means environmental issues, employee and social issues, human rights, and anti-corruption.

As part of our management of opportunities and risks, we have implemented a wide range of risk-mitigating measures. With regard to the non-financial aspects of the CSR Directive Implementation Act defined as relevant for the non-financial Group report, a net risk analysis shows no material risks in connection with our own business activities or with business relationships, products, and services that are very likely to have serious negative effects. Detailed information on our opportunity and risk management system can be found in the combined management report of the LANXESS Group and LANXESS AG, starting on [page 120](#) of this Annual Report.



We have formulated specific goals for all key topics. These are based on the goal of using our operating activities to achieve an increase in value for our company, our stakeholders, and society. Some of the variable compensation of the first and second management level below the Board of Management therefore depends on the extent to which certain targets are achieved. In a working group, internal sustainability experts again systematically examined the existing goals and indicators, fleshed these out where necessary, and also defined new goals in the reporting year. This relates in particular to our ambitions relating to "climate action and energy efficiency," which we have raised to a new level with our aim to be climate neutral in 2040.

The table below provides an overview of all corporate responsibility goals in the LANXESS Group. Further information on the individual goals and associated measures can be found in the following pages.



LANXESS Corporate Responsibility Goals

Topic	Goal	Indicator	Deadline	Status Quo 2019	SDG	Page
Resilient Sourcing	Our value chains start from a diverse, sustainable raw material portfolio. We engage with our suppliers and relevant stakeholders to improve the working and environmental conditions in the global supply chains.				1, 8	
Establishment of a systematic sustainability risk analysis to evaluate all suppliers	Status inquiry to identify relevant suppliers with high risk level	Share of suppliers evaluated	2020	The methodology behind the analysis was validated again after receiving the data from Ecovadis. For this reason, we will now carry out the status inquiry originally scheduled for 2019 in 2020.		39
Identification and reduction of sustainability risks in the supply chain	Differentiation of risk score by goods group/country (levels 1–6)	Sustainability risk score	2020			39
Safe and Sustainable Sites	We manufacture sustainable products at competitive and sustainable chemical sites. Continuous process improvements and investments are fundamental for our sustained success. We care about the communities of which our sites are a part.				3 , 4 , 6 , 8 , 9 , 12 , 13	
Uniform standards and processes worldwide	Integration of all sites into the global matrix certificate (ISO 9001 and ISO 14001)	Degree of coverage in relation to sites	Ongoing until the end of 2025	As of December 31, 2019, our matrix certificate covered 38 certifiable companies with 74 sites in 21 countries. In relation to the number of employees, this equates to 87% coverage of our matrix certificate. Due to the changes in our site portfolio in recent years, we still have some site certificates and a region certificate; these will also be transferred to our matrix certificate. As of the reporting date, a total of 98% of our sites had ISO 14001 certification.		20–21
Global process safety	Continuous reduction in incidents relating to facility and process safety	Number of reportable incidents relating to facility and process safety	Ongoing	15 relevant incidents, of which seven in facilities acquired in the last years.		40–41
	Continuous reduction in environmental incidents	Number of reportable environmental incidents	Ongoing	Three relevant reportable environmental incidents at LANXESS.		40–41
	Continuous reduction in transportation incidents	Number of reportable transportation incidents	Ongoing	One reportable transportation incident occurred at LANXESS in the reporting year.		40–41



Further information on the SDGs can be found on [page 13](#) and in the Responsibility/ Societal Added Value/ SDGs section of the LANXESS website.



LANXESS Corporate Responsibility Goals

Topic	Goal	Indicator	Deadline	Status Quo 2019	SDG	Page
Climate Action and Energy Efficiency For LANXESS, climate action based on efficient energy use is the right thing to do for society and also a key to delivering financial performance in the long term.					3, 7, 8, 12, 13	
Emissions	Reduction of CO ₂ e emissions by 65% versus 2004 (establishment of LANXESS; 6.5 million metric tons of CO ₂ e)	Absolute CO ₂ e emissions (Scope 1 and 2)	End of 2025	Absolute CO ₂ e emissions were reduced by nearly 5% compared with the previous year. The decline versus 2004, when the company was founded, is 53%.		48
	Including update of 2025 targets from 2015: › Reduction of specific Scope 1 emissions to < 0.19 (CO ₂ equivalents, metric tons per metric ton of product) › Reduction of specific Scope 2 emissions to < 0.24 (CO ₂ equivalents, metric tons per metric ton of product)			Specific Scope 1 emissions were maintained at the previous year's level of 0.28 metric tons of CO ₂ e per metric ton of product. Specific Scope 2 emissions were reduced to 0.29 metric tons of CO ₂ e per metric ton of product.		48
	Reduction of CO ₂ e emissions by 75% versus 2004 (establishment of LANXESS; 6.5 million metric tons of CO ₂ e)	Absolute CO ₂ e emissions (Scope 1 and 2)	End of 2030			46–47
	Climate neutrality for the entire Group	Absolute CO ₂ e emissions (Scope 1 and 2)	End of 2040			
Energy efficiency	Increase in energy efficiency of 40% to < 1.24 (MWh/t) compared to base year 2015	Energy efficiency	End of 2025	Energy efficiency deteriorated slightly. Specific energy consumption amounted to 1.41 MWh/t at the end of fiscal year.		49–50
Energized Employees and Performing Teams We create a motivating, energetic and health-preserving working environment for all employees, striving for high engagement and impact. We nurture and promote a value-based, performance-orientated culture. We aim to be an attractive employer and to develop peoples' full potential throughout their professional life.					3, 4, 5, 8	
Employee retention	High employee retention: Voluntary turnover rate below 3.5%	Turnover rate on the basis of resignations	Ongoing until the end of 2023	The turnover rate on the basis of resignations was 3.0%.		29
Employee development	At least 80% of apprentices hired after completing their training	Proportion of apprentices hired in Germany	Ongoing until the end of 2023	88% (previous year: 84%) of apprentices were hired.		26
Occupational safety	Continuous decrease in the LTIFR by > 50% (reference LTIFR of 2.0 in 2016)	LTIFR	End of 2025	The LTIFR was 1.6.		37
Employee welfare/work-life balance	95% of countries in which we operate have derived and implemented specific guidelines and/or corresponding models for flexible working conditions from our global "Xwork" principles.	Proportion of countries ¹⁾ that have derived and implemented specific guidelines and/or corresponding models for flexible working conditions from our global "Xwork" principles	End of 2022	At the end of 2019, the proportion was 74%.		34

1) Countries in which LANXESS operates.

LANXESS Corporate Responsibility Goals

Topic	Goal	Indicator	Deadline	Status Quo 2019	SDG	Page
Diversity & inclusion	Increase proportion of women in middle and upper management to 20%	Proportion of women in middle and upper management	End of 2020	The proportion of women was 19.8% (previous year: 19.2%).		31-32
	At least one female Board of Management member	Proportion of women on the Board of Management	Mid-2022	By resolution of the LANXESS Supervisory Board of December 11, 2019, Stephanie Coßmann was appointed as a member of the Board of Management and as Labor Relations Director with effect as of January 1, 2020.		31-32
	Increase the proportion of women in the first level below the Board of Management to 15%	Proportion of women in the first level below the Board of Management	Mid-2022	The proportion of women was 20.9%.		31-32
	Increase the proportion of women in the second level below the Board of Management to 25%	Proportion of women in the second level below the Board of Management	Mid-2022	The proportion of women was 25.1%.		31-32
	At least 30% female and 40% non-German participants in LANXESS corporate talent programs	Proportion of female and non-German participants in LANXESS corporate talent programs	Ongoing until the end of 2022	With a total of 65 participants in 2019, the proportions amounted to 31% female and 49% non-German participants.		27
 Sustainable Product Portfolio Our products are manufactured and marketed so that they do not pose a risk to humans or the environment. We systematically evaluate the sustainability of our entire portfolio. Sustainability criteria are also applied in the development of products and applications.					3, 12, 13	
Active portfolio management from a sustainability perspective	Optimization of the sustainability performance of the product portfolio	Proportion of strategic products with a sustainability risk in the total sales of products with a sustainability risk	Mid-2023	At the end of 2019, the proportion was 70%.		51-52
	Inspection and, if necessary, optimization of the quality of all registration dossiers that were prepared in accordance with the REACH Regulation under the guidance of LANXESS	Proportion of inspected/ updated dossiers	2026	The project started in mid-2019. The proportion of inspected/updated dossiers is 5%.		51-52



LANXESS Corporate Responsibility Goals

Topic	Goal	Indicator	Deadline	Status Quo 2019	SDG	Page
 Business-Driven Innovation We drive process-, product-, application- and business model-oriented innovation for and together with our customers and suppliers. We help our customers to make their business sustainable.						1, 8, 9, 12
Long-term, continuous development of products, applications, and processes	Developing innovative products based on the needs and expectations of our customers	Number of product-related projects	Ongoing until 2025	114 projects in the reporting year were aimed at developing new/improving existing products and applications.		53, 81
	Continuous further development of our production processes in order to maintain competitiveness and achieve our climate and energy efficiency targets	Number of process-related projects	Ongoing until 2025	68 projects in the reporting year concerned process technology issues with a view to reducing costs, improving efficiency or increasing capacity.		53, 81
 Valuing Customers Relationships We value long-term customer relationships, built on trust and knowing, understanding and solving the customers' challenges.						
Long-term customer relationship	Improvement in customer satisfaction and maintenance of customer loyalty: customer loyalty index > 75	Customer loyalty index score	2019	In the 2019/2020 survey, the customer loyalty index score was 77.		54



GOOD CORPORATE GOVERNANCE

LANXESS's identity is based on five central values: respect, ownership, trust, professionalism and integrity. These values apply always and everywhere – and to all employees. We seek to foster a corporate culture in which responsible and morally irreproachable actions and striving for performance do not contradict but complement each other.

Our central values, supplemented by operational guidelines and organizational structures – summed up as good corporate governance – enable our employees to act responsibly in their day-to-day work and thus turn a relatively abstract concept into a specific corporate



success factor. At LANXESS, good corporate governance is embodied by a values-based and safety-conscious corporate culture, effective management systems and a commitment to internationally recognized principles of responsible management, such as the principles of the U.N. Global Compact.

Compliance Organization and Committees

To ensure that our values as well as our rules and standards are observed and continuously developed, we have established the compliance organization and several specialized committees below the level of the Board of Management.

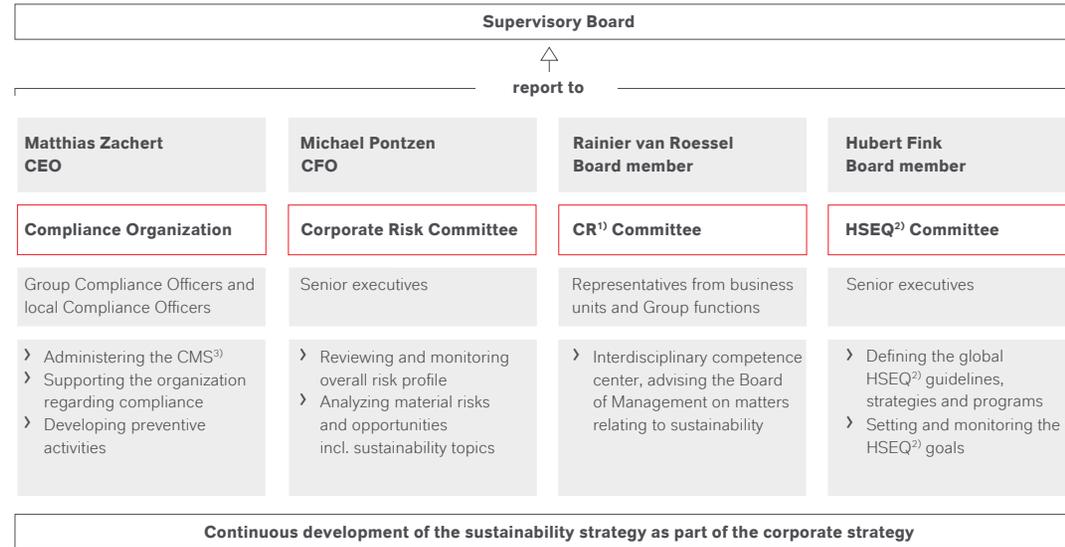


Compliance Organization

The global compliance organization is the central point of contact for all employees on compliance-related issues. It also works with the organizational units to develop measures intended to counter illegal or unethical conduct by LANXESS employees at an early stage and to prevent improprieties. Our compliance management system is described in the opportunity and risk report starting on [page 120](#) of this Annual Report.



Sustainability Committees and Board of Management Responsibilities in Fiscal Year 2019



1) Responsibility for the compliance organization was transferred from Matthias Zachert to Dr. Stephanie Coßmann effective January 1, 2020.
 2) Dr. Rainier van Roessel retired at the end of fiscal year 2019. His CR-related responsibilities were transferred to Dr. Stephanie Coßmann effective January 1, 2020.
 3) Corporate Responsibility.
 4) Health, Safety, Environment and Quality.
 5) Compliance Management System.

Corporate Risk Committee

The Corporate Risk Committee examines and monitors the Group's risk profile and in this context also regularly analyzes the key opportunities, risks, and corresponding preventive measures in relation to sustainability. Our opportunity and risk management system is described in detail in the combined management report starting on [page 120](#) of this Annual Report.



Corporate Responsibility (CR) Committee

The members of this committee represent all LANXESS business units and ensure that all LANXESS's CR activities within the Group are in line with our strategy. As an interdisciplinary competence center, the committee advises both the Board of Management and the business units on all matters relating to sustainability. It is also responsible for collecting and maintaining reliable data that comply with current market standards for use in our external CR communications.



HSEQ Committee

The HSEQ Committee ensures worldwide compliance with uniformly high quality management, safety, environmental, energy and climate protection standards. It has responsibility for initiating and monitoring the global implementation of all necessary HSEQ guidelines, strategies and programs as well as for defining our HSEQ objectives and monitoring their achievement. It also defines the global strategy for our integrated quality and environmental management system and our energy management system.

Integrated Management System

A centrally organized management system at LANXESS provides for the necessary global management structures in all business processes in order to ensure responsible business activities. Globally, we base our actions on the international standards ISO 9001 and ISO 14001 for quality and environmental management and ISO 50001 for energy management.

Confirmation of compliance with the standards ISO 9001 and ISO 14001 is provided in a global matrix certificate. This brings a whole range of benefits:

- › a high degree of standardization of processes
- › uniform in-house guidelines and instructions
- › transparent, efficient, and effective processes and controls
- › considerably reduced external expense for the maintenance and optimization of the management system, for the integration of additional management systems (e.g. ISO 50001, sustainability standards), and for the integration of new sites or business units.

 The LANXESS Code of Conduct can be found in the Responsibility/ Good Corporate Governance section of the LANXESS website.



We ensure that progress in integrating new sites into our management system and its performance are regularly reviewed worldwide by independent external experts. In 2019, we successfully passed the surveillance audit in accordance with the standards ISO 9001:2015 and 14001:2015 and the recertification audit in accordance with ISO 50001:2011. In the reporting year, the sites in Joo Koon, Singapore; Memphis, USA; Ningbo, China; and Sudbury, Great Britain, were added to the matrix certificate. In addition, Bergkamen was the first site acquired from Chemtura to be integrated into our matrix certificate. With just a few exceptions, the other sites taken on with the acquisition of Chemtura have already been certified in accordance with ISO 9001 and most of them have also been certified in accordance with ISO 14001. We are planning to gradually integrate these sites into our matrix certificate.

As of December 31, 2019, our matrix certificate covered 38 certifiable companies (companies with staff and in which LANXESS has a stake of over 50%) with a total of 74 sites in 21 countries. In relation to the number of employees, this equates to 87% coverage.

In addition, we have had LANXESS AG and all Group companies certified in accordance with ISO 50001 for energy management in Germany and Belgium. The only exceptions are the newly acquired IMD Natural Solutions GmbH and the newly founded CheMondis GmbH. As of December 31, 2019, the energy management system had reached 100% coverage in these two countries in relation to the number of employees. The former Chemtura site in Bergkamen was integrated into the matrix certificate in 2019. IAB Ionenaustauscher GmbH has its own certificate. Outside Germany and Belgium,



we are continuing to pursue our strategy of regional and local certifications. In Great Britain, energy audits in accordance with ESOS (Energy Savings Opportunity Scheme) are required for all sites. After the audit requirement was determined in 2018, these audits were conducted in the reporting year.

In addition, individual LANXESS Group companies and sites have other specific management systems and certifications such as EMAS, RC14001 (RC = Responsible Care®), OHSAS 18001, and IATF 16949. [The status of our certifications](#) can be viewed at any time in the Corporate Responsibility/References/Certifications section of the LANXESS website.

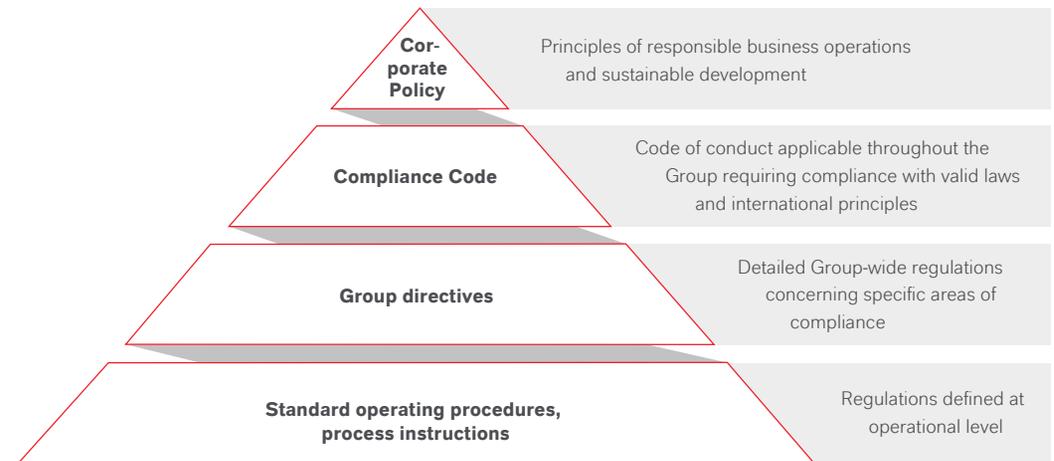


Internal Guidelines and Regulations

The principles of responsible business operations and sustainable development are expressed in our Corporate Policy, which defines our general corporate philosophy and the conduct expected of every single employee in relation to our stakeholders in a total of eleven guidelines.

The LANXESS Code of Conduct, which is applicable throughout the Group, requires all our employees – across all organizational units, regions and hierarchy levels – to behave lawfully and with integrity. Through correct and proper conduct, each employee is responsible for helping to prevent harm to LANXESS and increase the company's value over the long term. The code covers

Clear Rules Provide Guidance





issues such as human rights, cartel and antitrust law, anti-corruption, data protection, occupational, product and plant safety, and environmental protection.

Other Group directives, such as the HSE directives and the guideline on incentives, define the specific application of regulations in the individual areas of compliance covered by the code and are binding on all employees throughout the Group. On the basis of these LANXESS directives, more detailed regulations that also take account of local requirements are defined at the operational level in standard operating procedures and process instructions, etc. The applicable directives, standard operating procedures and guidelines are accessible to all employees. Employees are also regularly informed of new and updated regulations relevant to them.

We also expect our suppliers to commit to values and rules, especially the principles of the U.N. Global Compact and the ILO Labor Standards, and to establish adequate systems for ensuring legally compliant and responsible behavior. The LANXESS Supplier Code of Conduct is part of our communication with suppliers. When we select new suppliers, it is essential for us that they acknowledge the principles contained in this code or have established their own comparable regulations and management systems in line with the U.N. Global Compact. In addition, we promote responsible action in the supply chain with our involvement in the Together for Sustainability initiative, which we operate jointly with 24 other international chemical companies (see [page 39](#)).



The LANXESS Supplier Code of Conduct can be found in the Company/Conditions of purchase and sale section of the LANXESS website.



Human Rights

In line with our values and operational guidelines, we are committed in all our markets and supply chains to promoting respect for human rights at all times and systematically preventing child and forced labor, for example. At LANXESS, human rights and ethical principles apply without restriction, even if they are not stipulated in the legislation of individual countries. Our target is formulated with corresponding clarity: in all areas over which LANXESS has control, there should be no breaches of human rights. We have included all relevant information on our commitment and on the measures established in the Group to protect human rights in the [“LANXESS Position on Human Rights.”](#) This document can be viewed at any time in the Corporate Responsibility/Good Corporate Governance section of the LANXESS website.

Direct responsibility for ensuring that human rights are respected at all times lies with the respective management at our sites, supported by our global compliance organization and local Compliance Officers. At Group level, human rights are subject to regular evaluation as part of our risk management system. For example, we conduct specific risk assessments in all national companies with regard to the potential risk of human rights violations. The general risk potential across the Group is determined annually, and national companies with elevated risk potential are subjected to an additional, comprehensive risk assessment at least every three years. The risk assessments are coordinated by Group headquarters and carried out by the responsible



departments at national level. The assessments confirm that there is a high level of awareness of the subject and that functioning mechanisms have been established to prevent violations of human rights.

We review our activities for the protection of human rights in a regular process, taking account of external requirements such as those formulated in the German National Action Plan on Business and Human Rights (NAP). Our subject experts cooperate across departments to identify potential for improvement and derive suitable measures.

Furthermore, all organizational units at LANXESS and their business activities are subject to regular internal and external audits. It goes without saying that these activities also include monitoring respect for human rights and – if necessary – the introduction of suitable measures to guarantee this.

Our Code of Conduct includes unambiguous instructions regarding the respect of human rights. The code, which every new employee receives with their employment contract, is also an aspect of general training measures. In addition, we hold training sessions geared toward specific selected human rights issues such as occupational safety. If there are suspected human rights violations, the Integrity Line and Compliance Helpdesk offer our employees and external third parties various ways to notify the compliance organization – also anonymously if they wish.



We have no reports or knowledge of any systematic discrimination against LANXESS employees. This includes discrimination on the basis of skin color, age, gender, sexual orientation, origin, religion, physical and mental abilities, trade union membership or political opinion. In individual cases, misconduct by employees in respect of colleagues or third parties was reported. We will not tolerate verified misconduct and it will result in appropriate disciplinary measures up to and including dismissal.

All acquisitions of companies, interests in companies, or businesses are subject to a careful due diligence process to ensure that human rights are also respected by the target company. Significant suppliers of goods and services are regularly the subject of supplier assessments in the context of TFS audits that include aspects such as compliance with our Supplier Code of Conduct. The audits also cover compliance with human rights, including with regard to child labor and forced labor. In the reporting year, we received no reports or other indications of human rights violations by our suppliers. The same applies to child labor and forced labor.

We have also established the necessary sales-related processes to fulfill our responsibilities. This particularly includes our processes for central product monitoring and for trade compliance, especially with regard to regulations for preventing dual use. We also systematically evaluate the impact of our products on people as part of our portfolio analysis.



Anti-Corruption

By signing the U.N. Global Compact, we have undertaken to actively counter all forms of corruption. Here too, our target is no incidents. Prevention of corruption is part of our general compliance management system. Organizational measures and regulations for setting up the compliance management system as well as responsibilities for implementation, support and continuous monitoring of the system are defined in a guideline applicable throughout the Group. The respective site management, supported here too by our global compliance organization and local country compliance officers, is responsible for preventing instances of corruption at all times.

A Group-wide directive provides our employees with clear guidance regarding incentives. Our employees are prohibited, either directly or in connection with their professional duties, from offering personal advantages to the employees of other companies – in particular when initiating, awarding or handling an order or assignment. Our employees are likewise prohibited from accepting such advantages or requesting them for themselves. Exceptions may be made for customary occasional or promotional gifts that are symbolic in nature and of low value. If an employee is offered such gifts, they must immediately notify their supervisor or the compliance organization.



LANXESS may not grant advantages of any kind to public servants or other officials in Germany or abroad. When commissioning service providers who have contact with officials on behalf of LANXESS, employees must likewise ensure compliance with the prohibition on corruption. As a basic principle, we do not provide financial support to political groupings or parties. LANXESS is involved in large industrial associations, which we regard as fundamental to representing our interests. We disclose [contributions and spending on political activities](#) transparently; details can be found on the LANXESS website under Corporate Responsibility/Approach/Stakeholder Dialog at any time.

All donations require approval from a member of the Board of Management after prior consultation with the compliance organization.

To enhance our employees' awareness of these rules of conduct, the issue of corruption is regularly covered by compliance training. In addition, we hold specific corruption training aimed at exposed professional groups and countries. In the reporting year, we carried out compliance training sessions with a total of over 3,500 participants worldwide. If there are indications of compliance violations, our employees and external third parties can contact the compliance organization via the established reporting channels – also anonymously if they wish.



EMPLOYEES

15,479

LANXESS employees worldwide



The Corporate Audit function examines and monitors implementation of our measures to prevent corruption. It applies various analytical approaches and scopes here:

- › Assessment of the risk of exposure to corruption as part of annual audit planning, and general monitoring of the internal control system: all business units
- › Transaction monitoring to ensure compliance with company regulations with an influence on the prevention of corruption in the standard SAP system: at least 90% of all transactions

In fiscal year 2019, we received no reports or other indications of cases of active corruption by LANXESS employees. Verified cases of LANXESS employees being bribed lead to appropriate disciplinary actions up to and including dismissal as well as consideration of further legal steps. In the reporting year, we recorded a low single-digit number of such cases, but these did not have any further significant effects for LANXESS.

The central task of the Human Resources Group function is to provide the best possible support for the growth of LANXESS's operating businesses. At the same time, global HR trends such as demographic change, globalization, the drive for agility and digitalization, and cultural and value-based transformation mean that, in many places, we have to break the mold. This is just what we have done – by successfully completing an extensive HR transformation project. In the past two years, we have not only implemented a “People Strategy” but also restructured our entire HR organization. The new organizational structure puts the focus on our business, brings our expertise into the regions with globally networked teams and offers effective services as well as global standards in a shared system landscape. In the reporting year, the transformation project won the renowned “HR Excellence Award” in the “Corporations: International HR Management” category.

Our “People Strategy” is based on four pillars and eight strategic action fields that clearly guide our HR work:

› Enabling growth

With increasingly long-term and strategic workforce planning as well as a globally managed recruiting strategy, we are supporting the sustainable growth of our business in line with our corporate strategy.

› Developing people

We pursue continuous talent management and a comprehensive training and learning concept with the aim of promoting cross-functional and cross-divisional career development, developing young talent from within our own ranks and strengthening expertise for the LANXESS organization of the future.

› Enhancing and strengthening the HR function

We promote efficient and standardized HR processes, act as a global team with transparent structures and establish modern, digital HR systems and tools. We operate as a strategic partner for the businesses.

› Intensifying dialog

We strengthen exchange within and outside the HR department in order to create greater transparency regarding HR products and services, to enhance the role of HR as a strategic partner and to address the needs of the various Group functions and business units in an even more targeted way.

In the reporting year, we initiated or continued a great many projects and measures across these four pillars.



For example, we optimized, digitalized and harmonized significant HR processes throughout the Group with the successful global installation of a digital solution for HR services. The aim is to make these processes more transparent and user-friendly while also markedly less complex. The modern system solution covers central HR processes such as recruitment and onboarding, performance management, document management and employee self-service functions in a single system. We expect to implement another two modules in 2020.

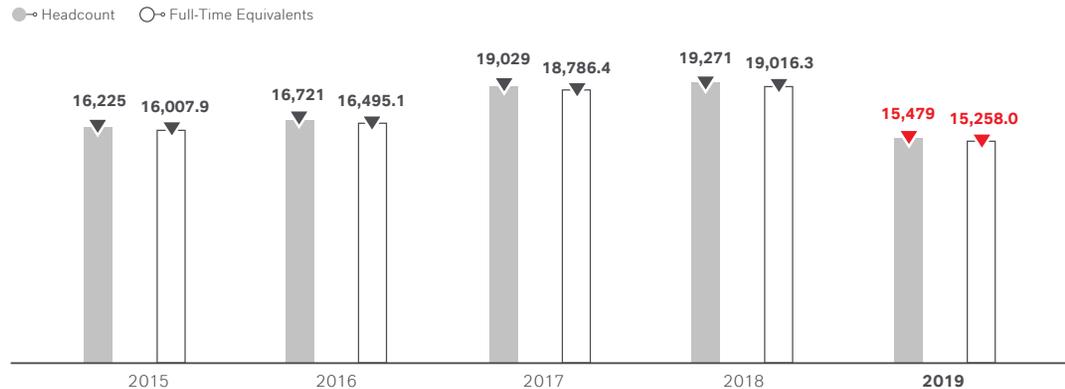
Other priorities in 2019 were the further development and harmonization of our Group-wide talent programs (see page 27 et seq.), the strategic realignment of the topic of Diversity & Inclusion (see page 30) and the global implementation of our Xwork program, which promotes more flexible forms of work (see page 34 et seq.).

Targeted Recruitment of Talents

Against a backdrop of strong competition for talent in our core markets and the demographic challenges (see page 32), we see recruitment as a strategic issue and are investing in a distinctive employer brand in order to highlight the advantages of LANXESS as a global and socially responsible employer. Our employer branding centers on authenticity and diversity. We are making ever greater use of social media, where we share a mix of company, product and employee information in order to spark enthusiasm for our company among talented people from a wide range of functions.

As part of our HR transformation, we have strengthened our global recruiter organization. In particular, the new software platform for recruitment and onboarding outlined above helps to make processes in connection with approaching and acquiring new employees more standardized, transparent and customer-focused. In order to approach interesting candidates in both an active and a targeted manner, we have also started building up a pool of active sourcing specialists, who will gradually replace external HR service providers. A total of 868 new employees joined the Group in the reporting year. The focus was on technical positions.

Number of Employees



The figures presented here for 2019 differ from those in the financial report, because the figures reported there are for continuing operations (see page 72 et seq.). These and all subsequent assessments relate – if not explicitly stated otherwise – to the core workforce (see page 33 for explanation). Figures from 2016–2018 including ARLANXEO.



New Employees by Age Group, Gender and Region

Age group	EMEA (excluding Germany)		Germany		North America		Latin America		Asia-Pacific		Total
	f	m	f	m	f	m	f	m	f	m	
<30	14	56	22	78	12	54	9	19	10	50	324
30-49	29	50	40	131	19	72	1	12	18	67	439
≥50	6	14	0	30	10	38	1	2	3	1	105
Total	49	120	62	239	41	164	11	33	31	118	868
Region total	169		301		205		44		149		
%											
Age group	f	m	f	m	f	m	f	m	f	m	Total
<30	27.5	31.5	11.6	10.6	20.9	30.0	28.8	27.3	13.7	24.1	18.3
30-49	8.3	4.9	6.4	5.2	12.0	11.4	0.8	3.2	4.5	4.7	5.7
≥50	4.7	1.7	0.0	1.0	4.4	4.8	5.4	1.4	5.9	0.3	1.7
Total	9.3	6.0	4.6	3.8	9.2	10.2	6.2	5.6	6.0	6.1	5.6
Region total	6.7		3.9		10.0		5.7		6.1		

Our international graduate trainee program is a fundamental tool for securing talent in Germany. Exceptionally well-qualified Master's graduates are prepared for challenging specialist and managerial tasks and gather valuable experience abroad. In addition to an engineering orientation, LANXESS also offers attractive opportunities for economists. In 2019, 23 new graduate trainees (9 women, 14 men) started their career at LANXESS.

Developing Specialist Staff from within Our Own Ranks

Training young people has always been hugely important to us, both in order to safeguard the company's future and as part of our social responsibility. Vocational training is the basis of our strategy of developing specialist staff for the German sites from within our own ranks.

215 apprentices on eight technical, scientific and commercial career paths and six dual-study programs started their apprenticeships at LANXESS Deutschland GmbH on September 1, 2019. The proportion of female career starters was around 10% in the reporting year (previous year: 8%).

Taking the new intake into account, there are currently 682 apprentices at LANXESS Deutschland GmbH (as of December 31, 2019). The proportion of female apprentices across all years is around 11%. We invested around €23 million (previous year: €20 million) in the vocational training of young talent in 2019.

Training will remain a key pillar of our HR policy in the years ahead. It is our stated aim to retain at least 80% of our apprentices after successful completion of their training. We reached this target again in the reporting year with a retention ratio of 88% (previous year: 84%). Outside of Germany, we have also started to offer apprenticeship programs on a smaller scale in countries such as Belgium, Spain, Great Britain, India and South Africa. These have met with a positive response so far and are helping us meet our demand for young talent in the countries in question.

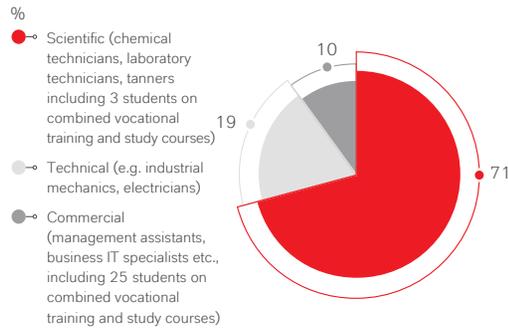
Each year, with our XOnce program, we give school-leavers who still do not meet academic or personal requirements for starting an apprenticeship program immediately the opportunity to qualify for a technical or scientific apprenticeship program – regardless of whether this is then done externally or at LANXESS itself. Ten young people took part in the XOnce program in 2019. On average, approximately 50% of participants become apprentices at LANXESS after participating in the XOnce program.



1) This figure is the ratio of apprentices at LANXESS Deutschland GmbH. The number of LANXESS Deutschland GmbH employees undertaking an apprenticeship is expressed as a percentage of the core workforce of LANXESS Deutschland GmbH (employees with a permanent, full- or part-time employment contract, see page 32) plus the apprentices of LANXESS Deutschland GmbH.

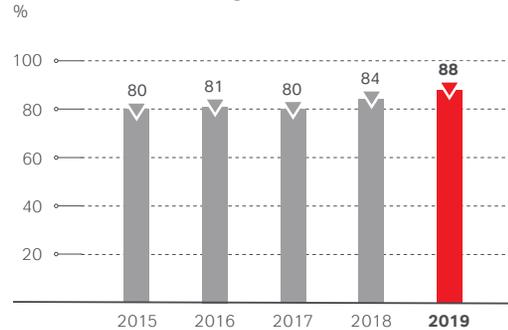


Apprentices by Career Path¹⁾



1) LANXESS in Germany

Hire Rate of Apprentices and Students on Combined Work and Bachelor's Degree courses at LANXESS¹⁾



1) LANXESS in Germany

Promoting Development Worldwide

Only by constantly investing in training our employees and imparting clear, globally binding values and standards can we as a company keep on using the opportunities of changing markets successfully. Wide-ranging leadership and HR development tools enable and motivate our employees to act on the basis of values, rethink issues, implement them quickly and devise solutions in a team.



Our activities in the reporting year centered on the further development of global, cross-divisional and cross-hierarchical talent programs, with which we want to retain particularly high-performing employees within our company and identify suitable successors for key positions at an early stage. In the previous year, we successfully established the new "eXplorer" program, which is aimed at employees who have the potential to develop toward major leadership roles at LANXESS in the next few years. Key "eXplorer" topics include dealing with complexity, new forms of collaboration and digital and agile leadership principles. We are now rounding off our range of Group-wide talent programs with "compass" and "navigator."

"compass" is aimed at employees at the start of their career. The program offers guidance for their future career path and encourages practical development measures. The core elements of the program are a Development Center with exercises tailored specially for the target group



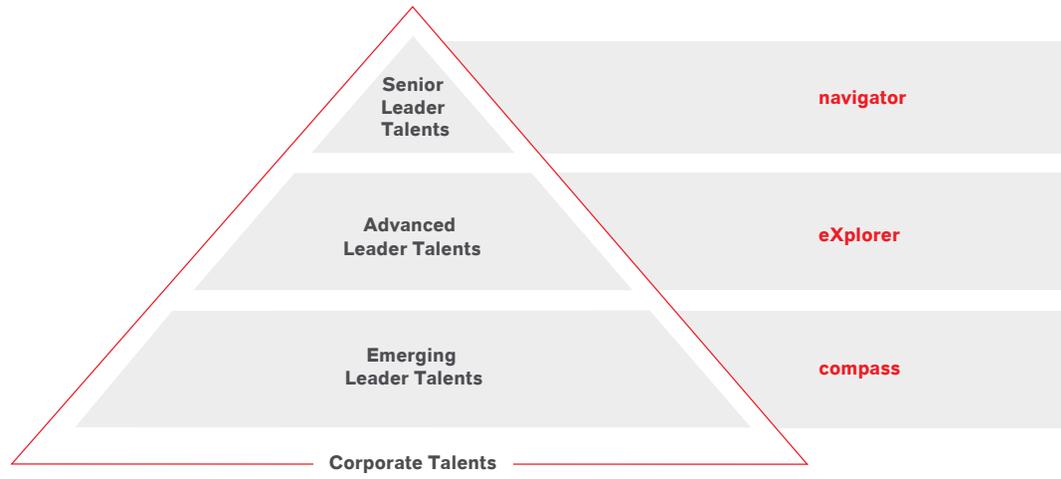
and personal development plans. The "navigator" program is aimed at top-level managers with the potential to lead a business unit or Group function.

Our commitment to increasing diversity at LANXESS (see page 30 et seq.) is reflected in a specific target for the composition of the three talent programs. Every year, the programs' participants should be at least 30% female and 40% non-German. With a total of 65 participants in 2019, the proportions amounted to 31% female and 49% non-German participants, which means we achieved our target for the reporting year. Because the programs can last for up to 18 months, double counting cannot be ruled out.

We offer global leadership training in order to embed our leadership principles more deeply worldwide and to strengthen our leadership culture. Depending on the experience of the participants, basic leadership techniques are conveyed, refreshed and translated into individual measures. Since management practice differs depending on the country and cultural environment, our training programs also take cultural differences into account and increasingly deal with the requirements of digital management. A total of 1,423 managers have been trained since 2016, including 419 in the reporting year.



Global Talent Programs Promote High-performing Employees



The performance dialog is a key tool for developing our employees. We use it to help our managers and their employees to compare mutual expectations regarding tasks, targets and responsibilities more effectively and to continuously give each other feedback, thus improving collaboration. The performance dialog was available to all managers in the reporting year and was very well received.

Promoting life-long learning of our employees was also a high priority for our HR development in 2019. In the EMEA region (excluding Germany), for example, 98% of our employees received training, including both basic and safety training, as well as further education to further their careers and skills in the reporting year. On average, each employee received 57 hours of training. This targeted HR development enabled us to fill one fifth of all vacancies in the EMEA region (excluding Germany) with qualified internal applicants.

To keep on expanding the learning options for our employees and make them flexible, digital learning formats are a core part of our training portfolio. We offered our employees 8,941 digital learning formats in 2019. We are also taking more account of the need for digital, virtual management in our leadership training programs. For example, we have integrated virtual exercises that train digital leadership skills. Our mentoring and coaching offerings are also easily accessible via a digital platform. With a broad range that goes beyond traditional training, our dLX Group function is also promoting the digital culture shift at LANXESS.

Leadership at the LANXESS production plants is also important to us. Alongside the basic training, we have therefore developed a second module for new plant managers in order to familiarize the employees with selected operational issues in a more targeted manner.

International deployments are another key component of our systematic HR development. At the end of 2019, 59 employees – i. e. around 1.5% of our specialist and managerial staff – were working outside their contractual country as expatriates. Along with targeted global exchange of expertise through deployment of experts and managers, it is our ongoing aim to build up local management with specialist knowledge and expertise and assign challenging tasks to suitable employees at our international sites. At sites outside Germany, 86% of our leadership positions are currently held by local employees.



Employee Commitment as a Key Success Factor

Committed employees are the key to strong company performance, successful change and ultimately long-term corporate success. Accordingly, we pay close attention to encouraging the commitment of our employees. Good management helps here, as do personal development prospects, a high degree of flexibility in job design and company values with which our employees can identify. All these factors, among others, shape the LANXESS corporate culture, which we actively cultivate and develop with regard to the constant new challenges in our markets. An important forum for this is the annual Performance Culture Day, which in 2019 was devoted to our “Think New – Act Fast” principle. We also want to lend greater weight to the



Turnover Resulting from Voluntary Resignations by Age Group, Gender and Region

Age group	EMEA (excluding Germany)		Germany		North America		Latin America		Asia-Pacific		Total	
	f	m	f	m	f	m	f	m	f	m	%	Abs.
<30	15.7	2.8	3.7	3.1	12.2	8.3	0.0	1.4	9.6	11.1	5.4	96
30–49	3.4	3.4	2.1	1.5	7.6	8.7	1.6	1.6	6.3	4.7	3.5	266
≥50	2.4	1.5	0.7	0.3	4.8	6.2	0.0	0.0	3.9	1.7	1.6	96
Total	4.4	2.6	1.8	1.1	6.7	7.4	1.1	1.2	6.5	5.0	3.0	458
Region total	3.0		1.2		7.3		1.2		5.3			
Region total (absolute)	75		95		149		9		130			

Early turnover: percentage of employees who left our company of their own accord within three years of being hired



aspect of “cultural fit” when it comes to acquisitions – so a corresponding analysis will become a fixed element of the due diligence process in the future.

Regular and structured feedback is another important element of our corporate culture. To this end, we use a wide range of survey formats to allow feedback relating to the satisfaction and commitment of the various employee groups. In 2019, countries where local surveys were carried out included Brazil, France, the UK, India and Spain.



We regard the turnover rate based on voluntary resignations as a key indicator for the commitment of our employees. Our goal is to continuously keep this ratio below 3.5% until the end of 2023. In the reporting year, the global voluntary turnover rate was 3.0%, meaning that we reached our target for this year. In Germany, the rate was 1.2%. The percentage



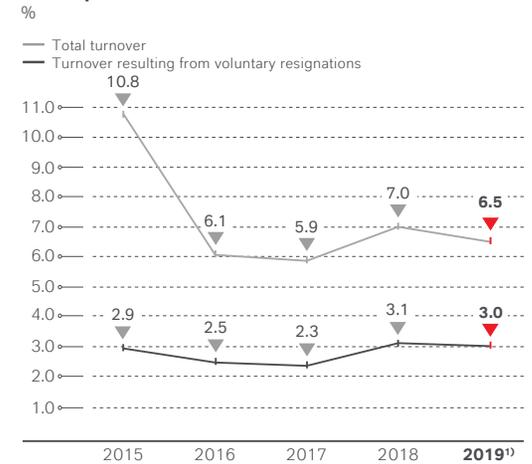
of employees who left our company of their own accord within three years of being hired stood at an average of 1.2% worldwide in the reporting year.

We rate our performance in relevant rankings and competitions as a further sign of our employees’ satisfaction and the attraction of LANXESS as an employer. LANXESS was named as a top employer or as an employer of choice in various countries, e.g. Brazil and China, in the reporting year.



17
years
average length
of service

Development of Turnover Over Time



1) The turnover rate is the sum of departures (from the Group) in the last twelve months divided by the average of the headcounts at the end of the last four quarters. It therefore includes employer- and employee-initiated departures as well as retirement. Since fiscal year 2019, temporary absences, e.g. due to parental leave or lengthy illness, are no longer counted as departures.



Early Turnover Resulting from Voluntary Resignations by Age Group, Gender and Region

%

Age group	EMEA (excluding Germany)		Germany		North America		Latin America		Asia-Pacific		Total	
	f	m	f	m	f	m	f	m	f	m	%	Abs.
<30	11.8	2.3	0.0	0.8	10.4	6.1	0.0	1.4	6.8	7.2	3.1	54
30-49	2.0	1.3	1.0	0.6	3.8	4.3	0.0	0.5	1.8	1.7	1.4	107
≥50	0.8	0.4	0.2	0.0	2.6	2.2	0.0	0.0	2.0	0.0	0.5	30
Total	2.7	1.0	0.5	0.3	4.0	3.4	0.0	0.5	2.5	2.1	1.2	191
Region total	1.3		0.4		3.6		0.4		2.2			
Region total (absolute)	34		28		73		3		53			

Total Turnover by Age Group, Gender and Region

Age group	EMEA (excluding Germany)		Germany		North America		Latin America		Asia-Pacific		Total	
	f	m	f	m	f	m	f	m	f	m		
<30	8	11	8	27	7	24	3	9	7	32		136
30-49	15	53	18	55	17	74	16	33	31	142		454
≥50	5	52	20	130	23	76	2	29	6	72		415
Total	28	116	46	212	47	174	21	71	44	246		1,005

Age group	w		m		w		m		w		m		Total
	w	m	w	m	w	m	w	m	w	m			
<30	15.7	6.2	4.2	3.7	12.2	13.3	9.6	12.9	9.6	15.4		7.7	
30-49	4.3	5.2	2.9	2.2	10.8	11.7	12.5	8.7	7.8	9.9		5.9	
≥50	3.9	6.5	3.7	4.3	10.0	9.6	10.8	20.2	11.8	25.0		6.9	
Total	5.3	5.8	3.4	3.4	10.6	10.9	11.8	12.0	8.5	12.7		6.5	
Region total	5.7		3.4		10.8		12.0		11.8				

Diversity as a Success Factor

We regard diversity as a strategic advantage. Therefore, we aim to enhance diversity at LANXESS and use its positive effects for our company and employees. An appreciative organizational culture that is open to all people – regardless of age, gender, nationality, disability or ideology – helps us to become more innovative and efficient and to attract and retain promising talents. Recognizing and appreciating diversity is therefore ingrained in our values, our guiding principles as well as our leadership principles.

Diversity Work Wins Multiple Awards

Our work to create an organizational culture in which diversity is a matter of course won various awards again in 2019: Among others, the Rhine-Ruhr Diversity Network, in which we engage in an intensive dialog on diversity issues with 14 other large companies from the region, received the Best Practice Award from the “Diversity Charter” initiative.

Ratio of Disabled Employees at German Companies

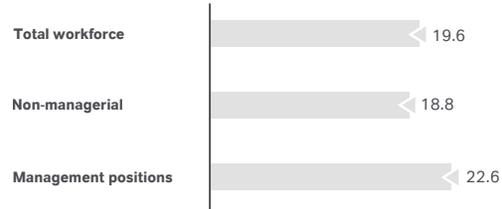
	2015	2016	2017	2018	2019
Ratio in %	5.5	5.6	5.9	5.7	5.9



In the reporting year, we revised our strategic “Diversity & Inclusion” (D&I) concept for promoting diversity at LANXESS. In the interests of an integrative approach, we want to better incorporate D&I into all HR processes. In the future, we will follow a more holistic D&I approach and particularly address the aspects of age, gender, nationality, disability and sexual orientation.

Gender diversity remains one of our global priorities, with the clear target of increasing the proportion of women in the company. Our measures begin in recruitment, with messages and event formats tailored specially to women. Their professional and personal development is supported by mentoring, coaching and mandatory D&I criteria for the composition of our global talent programs (see page 27). In addition, we are constantly working to expand and improve our offerings for work-life balance (see page 34 et seq.). Regional and local D&I activities accompany our global measures. They have all helped us to achieve two of our three gender diversity targets ahead of schedule.

Proportion of Women
%



Proportion of Women on the Board of Management and at the Top Management Levels

Proportion of women	2015	2016	2017 ¹⁾	2018	2019	Goal	Target date
First level below the Board of Management	9.8%	9.8%	11.6%	13.8%	20.9%	15%	June 30, 2022
Second level below the Board of Management	20.5%	25.1%	23.9%	19.2%	25.1%	25%	June 30, 2022
Board of Management (number of women)	0	0	0	0	0	1 woman	June 30, 2022

1) Year when target was set.

The proportion of women at the second management level below the Board of Management has been fluctuating since 2015 due to M&A activities. In 2018, the proportion of women also fell due to a change in the reporting structure below the Board of Management associated with the introduction of an additional reporting level at the regional level. The significant increase in the proportion of women at the first two management levels below the Board of Management in the reporting year is partly due to a change in the functional reporting structure to our Chief Financial Officer, Michael Pontzen.

In addition, the German Act on Equal Participation of Women and Men in Executive Positions in the Private and the Public Sector commits us to set targets in Germany for aspects such as the proportion of women at the two management levels below the Board of Management and to determine the target date for attainment of the proportion of women. In 2017, the Board of Management and the Supervisory Board approved the targets with an

implementation deadline of June 30, 2022: The proportion of women is to be 15% for the first level below the Board of Management and 25% for the second level. At the end of 2019, the proportion of women at the first management level below the Board of Management was 20.9%. At the second management level, it was 25.1%. Both ratios therefore exceeded the target.



We achieved another significant target in the context of gender diversity at the beginning of fiscal year 2020: At least one woman was to be included on the LANXESS Board of Management by mid-2022. By resolution of the LANXESS Supervisory Board of December 11, 2019, Stephanie Coßmann, previously Head of the Human Resources Group function, was appointed as a member of the Board of Management and as Labor Relations Director as of January 1, 2020. She succeeds Rainier van Roessel, who retired at the end of the year.

We are now voluntarily committed to increasing the proportion of women in middle and upper management around the world to 20% by the end of 2020. This figure was already 19.8% as of the 2019 reporting date.

Overcoming Demographic Challenges

Two regions of commercial significance for LANXESS – Europe, especially Germany and Belgium, and the U.S. – are hit particularly hard by the problem of the increasing

average age of our employees. Accordingly, competition for qualified young talent is intensifying. In the medium term, illness and retirement – both regular and early – will mean that many vacancies require filling, especially in career paths such as chemical production technician, mechanic/fitter and engineer. Against this backdrop, another 30 additional “demographic jobs” were approved in the reporting year. This means that we have so far created around 110 demographic jobs.

After two successful pilots, we also adopted our newly established, global strategic HR planning process in day-to-day business in the reporting year. The aim is to simulate the long-term staffing supply – taking into account retirements, natural turnover, etc. – and compare it against our long-term staffing requirements, taking into account the corporate strategy and technological changes. This enables us to identify staff shortages at an early stage and instigate appropriate HR measures.

Rewarding Performance Appropriately

In the context of the digitalization of our working world, longer working lives and shifting social trends, employees’ expectations of their employer are also constantly changing. This means that existing offerings to employees must be regularly reviewed and, if necessary, adapted to different needs.

In addition to fair monetary remuneration, flexible working conditions and benefits are becoming increasingly important. As components of total remuneration at LANXESS, they make a material contribution to the well-being and productivity of our workforce. It is important to us that the benefits granted support our corporate targets, values and culture and address the relevant needs of our employees. Some benefits are equally essential for all employees, such as:

- › Company pension plans and insurance benefits for financial security
- › Flexible working conditions and other offerings that support our employees’ work-life balance
- › Programs for prevention and long-term preservation of our employees’ health
- › Education and training

When designing these benefits, we often go further than the respective statutory framework. In addition, we always aim to account for individual needs and every life situation in the best possible manner.

Employees by Age Group, Gender and Region

Age group	EMEA (excluding Germany)		Germany		North America		Latin America		Asia-Pacific		Total
	f	m	f	m	f	m	f	m	f	m	
<30	49	182	191	739	55	174	31	71	59	196	1,747
30–49	353	1,003	617	2,530	165	622	124	376	394	1,413	7,597
≥50	134	814	565	3,099	226	795	21	150	52	280	6,136
Total	536	1,999	1,373	6,368	446	1,591	176	597	505	1,889	15,479
Region total	2,535		7,740		2,037		773		2,394		



All services relating to career and family, health and pensions apply to our core workforce. Even so, some individual services in the regions may have differing structures and be locally adapted to the needs of our employees. Our core workforce includes all employees with a permanent full-time or part-time employment contract. As of December 31, 2019, this was 93% of our total workforce worldwide.

Fair Remuneration and Comprehensive Benefits

LANXESS pays its employees worldwide transparent remuneration in line with market conditions that also includes a bonus system geared toward the company's long-term success. In total, 88% of our employees worldwide receive variable remuneration.

Above the pay scale, and, in most countries, within the pay scale, we also provide a performance-related remuneration component on top of fixed pay. This is the Annual Performance Payment (APP), which goes to employees in countries that participate in this program. This bonus payment is linked to the Group's attainment of a defined EBITDA target. Further individual targets in areas such as safety and sustainability additionally apply to top management. In 2019, we shared around €96 million of our profits for 2018 with our employees worldwide.

Furthermore, through the Individual Performance Payment (IPP), managers can also reward outstanding performance of an employee during the year promptly and with no red tape. Around €12 million was assigned for outstanding individual performance alone in fiscal year 2019 (including around €8.5 million in Germany). At present, around 79% of our employees worldwide are entitled to receive the IPP. In relation to this, they also receive a prompt assessment of their performance and their career prospects.

In addition, we offer a long-term incentive program for our managers in Germany. There are similar programs in the U.S., India and China. The Long-Term Stock Performance Plan (LTSP) 2018–2021 consists of four tranches commenced each year and tracks the performance of the LANXESS share compared with the MSCI World Chemicals Index, over a period of four years in each case. The four-year term and the potential growth in value make this program an attractive long-term incentive and retention tool. In addition, there is a new Share Ownership Guideline (SOG) for the Board of Management and our top-level managers. This guideline emphasizes trust in the strategy and long-term success of LANXESS. 99.9% of those eligible participated in the current program in 2019.

As of the reporting date, our employees and directors held around 1% of the LANXESS shares in total in the context of participation programs.

Another core element of our offering is the company pension plan for plugging potential gaps in provision in old age. The design of the company pension plan differs from country to country depending on the state pension system. However, LANXESS's pension commitments often go beyond what is required by law. They are funded by employer and/or employee contributions. Employees in Germany can voluntarily increase their pension and receive additional contributions from LANXESS. 76% of employees participate in the supplementary component of the current pension plan. In turn, other offerings enable a smooth transition into retirement, such as the long-term account for pay-scale employees in Germany. The participation rate here remained at a high level of around 92.4%.



Optimally Balance Work and Life

LANXESS Employee Structure by Employment Type, Gender and Region

(also including employees on fixed-term contracts)¹⁾

Contract	EMEA (excluding Germany)		Germany		North America		Latin America		Asia-Pacific		Total
	f	m	f	m	f	m	f	m	f	m	
Permanent contract	536	1,999	1,373	6,368	446	1,591	176	597	505	1,889	15,479
Full-time	483	1,845	993	6,164	438	1,590	175	597	498	1,889	14,671
Part-time	53	154	380	204	8	1	1	0	7	0	808
Temporary contract	26	39	147	789	3	11	28	30	27	62	1,162
Full-time	25	39	127	772	2	11	28	30	25	62	1,121
Part-time	1	0	20	17	1	0	0	0	2	0	41
Total	562	2,038	1,520	7,156	449	1,602	204	627	532	1,951	16,641

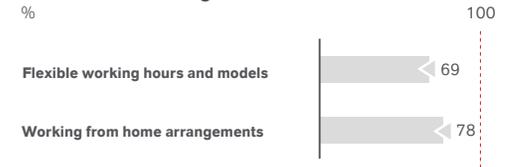
¹⁾ In fiscal year 2019, we employed a total of 83 temporary staff members (16 women and 67 men) at our German companies.



In line with our employees' desire for more flexible working and working-time models as well as greater transparency regarding existing options, we introduced and communicated global flexibility principles in 2018 under the heading "Xwork – Flexible Work." On this basis, we developed specific guidelines on flexible working conditions and introduced corresponding models in a number of countries in the reporting year, for example a pilot project for flexible working hours at several U.S. sites. All measures count toward our new goal of 95% of all countries in which we operate having derived and implemented specific guidelines and/or corresponding models for flexible working conditions from our global "Xwork" principles by the end of 2022. At the end of 2019, the coverage ratio was already 74%.

The "flexitime" model introduced in Germany in 2017 aims to enable employees in senior management to work part-time in an intelligent way. In the Flexi-95 model, the level of employment is reduced to 95% with a corresponding adjustment to remuneration, meaning that a full-time worker is entitled to 13 extra days off per year. All non-pay-scale employees have been able to participate in the program since 2019. At the end of fiscal year 2019, we already counted around 130 participants, of which 45 in senior management.

Options for Flexible Working Hours and Mobile Working Worldwide



Both coverage ratios decreased in the reporting year due to change in the calculation method. As part of our Xwork program and the associated new target (see left column), we have applied stricter assessment criteria and called not only for a country-specific program, but also, for example, for compliance with the Xwork principles, coverage of the majority of employees in the country and appropriate communication in connection with the new Xwork program.

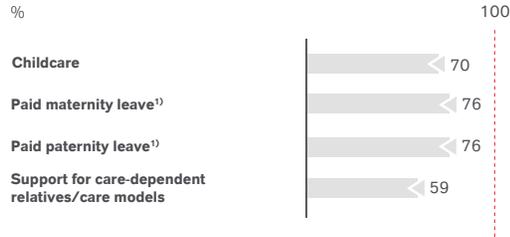
Work/life balance matters to an ever-growing number of employees. A total of 7% of our employees in Germany aged between 20 and 40 were on parental leave for a time. Of this figure, 58% were fathers. 97% of the employees who ended a parental leave period in 2019 returned to a job at LANXESS, 99% of which still worked in the company at the end of 2019.

The statutory maternity rights in Germany and similar models in the European Union are by no means standard worldwide. Therefore, at our sites outside Europe, we are assessing whether we can introduce or expand country-specific models for our employees. For our employees in the U.S., for example, we approved a new paid parental leave model in the reporting year, which allows mothers and fathers to take parental leave of eight weeks on the birth or adoption of a child – while continuing to receive a full salary. The model will be implemented in 2020.



Against a backdrop of demographic change, care is a major issue in Germany. The centerpiece of the LANXESS care model is caregiver leave, which allows our employees to reduce their working hours by more than their pay during the care period and to work off the hours commensurate with the pay they received after their return. Caregiver leave and time off have been used by 109 employees in Germany since the LANXESS care model was introduced.

Options for Childcare, Maternity/Paternity Leave and Care Models Worldwide



1) Beyond legal requirements

Coverage is shown in percent for each initiative with regard to the countries and the total number of employees.

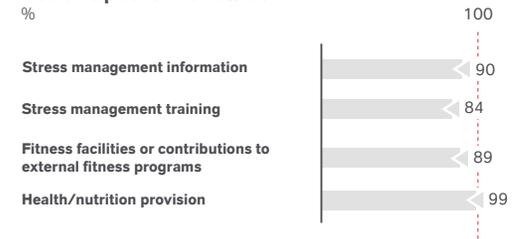
Occupational Health and Safety Enjoy Top Priority

Our occupational health management is based on raising all employees' awareness of their own health and motivating them to act on their own initiative and adopt healthy behaviors in their professional and private lives.

In the context of our occupational health management, we again offered our employees at various German sites a medical check-up in 2019 – this time with a focus on catching poor posture early and preventing back complaints. Around 1,031 people took up this offer. As it proved so successful we will be offering a medical check-up again in 2020. In addition, our employees in Germany again received €200 credit for booking a wide range of health-related options on the digital platform “machtf.it.” LANXESS pays 80% of the costs for each course booking until the budget is used up. Around 50% of German LANXESS employees are now registered. Up to the reporting date, a total of around 20,000 health units had been booked, with massage, fitness and yoga options proving most popular.

We also offer our employees wide-ranging measures to promote health and wellbeing at our international sites, e.g. medical check-ups, training on stress management and fitness, wellness or dietary options.

Health Options Worldwide



Coverage is shown in percent for each initiative with regard to the countries and the total number of employees.



We address the topic of occupational safety with our global safety initiative Xact. Xact pursues the goal of gradually lifting the safety culture of LANXESS to a higher level. Starting with top management, all employees are expected to work together to improve safety in the Group. We are doing this because we firmly believe that all industrial accidents are avoidable. As a specific target for occupational safety, we aim to reduce the lost time injury frequency rate (LTIFR, known as MAQ in Germany) by more than half by the end of 2025 compared to the reference year of 2016 (LTIFR of 2.0).



Six Xact safety rules, the core principles of safe working at LANXESS, address the key points with which all employees – from the factory to the office, regardless of hierarchy and position – can make an active contribution to their own safety and that of their colleagues. They are derived from the Xact “guidelines and principles,” the worldwide framework for the orientation of our safety culture.



As ever, the work of the Xact team is focused on fostering a positive culture of safety and greater alignment toward behavior-based safety. To this end, we therefore developed and piloted a systematic process called the Safety Culture Development Process in 2018. A gradual, global rollout – starting with Germany and the USMCA region – has been underway since 2019.



The six-stage process is centered on a full-day, focus-group workshop led by the Xact team. In this workshop, representatives of all levels of the respective department’s hierarchy – from plant managers to shift workers – engage in an in-depth discussion the safety culture in their own plant. In this way, we can identify the individual strengths and weaknesses of each plant and initiate targeted improvements. To boost sustainability, a follow-up workshop a few months later discusses the implementation of the measures with the focus group. The Xact team collates the workshop results centrally in order to determine global, regional or department-specific trends.

Our Safety Culture Development Process



By the end of 2019, more than 20 of the planned 150 focus-group workshops had been carried out in Germany, the U.S. and China. A first interim evaluation shows that our employees appreciate the fact that they can contribute personally, receive direct feedback from their colleagues and supervisors and actively help to shape the safety culture in their own area of activity. Internal communication, an effective occupational safety organization and mindfulness emerged as particularly important topics for discussion. We will continue this process and extend it to all regions in 2020.

Active, ongoing communication is a top priority for us when it comes to matters relating to safety. The pulse-check survey that we conduct every year among all LANXESS employees is an important tool here. It gives them the opportunity to express their personal experience of key aspects



of safety at LANXESS. One aim of the anonymous survey is to determine whether the individual employee receives positive feedback for safe work – as intended – or whether supervisors set an example when it comes to safety.

Once again, more than 60% of our employees took part in the survey in 2019. For the first time, those surveyed were also asked how well they understand the Xact “guidelines and principles” and to what extent they are put into practice in their working area. Over 90% of respondents answered the question with “mostly put into practice” or at least “partially put into practice.” The high level of awareness and comprehension of the Xact “guidelines and principles” suggest that communication during the rollout has been successful. However, the results differed substantially in terms of individual regions, organizational units and hierarchy levels. For instance, responses to the question on positive feedback from supervisors in the event of safe work were far less affirmative than the global average in countries such as Germany. The survey results and the more than 600 free-form comments therefore give us valuable ideas for the further development of the safety culture at LANXESS.

We also want to reach an improved shared understanding of occupational safety with service providers who perform technical services for us, as well as including them in our safety culture. For instance, our partners must demonstrate that they maintain their own safety-management system and have carried out all safety training that is required of



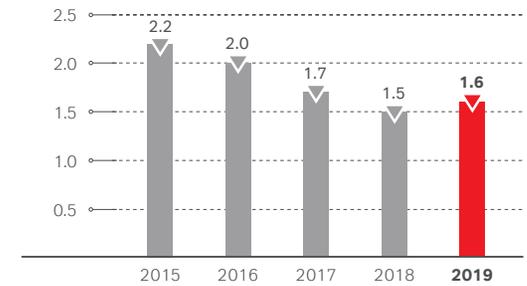
all employees who work for us. Regardless of this, we provide personal safety briefings for employees of our partner companies.

Indicators for the assessment of occupational safety at LANXESS are the recordable incident rate (RIR: number of incidents per 200,000 working hours that have to be reported according to the Occupational Safety and Health Administration) and the lost time injury frequency rate (LTIFR: accidents per million hours worked) for accidents with days lost. The LTIFR in 2019 was 1.6 and thus slightly higher than in the previous year. As in previous years, no fatal accidents occurred in the reporting period. The RIR, which also includes accidents with no days lost in accordance with OSHA rules, was 0.8 in 2019, and thus likewise slightly below the previous year’s level. Companies have been taking occupational safety increasingly seriously in recent years. This increased focus at all hierarchy levels has helped to continuously reduce reports of serious accidents on a lasting basis.

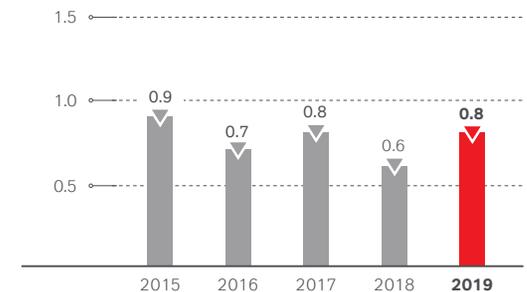
All accidents as well as significant near-misses are systematically analyzed with regard to their cause and possible preventive measures. The results of these investigations are, for instance, incorporated into safety updates that are made available to the entire organization. We regard the sharp fall in the LTIFR in recent years as evidence that this structured transfer of knowledge and the many measures to improve occupational safety at LANXESS are having a positive effect.



Work-Related Injuries to LANXESS Employees Resulting in Absence from Work (LTIFR)



Work-Related Injuries to LANXESS Employees That are Reportable in Accordance with OSHA Regulations (RIR)





First CEO Safety Award

For us as a chemicals company, the safety of our plants and processes is the utmost priority. With the CEO Safety Award, bestowed for the first time in March 2019, we want to anchor occupational safety even deeper in the minds of all employees. The international award recognizes particularly successful initiatives and contributions to occupational safety at LANXESS. The focus is on avoiding accidents and incidents as well as the sustainable implementation of safety processes. The first recipients of the award were a plant team from Belgium with their “contractor safety in the event of downtime” project. In this project, excellent preparation for a facility’s maintenance downtime of three weeks and targeted training for contractors increased the safety of all participants. In total, around 600 contractor employees and 75 LANXESS employees cooperated closely. Teams from Ningbo, China, and Fords, U.S., were also recognized for their safety initiatives as finalists.

Recognizing, Promoting and Using Good Ideas

With our ideas management system, we systematically promote the development and implementation of suggestions for improvement in order to keep on generating impetus for improving economic efficiency, occupational safety and environmental protection. Many good ideas were again implemented in 2019. 485 contributed to increased occupational safety, 398 to improved environmental performance.

Ideas Management

	2015	2016	2017	2018	2019
No. of new ideas	2,027	2,442	2,262	1,633	1,538
Employees entitled to participate	7,390	7,908	7,655	7,206	7,475
TMQ ¹⁾	274	318	295	267	206
Savings (€ million)	2.56	2.26	1.58	0.92	0.42
Bonuses (€ million)	0.95	0.8	0.65	0.34	0.27

¹⁾ TMQ: rate per thousand employees.

Partnership-based Discussion

Dialog with chemicals social partners – trade unions and employer associations alike – as a principle of consultation in action is the global practice at LANXESS. As part of this, we also respect the freedom of association of our employees in accordance with the International Labour Organization (ILO) and the Global Compact and comply with collective bargaining agreements. We regularly seek dialog with employee representative committees in Germany, Europe and worldwide, provide information on our corporate objectives and involve employee representatives in organizational changes at an early stage.

Fair dealings with employee representatives and trade unions are also a top priority for us outside Europe. In South Africa, for instance, we comply with International Labour Organization (ILO) standards with respect to our employees’ freedom of association. This includes regular exchange between local management and trade-union representatives as well as binding, collectively agreed-upon regulations on remuneration and working conditions.

Proportion of Employees Covered by Collective Bargaining Agreements





RESILIENT SOURCING



At LANXESS, raw materials, other materials, equipment and services are subject to globally standardized requirements with regard to safety and environmental protection. Their procurement is the responsibility of the Global Procurement & Logistics (GPL) Group function, the head of which reports directly to the Board of Management member Dr. Hubert Fink. In close coordination with our internal stakeholders, GPL organizes Group-wide procurement, establishes corresponding guidelines, and initiates measures to promote purchasing synergies and sustainable behavior by our suppliers.

In the year under review, procurement transactions with over 15,000 suppliers were processed. A global procurement guideline for the entire Group defines our employees' conduct when dealing with suppliers and their employees. We have specified standardized workflows in the context of procurement in more detail in a process description. In our training program for strategic purchasers (ProTrain), we also pay due attention to the topic of sustainability. Based on the principles of the U.N. Global Compact, the International Labour Organization (ILO), Responsible Care® and other CSR codes, we expect our suppliers to comply with national and other applicable laws and regulations for environmental protection, health and safety at work and with regard to labor and recruitment practices. Acceptance of the requirements of our "Supplier Code of Conduct" is an essential prerequisite for any supplier wishing to work with us.



In the interests of safe processing at our production facilities, there is a particular focus on the procurement of raw materials. It is thus essential for suppliers to present an up-to-date safety data sheet for the procurement of each raw material. In the case of raw material deliveries from non-European suppliers, our purchasing department clarifies which obligations have to be fulfilled under the REACH Regulation. Since the acquisition of Chemtura, we have also been using the raw material tin, which is classified as a conflict mineral. We purchase tin only from certified dealers who can prove that their goods come from a conflict-free source.

As a founding member of the "Together for Sustainability" (TfS) initiative, our goal is to promote sustainability, increase transparency throughout our supply chain, and thereby further minimize procurement risks. The initiative, which is currently supported by 25 international chemicals companies with an accumulated purchasing volume of more than €281 billion (estimate), is aimed at assessing and continuously improving sustainability activities in the chemicals industry supply chain. The focus here is on human rights, prevention of child labor, labor standards, occupational safety, environmental protection, and business ethics. TfS has established itself in the chemicals industry as the clear standard for a sustainable supply chain.

Because the assessment results and audit reports are shared within the initiative, we had more than 9,400 sustainability assessments and over 500 audit reports available to us as of the end of 2019. Suppliers whose



sustainability-related activities have been assessed in TfS audits represent 55% (previous year: 70%) of our relevant procurement volume. The relevant procurement volume comprises all suppliers from which we procure more than €20,000 of goods or services per year. The year-on-year decline in the ratio is attributable to the much lower number of TfS audit reports that were valid – i.e. no older than three years – as of the end of 2019. The TfS sustainability assessment is also incorporated into our strategy process, which must be applied to every contract negotiation or renewal with a purchasing volume of more than €5 million.

It is also encouraging to see that our suppliers' average Ecovadis sustainability assessment of 46 points is above the Ecovadis benchmark of 43 points. With regard to our suppliers' weak points, no trend could be discerned in 2019 again. We had no reason in the year under review to end our collaboration with suppliers due to sustainability aspects.

Data from Ecovadis also form the basis for a systematic sustainability risk analysis that we developed in 2019. Taking account of risks in relation to specific goods groups and countries, we will use this tool to identify suppliers with an increased sustainability risk. Our goal is to cover all suppliers by the end of 2020 and thus calculate a sustainability risk score for LANXESS for the first time. In parallel with the analysis, we also intend to initiate targeted measures in 2020 to improve our suppliers' sustainability and thereby gradually lower our sustainability risk score.



SAFE AND SUSTAINABLE SITES



More than ever, acting sustainably in the chemicals industry means taking responsibility for products and manufacturing processes. All over the world, we are seeing a high level of convergence of environmental and production standards. What used to be positive distinguishing features in the area of sustainability are now increasingly essential worldwide to the mere ability to produce and sell chemical products. Yet we would be failing in our commitment to quality if we simply restricted ourselves to meeting standards – even if they are more exacting than in the past. Instead, our commitment is to make our production safe and sustainable in every respect, thus ensuring our long-term competitiveness.

Our Production, Technology, Safety & Environment (PTSE) Group function, the head of which reports directly to the Board of Management member Dr. Hubert Fink, is responsible for this. PTSE develops and maintains company-wide standards that ensure responsible use of chemicals at LANXESS. They define requirements and govern responsibilities for health protection, environmental protection, handling of chemicals, plant safety and safety precautions in the workplace. Continuous training of our employees and regular audit-based reviews of our health, safety and environmental management systems are aimed to ensure that the requirements are incorporated into our processes systematically and sustainably.



Uniform Standards in Production

LANXESS operates a total of 61 production sites and has a presence in 19 countries (investments \geq 50%, as of December 31, 2019). Our wide range of products requires the use of many different chemical and technical processes. Uniform standards for planning, building and operating plants ensure a high level of process, plant and occupational safety.

Handling chemical substances and working with technical equipment involves health and safety risks. We identify these risks and potential threats systematically worldwide – for new and existing plants – and minimize them by implementing defined preventive and protective measures. Experts examine implementation of LANXESS guidelines and local regulations for safe operation of our plants on-site via targeted spot checks in audits whose frequency is geared toward the respective risk profile. Compliance with safety standards must be regularly verified worldwide for every plant via audit opinions. In 2019, a total of 38 production facilities (previous year: 34) were examined in the context of HSE compliance checks (health, safety and environment), including 16 (previous year: 15) in Germany. Furthermore, we completed our gap analyses for the plants acquired from Chemtura. The gap analyses mainly highlighted the differences in the management-system approaches and are now helping to roll out LANXESS management rules and standards at the sites.



We use an electronic reporting system (Incident Reporting System – IRS) to record accidents and events worldwide in line with uniform regulations. Injuries, transportation accidents, near-accidents, environmental incidents, instances of damage and security-relevant incidents such as theft are documented. Each event is carefully analyzed in order to draw conclusions as to how we can avoid similar incidents in the future.

All measures count toward our goal of continuously reducing the number of events. A few major incidents occurred in the 2019 reporting year. Further information can be found in the [GRI Content Index on page 233](#) of this report.



Global Hazardous-Goods and Transport-Safety Management System

With a global hazardous-goods and transport-safety management system, we ensure that we minimize or entirely avoid hazards. We coordinate, monitor and review implementation of relevant hazardous-goods and transport-safety regulations as well as in-house regulations centrally in a department that is specifically responsible for this.



Central classification of our products in line with international, regional and local hazardous-goods regulations ensures that the respective requirements are interpreted uniformly while taking regional and local aspects into account. Classification determines such things as the type of containment (packaging and tanks), marking and labeling, the permitted modes of transport and transportation routes as well as measures that operational staff must take if a transportation event occurs. The corresponding classification data is stored in the safety-data system for chemicals at LANXESS. In recent years, we have gradually connected an increasing number of countries and Group companies to the system. The previously unconnected sites in Argentina, Uruguay and Russia were added as planned in 2019. In 2020, we will integrate the former Chemtura sites in North America.

To counter the deficiencies in load securing of general cargo, the PTSE Group function and the business units have worked closely together to establish a load-securing standard for LANXESS. This standard was tested in numerous field tests and was initially used successfully at our locations in Brunsbüttel and Leverkusen, Germany. In the reporting year, we carried out load-securing training sessions for external service providers in Antwerp, Belgium, and Bitterfeld, Duisburg and Mannheim, Germany, and established the new load-securing standard there. The standard was also implemented at all Indian sites.



Storage Management

We have around 540 warehouses worldwide, operation of which is split roughly 50:50 between us and external service providers. We select warehouses – both our own and those operated by external service providers – according to logistics, safety and security, environmental protection and cost-effectiveness aspects. We apply a globally standardized warehouse concept that takes into account the substances stored and meets fire protection and occupational health and safety requirements.

Environmental Responsibility

We regard preservation of natural resources – for example by using raw materials and energy as efficiently as possible – and identification of further potential for reducing emissions and waste as an ongoing task in the context of our environmental responsibility and expertise. We equip all new production sites in line with the state of the art, including in terms of environmental standards, taking local requirements into account.

Sparing Use of Water

As a chemicals company, we rely on water for our production. We use it mainly for cooling, as an input material in chemical processes or in the form of steam. In addition, rivers are an important transportation tool, particularly for our networked sites in Germany. Through access to drinking water at our sites, we are also meeting our responsibility to our employees.



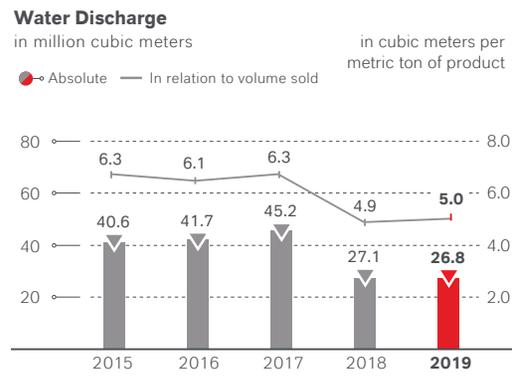
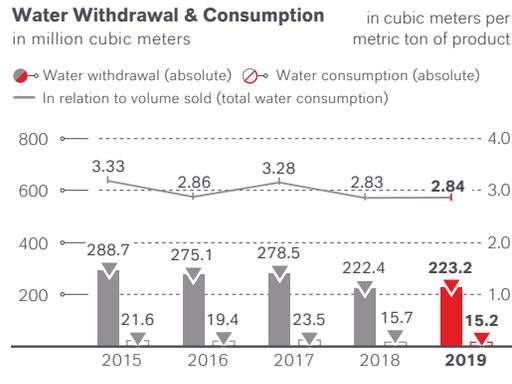
We are aware that our responsibility regarding the most precious of resources does not end at our factory gates. Water availability and quality are global challenges that we can face up to locally as a company. In addition to the efficient use of water, wastewater management is especially important here. SDG 6 sets out specific action areas that we gear our operations toward: Access to water, water quality and quantity, water management and governance as well as protection of ecosystems.

To enable us to derive context-based measures for LANXESS, we have performed a water-stress analysis for all our sites. First, we used the Water Risk Map of the World Wide Fund for Nature (WWF). The water stress indicator compares the amount of water withdrawn in a region to the renewal of water reserves, thus allowing an assessment of availability. The assessment, which initially took only the geographical location of the sites into account, showed that 15 of our sites are in water-stress areas. At these sites, we are therefore paying special attention to the responsible use of water. To further assess and prioritize the sites, we also consider risks and costs relating to water supply and disposal beyond the volume and intensity of water withdrawal. This enables us to identify supply bottlenecks on the basis of various future scenarios and to include this information in the enhancement of our plant portfolio. In addition, the analyses allow us to derive specific measures at individual sites.



For example, after the low water levels on the Rhine in 2018, which was a particular challenge with regard to cooling water and transport, we joined other companies in the chemicals, steel and petroleum industry in signing the “Low Water Action Plan.” A total of eight measures to counter the problems on the Rhine caused by climate change were defined in the four action areas of “information provision,” “transport and logistics,” “infrastructure” and “long-term solutions.”

We are also making major contributions to the water-related SDGs with the products of our Liquid Purification Technologies business unit. Lewatit® ion exchange resins and Lewabrane® reverse osmosis membrane elements are two complementary technologies that have a particular use in the processing and reuse of process water. While reverse osmosis can remove virtually all substances from water, ion exchangers are used to remove individual undesired substances from process water in a targeted manner.



The comparison of water withdrawal and water consumption shows that, while we do withdraw large volumes of water (e.g. in the form of once-through cooling water), this water is later returned to the water cycle in the same quality. LANXESS’s water is calculated by subtracting the volume of once-through cooling water, wastewater and the volume of sold steam from the water withdrawal. Water consumption was lowered slightly while water withdrawal remained almost constant. Specific water consumption was on the same level as in the previous year.

After a significant reduction in wastewater volume in the previous year as a consequence of the sale of ARLANXEO, it was reduced further in 2019. Compared to the previous year, the specific figure remained almost unchanged.

Sustainable Waste Management

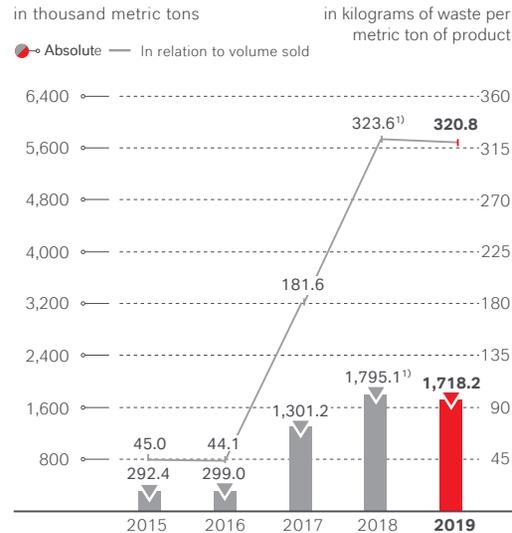
Rigorous material-flow management from use of raw materials to product finishing is aimed at ensuring that we use resources as efficiently as possible and minimize our waste volumes. Where waste is unavoidable, we try to use or sell it as a secondary raw material or energy source. To keep the amount of waste that has to be disposed of to an absolute minimum, we take a wide range of measures to continuously improve recovery in our production processes.



To ensure continuous optimization of our material-flow management, we have committed ourselves to achieving the targets defined in the international program Operation Clean Sweep (OCS) of the “Society of the Plastics Industry.” OCS aims to prevent plastic particles and pellets from entering the maritime environment and having an undesired impact. By joining in 2016, we made a commitment to train relevant employees, to implement measures to prevent the release of pellets at our facilities and to require our business partners to also take active steps to prevent pellet emissions. In the reporting year, our Liquid Purification Technologies business unit made significant progress toward reducing the level of polymers in production wastewater, i.e. directly at the source. This success was based on improvements in the process technology used. In the future, we will continue to invest in solutions that sustainably reduce the entry of plastic particles into the wastewater cycle.

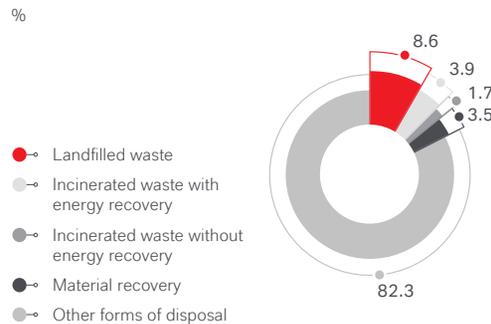


Total Waste



1) Figure restated

Waste for Disposal



Compared with the previous year, the total amount of waste generated decreased. At the former Chemtura sites (acquired in 2017) in particular, efficiency measures helped drive the waste figures in a positive direction. This effect is also reflected in an improvement in the specific waste volume. The biggest share of our waste volumes comprises slightly polluted wastewater at our El Dorado site in the U.S., which is declared as waste.

Systematic Recording of Key Data

To record key data on safety and environmental protection systematically worldwide, we use an electronic data-entry system. This enables us to calculate a wide range of HSE performance data for each business unit and site worldwide, which is used as a valid data pool for strategic decisions as well as internal and external reporting. In addition, it maps the progress that we make with our global sustainability targets (see the table on pages 16 et seq.). Data is gathered only at production sites where we have investment of over 50%.

PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft has been auditing our HSE key data and the requisite data-gathering processes with limited assurance since 2012. The current independent assurance report can be viewed on page 231 of this report.



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Environmental and Safety Performance Data*

	2017	2018	2019
Safety			
Occupational injuries to LANXESS employees resulting in at least one day's absence (per million hours worked) (LTIFR ¹⁾)	1.7	1.5	1.6
Volume sold²⁾ in thousand metric tons/year	7,167	5,547	5,356
Energy consumption in petajoules (10¹⁵ joules)³⁾	52.0^{a)}	27.7^{a)}	27.2
Direct energy sources (GRI 302-1)			
Non-renewable	14.6	11.6 ^{a)}	11.2
Renewable (biomass)	2.0	2.2	1.7
Indirect energy sources (GRI 302-1) ⁴⁾			
Electricity consumption	10.5	6.2	6.45
Heat and steam consumption	23.95	7.0	7.2
Energy consumption for cooling	0.75	0.55	0.5
Other	0.2	0.15	0.15
Water and wastewater in million cubic meters			
Total water withdrawal (GRI 303-3)	278.5	222.4	223.2
Surface water	83.4	49.5 ^{a)}	52.7
Groundwater	8.8	5.3	5.2
Third-party wastewater	1.1	1.2	1.1
Third-party water	185.2	166.4	164.1
Total water withdrawal in water-stress areas (GRI 303-3)	-	-	5.9
Volume of once-through cooling water (GRI 303-4)	208.6	178.5	180.1
Total wastewater discharge (GRI 303-4)	45.2	27.1	26.8
Emissions in wastewater (after treatment) in thousand metric tons			
Total nitrogen	0.55	0.5	0.4
Total organic carbon (TOC) ⁵⁾	1.8	1.2 ^{a)}	1.2
Heavy metals ⁶⁾	0.0054	0.0027	0.0022
Total water consumption (GRI 303-5)⁷⁾	23.5	15.7	15.2
Emissions to air in thousand metric tons			
Total greenhouse gas emissions CO ₂ e (GRI 305-1, GRI 305-2)	5,081 ^{a)}	3,210 ^{a)}	3,058
Direct (Scope 1) ⁸⁾	1,784 ^{a)}	1,540 ^{a)}	1,504
Indirect (Scope 2) ⁹⁾	3,297 ^{a)}	1,670 ^{a)}	1,554
Ozone-depleting substances (GRI 305-6)	0.00989	0.00785	0.00716
NO _x , SO _x and other emissions (GRI 305-7)			
NO _x ¹⁰⁾	2.7	2.8 ^{a)}	2.6
SO ₂ ¹¹⁾	1.0	1.0	0.9
CO	2.2	2.2 ^{a)}	1.7
NH ₃	0.08 ^{a)}	0.025 ^{a)}	0.045
NMVOC ¹²⁾	5.0	0.7 ^{a)}	0.7

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Waste in thousand metric tons

	2017	2018	2019
Total weight of waste (GRI 306-2)	1,301.2	1,795.1 ^{a)}	1,718.2
Incineration with energy recovery	78.3	65.0 ^{a)}	67.5
Incineration without energy recovery	28.3	25.0	29.3
Landfilling	130.4	141.7 ^{a)}	147.5
Material recovery	60.7	65.0 ^{a)}	60.3
Other forms of disposal	1,003.5	1,498.4 ^{a)}	1,413.5
Type of waste			
Hazardous	578.6	718.7 ^{a)}	687.8
Non-hazardous	722.6	1,076.4 ^{a)}	1,030.4

Explanations concerning our environmental and safety performance data

- * 2017: The aggregate data refer to all LANXESS production sites in which the company holds an interest of more than 50%. As an equity investment of exactly 50%, ARLANXEO was included in the LANXESS consolidated financial statements in 2017 and fully consolidated in fiscal year 2017. Therefore, the environmental data pertaining to the ARLANXEO sites also continue to be included in our key data for this period.
- 2018: As discontinued operations, ARLANXEO was shown separately from continuing operations in reporting year 2018. For the reporting in 2019, only continuing operations are shown for 2018. All charts on environmental and safety performance data present the figures for continuing operations for reporting year 2018.
- 2017/2018/2019: Some of the data are based on estimates and projections.
- 1) LTIFR: accident rate per million hours worked resulting in one workday or more lost following the day of the accident, calculated for all employees (including temporary workers) at all sites.
- 2) Volume sold of goods manufactured by LANXESS and sold internally to another LANXESS company or externally (excluding commercial products).
- 3) The energy volumes given were calculated on the basis of simplified assumptions and typical substance values. They do not include other forms of imported energy (e.g. the energy contained in raw materials).
- 4) Indirect energy sources are shown in the form of a balance sheet. The volume of energy sold is subtracted from the volume of energy purchased.
- 5) Chemical oxygen demand (COD) is calculated as follows: [COD] = [TOC] * 3. For 2019, the COD is 3.6 kt.
- 6) Heavy metals (arsenic, cadmium, chromium, copper, mercury, nickel, lead, tin, zinc).
- 7) According to GRI 303-5, total water consumption is calculated by subtracting the volume of once-through cooling water, wastewater and the volume of sold steam from the water withdrawal.
- 8) The emission factors used for fossil fuels are based on calculations by the U.S. EPA (AP-42 from 1998) and on the IPCC Guidelines for National Greenhouse Gas Inventories (2006). In accordance with the GHG Protocol (2004), the factors for calculating CO₂e are based on the global warming potential (time horizon: 100 years) defined in the IPCC Second Assessment Report (SAR 1995). All Scope 1 greenhouse gases are calculated as CO₂e. In accordance with the GHG Protocol, the CO₂ emissions from the combustion of biomass are shown separately and are not included in the Scope 1 emissions. The following emissions were produced during the reporting period: 2015: 236 kt CO₂, 2016: 212 kt CO₂, 2017: 215 kt CO₂, 2018: 230 kt CO₂, 2019: 184 kt CO₂.
- 9) All Scope 2 greenhouse gases are calculated as CO₂e. In 2019, the conversion factors used were provided by the energy producers. Where these were not available, factors from the IEA (International Energy Agency) from 2017 were used for fiscal year 2019, factors from 2016 were used for fiscal year 2018 and factors from 2015 were used for fiscal year 2017. The Scope 2 CO₂e emissions are calculated using the market-based method in accordance with the GHG Protocol. Using the location-based method, Scope 2 CO₂e emissions for 2019 amounted to 1,989 kt.
- 10) Nitrogen oxide (NO_x) calculated as NO₂ (excluding N₂O – nitrous oxide).
- 11) Sulfur dioxide (SO₂) + SO₃ calculated as SO₂.
- 12) Total VOC (volatile organic compounds) excluding methane and acetone.
- a) Values restated due to supplementary notifications or change in calculation method.



Corporate Citizenship

Our understanding of sustainable sites also includes being a strong and reliable partner for the people locally and in the respective region and taking responsibility for development of the social environment. Our social commitment is based on our corporate expertise and objectives and focused on education, climate protection, water and culture. Our goals in all these areas are identical:

- › Mobilizing resources and people for social commitment
- › Achieving positive impacts on the company, the environment and society

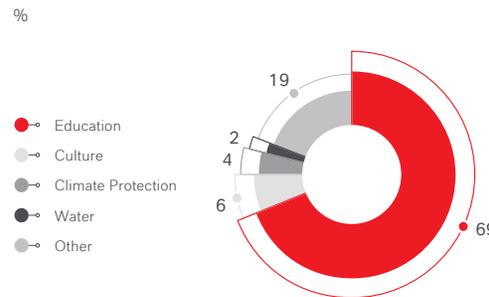
As a company, we aim to play a positive part in improving living conditions, education, training and equal opportunities as well as health and safety. In addition, we are working to attract talented persons, engage in extensive dialog with our stakeholders, have a positive influence on employee motivation and constantly improve our reputation.

As in the previous year, we provided around €1.7 million globally for our projects in 2019. The regional focal points of our activities in the reporting year were the EMEA and USMCA regions.

We initially assess our projects according to whether they pursue purely charitable ends ("charitable gift"), whether we are investing in the social environment of our sites ("community investment") or whether we are investing in corporate objectives such as image, sales and income while also generating social value ("commercial initiative").

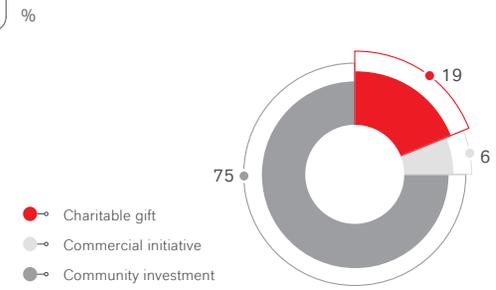
In total, around 300,000 (previous year: nearly 100,000) people benefited from our projects. We use a system of performance indicators to measure the social impact of our activities above and beyond the number of people who benefit. For nearly all of our projects in 2019, we performed an impact assessment, taking into account positive effects in the area around the site and positive environmental effects and impacts on our business. Specific feedback from people who benefit from our projects is a key factor in this context. We regard these indicators as important benchmarks for impact-oriented management of our measures.

Social Activities by Topic¹⁾



1) Number of projects: 186

Social Activities by Type of Investment¹⁾



1) Number of projects: 186

Impact Dimensions of Evaluated Activities and Projects



1) Number of projects: 170

Commitment to Education, Climate Protection, Water and Culture

2019 again yielded numerous examples of how we put our social commitment into practice.



We have been working under the umbrella of the LANXESS education initiative for over ten years and have initiated more than 500 education projects at our sites worldwide in order to get young people interested in the natural sciences at an early age. In Germany, the LANXESS laboratory days again met with a great response, with children from secondary schools spending a day in modern laboratories conducting experiments under expert guidance. In total, 17 of these events took place at our sites in Leverkusen, Dormagen and Krefeld in the reporting year. In addition, we provided schools with project funding of around €147,000. The schools used the donations to purchase STEM teaching materials. We are also particularly interested in supporting disadvantaged children with qualified science teaching. For example, we continued our partnership with “Save the Children Japan” in the reporting year and held workshops in several Japanese cities that are still suffering the aftereffects of the tsunami in 2011. Children in Korea from low-income or otherwise disadvantaged backgrounds also benefited from various educational events.

We have also underscored our commitment to a more environmentally friendly future by sponsoring a U.N. climate change conference simulation. 180 students from 30 nations simulated U.N. climate change talks at the University of Cologne. All the roles – including representatives of government, multinational companies and NGOs – were played by students. They thus not only gained an understanding of different perspectives on the subject to climate change, but also strengthened



their rhetorical and intercultural skills. In many places, we are also working to protect the climate in entirely practical ways. At our Indian sites in Nagda and Thane, for example, we support projects to bring greenery to urban space. In various villages around Nagda and Jhagadia, we have also installed solar-powered – and thus climate-neutral – street lighting.

For the fifth consecutive year, we held a research competition in China, entitled “Clean Water for a Better Life.” In addition to fostering young academic talent, we also aim to raise public awareness of water problems. In the reporting year, the competition was centered on the Sustainable Development Goals. Another priority of our water-related engagement was the installation of drinking water storage in several villages near our Indian site in Nagda.

As part of our cultural commitment, we have been sponsoring lit.Cologne as a lead partner since 2010 and the Kölner Philharmonie for several years. The Ozawa International Chamber Music Academy in Japan, which we also support, gives talented young musicians from all over Asia the opportunity of first-class musical training.

Further information on our corporate citizenship activities can be found in the “Safe and Sustainable Sites” section of the LANXESS website.



CLIMATE ACTION AND ENERGY EFFICIENCY



With the Paris Climate Agreement, the international community committed to limiting global warming to less than two degrees Celsius above the pre-industrial level. Accordingly, all signatory nations have set ambitious reduction targets. For instance, in Germany, the “Climate Protection Plan 2050” sets out the interim goal of cutting greenhouse gas emissions by at least 55% compared with the base year of 1990 by 2030. Industry is expected to contribute to this with a reduction of between 49% and 51%.

Since it was founded, LANXESS has made substantial progress in its goal of becoming more environmentally friendly. Between 2004 and 2018, we halved our greenhouse gas emissions from around 6.5 million tons of CO₂e to about 3.2 million tons. Moreover, we have already achieved our most recent targets – improving energy efficiency and reducing the associated CO₂ emissions and emissions of volatile organic compounds by 25% compared to 2015 – much earlier than originally planned.



Our Journey to Climate Neutrality

1. We drastically reduce emissions from internal sources.
2. We reduce our specific energy requirement.
3. We purchase very low-emission or climate-neutral energy.



In light of this, it was time to set new, ambitious targets and thus fulfill our responsibility as a global specialty chemicals company: LANXESS is to be climate neutral by 2040. By 2030, we aim to halve our greenhouse gas emissions again to around 1.6 million tons of CO₂e. We will thus have achieved a 75% reduction compared to the emissions when LANXESS was founded. To measure our emissions, we look at the emissions of greenhouse gases defined in the Kyoto Protocol and calculate their greenhouse effect in comparison to carbon dioxide (CO₂e). We include emissions from our own production (Scope 1) and from external energy sources (Scope 2) in the calculation.

Clear Strategy to Lower Emissions

We are taking a three-pronged approach to achieve our target:

1. Launch climate protection projects

Over the next few years, several special projects will significantly lower greenhouse gases. For example, we are currently building a facility for the decomposition of nitrous oxide at the site in Lillo, Belgium. The new facility will begin operations in 2020 and reduce our annual emissions of this particularly harmful greenhouse gas by around 150,000 tons of CO₂e. After a second expansion in 2023, CO₂e emissions will fall by another 300,000 tons.



In addition, we are also switching the entire energy supply at our Indian site to renewable energy sources, specifically biomass and solar power. This will cut our CO₂e emissions by a further 150,000 tons from 2024. Under these projects and other measures, we want to decrease our CO₂e emissions by a total of 800,000 tons by 2025. We will invest up to €100 million in order to achieve this.

2. Break the link between emissions and growth

LANXESS is growing. But despite increasing production, emissions of greenhouse gases in our individual business units are set to shrink. In addition to technological efficiency, changes to governance instruments also play a significant role, with the impact on the company's carbon footprint becoming an investment criterion for organic growth and acquisitions. This gives business units that achieve better than average reductions in greenhouse gas emissions a direct financial advantage. Moreover, lowering CO₂e is to be introduced as an assessment criterion in the bonus system for managers and the Board of Management.



3. Strengthen process and technological innovations

We are revising many of our existing production processes in order to go climate neutral by 2040. For example, we will continue to improve our composite structures, e.g. when it comes to heat exchange between plants and air purification. However, other procedures must first be developed on a large industrial scale. We will therefore focus our research activities more closely on climate-neutral process and technological innovation.

By implementing the above measures, we want to decrease our annual emissions to less than 300,000 tons by 2040. We will neutralize the remaining emissions via appropriate offsetting measures. In this way, we will not only make a significant contribution to climate protection in the years to come, but will also become an even more sustainable partner for our customers.



LANXESS is IN4climate

We have been involved since 2018 as an active partner in the IN4climate.NRW initiative, a new working platform for industry, science and the North Rhine-Westphalian government, the only one of its kind in Germany to date. The aim of the initiative is to devise strategies for how industry in North Rhine-Westphalia can become highly competitive, generate additional growth and play its part in attaining the Paris climate-change targets. Specifically, the partners work together in innovation teams to address how production processes and value chains can be made climate neutral on a long-term basis, or what role industry might play in the development of climate-friendly products. For example, one working group is looking at the infrastructure required for the use of hydrogen as a reducing agent and heating medium. Meanwhile, the "Circular Economy" working group wants to gain access to raw materials for chemistry through thermolysis of plastics. Set up for an initial four years, the project is receiving €16 million in funding from the regional government.

Uncertainty over National Emissions Trading

In Europe, 13 of our plants and sites are subject to European emissions trading. Trading with CO₂ emissions rights, known as certificates, is intended to reduce

emissions of the environmentally harmful gas CO₂ cost-effectively. Because all of our plants covered by emissions trading are state-of-the-art and compete at the international level, we plan to receive enough certificates from free allocation to cover the expected CO₂ emissions by the end of the third trading period in 2020.

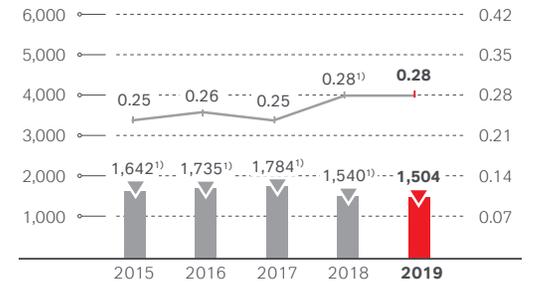
However, we cannot precisely estimate the effects of the planned national Emissions Trading System (n-ETS), as the regulations specifying the important details and procedures are not yet available. In particular, the rules for avoiding double counting at plants subject to emissions trading, the carbon-leakage protection for plants in the n-ETS, and the future treatment of hazardous waste have not yet been specified, but may have relevant effects for LANXESS.

CDP Gives LANXESS Top Score

For more than a decade, we have been participating in the international climate protection initiative CDP (formerly the Carbon Disclosure Project), each year sharing data and information on climate protection and the reduction of emissions. We received the best possible score of "A" in the assessment for 2019, which puts LANXESS among the top 2% of more than 8,000 companies examined by the initiative in 2019. These gratifying results gave us encouragement to continue systematically pursuing our climate protection strategy.

Greenhouse Gas Emissions (Scope 1)

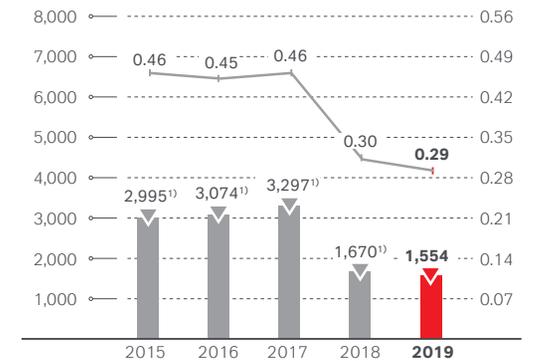
in thousand metric tons of CO₂ equivalents in CO₂ equivalents, metric tons per metric ton of product



1) Figure restated

Greenhouse Gas Emissions (Scope 2)

in thousand metric tons of CO₂ equivalents in CO₂ equivalents, metric tons per metric ton of product



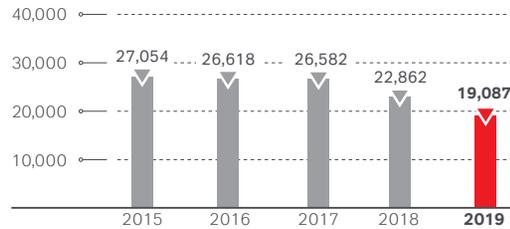
1) Figure restated



Greenhouse Gas Emissions (Scope 3)

in thousand metric tons of CO₂ equivalents

● Scope 3 (absolute)



In 2019, we further reduced our absolute Scope 1 emissions. This development was driven primarily by reduced nitrous oxide emissions in Belgium. The use of coal was also reduced further – we even stopped using coal entirely in China. Specific Scope 1 emissions were on a par with the previous year.

Absolute Scope 2 emissions decreased again compared with the previous year. This effect is chiefly attributable to the increased use of natural gas instead of coal by our site operators in the Lower Rhine region. The emission factors have been adjusted accordingly. This also had a positive effect on our specific emissions.

The level of Scope 3 emissions remained roughly stable compared with the previous year.



Other Atmospheric Emissions

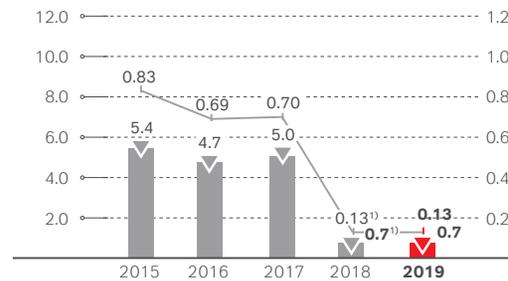
VOC Emissions

in metric tons

in VOC, kilograms per metric ton of product

● Absolute

— In relation to volume sold



1) Figure restated

Since the sale of ARLANXEO, LANXESS has been operating with a much lower level of VOC emissions on the whole. In the reporting year, we maintained this level in both absolute and specific terms.

Systematic Energy Management

A high level of energy efficiency improves not just our emissions footprint, but also our cost position, thus ultimately making LANXESS more competitive. Our global energy management promotes projects to increase energy efficiency in our plants. In each business unit, energy officers ensure communication and the ongoing improvement of energy-related performance. Technical experts from the central departments help the local teams to identify and implement effective projects to increase efficiency.



With our Leverkusen, Krefeld-Uerdingen and Dormagen sites in Germany, since the end of 2017, we have been part of the Energy Efficiency Networks Initiative, established by the German federal government and leading industry associations. An Energy Efficiency Network consists of 8 to 15 companies. At the national level, the networks are expected to help save 75 petajoules of primary energy and reduce greenhouse gas emissions by 5 million metric tons. With its partners, the network@CHEMPARK, in which several of our sites are involved, has set a target of making a contribution of 100 gigawatt hours. Further projects were successfully implemented in the reporting year. The network initiative is also supported in other regions with our Mannheim site's participation in the ChePap network and the Bitterfeld site's participation in the new Bitterfeld-Wolfen 2.0 network.

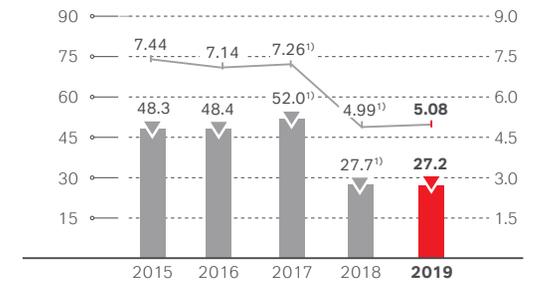
Energy Consumption (Balance Sheet)

in petajoules

in gigajoules per metric ton of product

● Absolute

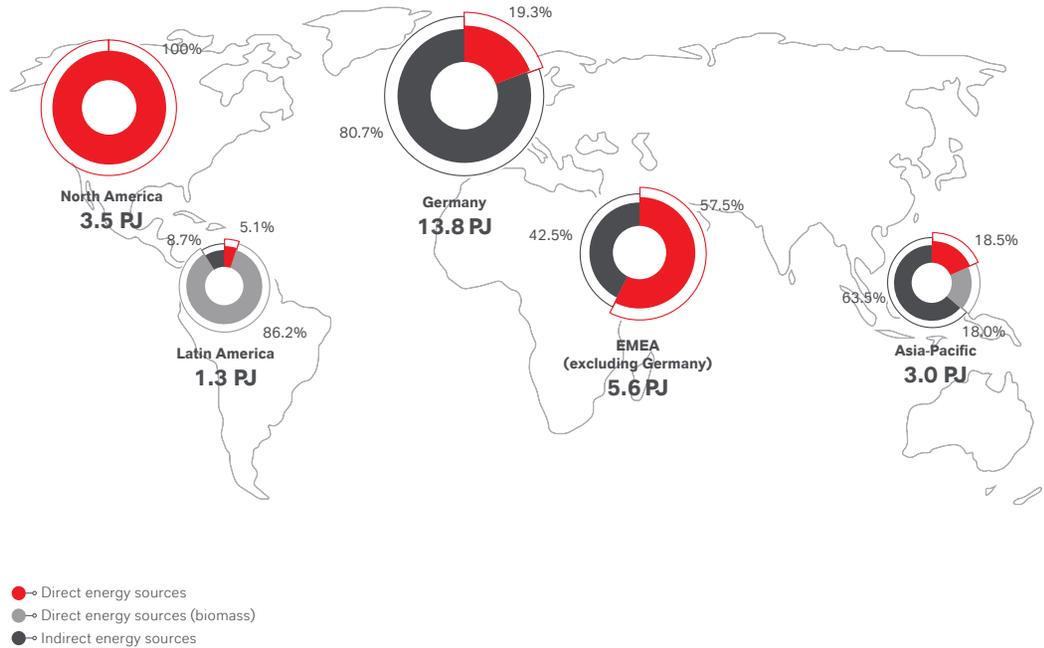
— In relation to volume sold



1) Figure restated



Direct and Indirect Energy Consumption by Region
in petajoules/%



We reduced our absolute energy consumption further in 2019. This is partly attributable to changes in our asset portfolio and lower use of fuels. In specific terms, however, there was a minor deterioration due to the slight decline in our production volumes.



Sustainable Logistics

We select our transportation solutions individually worldwide in line with the principles of safety, punctuality and cost-efficiency. In doing so, we also take into account the CO₂ emissions resulting from transportation. In particular, we are eager to step up our use of ships. In this context, we are currently making targeted investments in digital solutions that tell us the status of ship transports early on so that we can plan the subsequent land transport with means of transport with the lowest possible emissions in a forward-looking manner. Furthermore, we are increasingly using comparatively low-emission combined-transport options, where most of the distance involved is covered by train, barge or sea vessel, thus keeping initial and final journeys by road to an absolute minimum. Europe in particular has a strong infrastructure for these types of transportation. However, increased use of rail means that combined transport is even an option for long-distance connections to China.

To transport our rail freight in Germany, we continue to use the TÜV SÜD-tested Eco-Plus service of the logistics company DB Cargo. The power required for transportation is obtained from regenerative energy sources. As a result, we can reduce our CO₂ emissions in national rail transportation by approximately 80% compared with conventional options.



SUSTAINABLE PRODUCT PORTFOLIO

In signing the Responsible Care® Global Charter, LANXESS committed itself to comprehensive product responsibility. This initiative launched by the International Council of Chemical Associations (ICCA) made a significant contribution to the development of the “Global Product Strategy” (GPS). It aims to provide basic information and risk assessments of materials in order to minimize harmful effects of chemicals on human health and the environment and to manufacture and distribute products in a way that avoids harm to people and the environment. In line with the above obligations, our product responsibility covers the safe handling of chemical materials and products throughout their lifecycle – from research and development, procurement and production, storage and transportation through to marketing, further processing and disposal.

The “Guideline on Product Safety Management at LANXESS” stipulates how product responsibility is to be exercised throughout the Group and ensures collaboration between all of the parties involved. This particularly applies to substances in our product portfolio that are classified as hazardous. With the “Central Product Monitoring” guideline, we systematically manage the global monitoring of our products and their application with regard to possible health and environmental effects. Our product developers and product safety experts incorporate the experience gathered into their assessments. Our guideline “Development of New or Changed Products, Processes and Applications” stipulates that

development ideas already have to be examined systematically with regard to their potential economic, environmental and social impact. In this way, we ensure that unsustainable products, processes or applications no longer occur in our development process.

Particularly in the case of consumer applications – for example, use as an additive in food or animal feed, in contact with drinking water or food, or in cosmetic, pharmaceutical, or medical products – it is extremely important to us that our products meet high national and international standards, certificates, and quality seals. We thereby actively support our customers with the authorization of materials to be used in contact with drinking water, for example, or with further processing of our products into certified goods for end consumers. By intensively exchanging information with our customers and suppliers, we achieve greater transparency and safety throughout the whole product lifecycle.

Management of Chemicals Control Regulations

Complying with global chemicals control regulations is an essential prerequisite for the saleability and safe handling of our chemicals and products across the whole value chain.

LANXESS ensures the implementation of binding and voluntary requirements using an electronic safety data system. Safety data sheets in more than 40 languages provide our customers worldwide with data on the materials and inform them of the protective measures required when handling the respective chemicals. We regularly

adapt our electronic safety data system to take account of new features in the GHS (Globally Harmonized System of Classification and Labeling of Chemicals) in the different countries. The GHS is a system under the auspices of the United Nations that aims to globally harmonize existing classification and labeling systems from different sectors such as transportation, consumer protection, employee protection, and environmental protection. We take account of regional aspects in the implementation of the GHS, such as the CLP Regulation (Regulation on Classification, Labeling and Packaging of Substances and Mixtures) in Europe.

We explicitly support the goal of the EU chemicals regulation REACH: to ensure a high level of protection for human health and the environment. We have so far registered all relevant materials for LANXESS that we produce in or import to Europe in quantities of more than one metric ton per year on schedule in line with the REACH process. In the last ten years, approximately 1,000 registration dossiers have been submitted to the central European Chemicals Agency (ECHA). We systematically evaluate all necessary information on our materials and their uses for the registration. In doing so, we consider the whole product lifecycle and determine safe conditions for use.

However, the registration of all phase-in materials is only part of REACH, because REACH means the registration, evaluation, and authorization of chemicals. In the future, new materials must be registered before they are produced or imported. This already applies for quantities of more than one metric ton per year and per LANXESS



Further information on sustainability performance of our products can be found in the Responsibility/Societal Added Value/Product Portfolio Assessment section of the LANXESS website.

company. Existing dossiers must also be updated constantly, as the content requirements will change over time. In this context, we support the voluntary Action Plan of the European Chemical Industry Council (Cefic) and have signed an associated declaration of intent. We are thus committed to re-evaluating all our existing REACH registration dossiers and to updating them according to the latest requirements by 2026 at the latest.

Similar chemicals control regulations to those in the EU now also exist in many other countries, and the number of them is still increasing. Before manufacturing or exporting our products, we therefore check their saleability under the applicable chemicals laws in the countries concerned. We register our materials and products in accordance with local requirements. We support the responsible authorities' material assessment programs by supplying all available information and determining new data where necessary. Here we benefit from our experience from the REACH process. We are currently dealing with increasing requirements particularly in the Republic of Korea, Taiwan, Turkey, the U.S., Russia, and the Eurasian Economic Union.

Comprehensive Analysis of our Product Portfolio from a Sustainability Perspective

In order to take effective sustainable action, we need to know the effects of our business activities – both positive and negative – as precisely as possible. With a specially developed assessment system, we have established a strategic management tool that enables us to systematically assess and improve the sustainability performance of our product portfolio with regard to economic, environmental and social aspects. The system analyzes the effects and benefits of our products based on criteria that we consider relevant for our company and for society as a whole.

Criteria for Our Product Portfolio Analysis

Impact on society	Support for development goals Societal acceptance Safety in end use
Ecological impact	Raw material efficiency in production Energy efficiency in production Emissions and waste balance sheet in production Water risks Impact on the environment during use
Economic impact	Registration, evaluation and approval Profitability Demand trend

Based on this list of criteria, we carry out an annual assessment of our entire product portfolio – followed by a review by an internal panel of experts – as part of our strategy process. This process has revealed which of our products satisfy the sustainability requirements we have defined and can help us to deliver solutions for key sustainability challenges.

Evaluation Processes



Throughout the LANXESS Group, we work intensively with the results of this assessment in order to further improve the sustainability performance of our product portfolio. The increased understanding of our products' capabilities can also provide important impetus for innovation. In addition, it also makes it clear which areas still show a need for action – which can lead to specific improvement processes, but can also be aimed at creating acceptance for a certain topic in stakeholder dialog.



BUSINESS-DRIVEN INNOVATION



Further information on innovations can be found in the Responsibility/ Material Topics/ Business Driven Innovation section of the LANXESS website.

With process-, product-, application- and business model-oriented innovation, we not only make LANXESS more competitive but also help our customers run their businesses successfully and sustainably. We put the needs and expectations of our customers at the center of product and application development and frequently pursue projects together with the customer concerned or other high-powered partners.

For us, innovation also means developing new uses for existing products. Our partner Standard Lithium Ltd. has now completed a pilot facility for the extraction and processing of lithium salt at our site in El Dorado. Lithium salt is required on a large scale for lithium-ion batteries and is therefore a crucial raw material for the desired expansion of electric mobility. LANXESS operates three plants manufacturing bromine products in El Dorado. The bromine is obtained from the brine extracted at the site, which also contains lithium. Our partner Standard Lithium provides the technology for extracting the lithium.

Meanwhile, we are breaking new ground when it comes to the development of customer-specific high-performance plastics. By deploying artificial intelligence (AI), we are looking to drastically cut the amount of time it takes to develop new materials. To this end, we are collaborating with Citrine Informatics, a U.S. AI company specializing in the software-supported development of chemical products. In a pilot project, we are exploring the options for using AI to optimize glass fibers and thus further enhance the properties of our high-performance plastics. It is anticipated that AI will cut development

times for the necessary formulations by more than half. Our customers would therefore receive even better, tailor-made products within shorter time frames.

Another AI project with Citrine Informatics is devoted to expanding the range of prepolymer products. LANXESS data specialists and process experts have used the Citrine platform to expand the existing formulation database. This involved an algorithm designed for chemicals accessing existing empirical measurement data, linking them to the knowledge of the process experts and calculating additional figures. This meant that only a few real-life measurements were required to verify the figures already determined with AI. The next step is for our data and process experts to check how reliably optimum formulations can be predicted with the aid of AI so that customer-specific requirements for product characteristics can be met.

We pay particular attention to the development of products that have a tangible benefit for sustainability. For example, our Inorganic Pigments business unit has developed a black pigment that reflects 20% more of the sun's near-infrared radiation (NIR) than conventional products. Plastic roofs and facade elements colored with Bayferrox 303 T heat up much less due to solar radiation, meaning that the building's inside temperature can be reduced. This not only improves the indoor climate but also reduces energy consumption for air conditioning.

At our Belgian site in Lillo, we are developing a new type of catalytic waste gas purification for the reduction of nitrogen oxides and nitrous oxide in the exhaust air generated in connection with the production of caprolactam.

The measure is to make an important contribution on our journey to climate neutrality in 2040.

In 2017, we gained promising access to the German start-up scene with a financial investment in the "High-Tech Gründerfonds (HTGF) III." This fund pursues the goal of supporting promising start-ups in the technology sector in order to bring inventions to the stage where they are ready for the market. The fund covers a wide variety of topics: robotics, the Internet of Things (IoT), energy, medical and biotechnology, chemistry and software. This investment helps us gain access to new technologies and identify partners for cooperations.

Together with the Berlin-based chemicals start-up DexLeChem, for example, we support the "Data Analytics for Chemical Engineers and Chemists" course, which is being offered by the Institute for Chemistry and the Chemical Invention Factory at TU Berlin for the first time in the 2019/2020 winter semester. We are thus promoting the education of skilled professionals who can provide both the chemical and the digital expertise required to exploit all the possibilities of digitalization.

Further information on the topic of research and development can be found in the [combined management report starting on page 81](#) of this Annual Report.



VALUING CUSTOMER RELATIONSHIPS

Customer satisfaction and customer loyalty are among our most important measures of success. Via a central inquiry management system, customers can obtain information on our products, their applications and potential risks, and product certificates. Feedback from customers gives us valuable information on how we can further improve our products and processes.

Based on a central CRM system and a uniform complaint management platform, each of our business units has its own market- and customer-oriented complaint management and optimization processes. Shared elements of these processes include clear targets, for example in relation to processing times for customer complaints, a corresponding statistical analysis of the feedback received, and structured monthly reporting to the management of the respective business unit. Various bodies and dialog forums, such as the Marketing & Sales Community that meets quarterly, also guarantee the regular exchange of experiences between our business units and Group functions.

In the case of justified complaints, we always aim to find a sustainable solution to the problem that occurred together with everyone involved. In 2018 and 2019, for

example, some customers of our Inorganic Pigments business unit complained about agglutination in red pigments delivered in sacks. This problem was successfully solved by introducing variable compaction pressures to the standard compaction of the pigments as part of the storage process.

Our Lubricant Additives Business business unit introduced another innovative packaging concept together with a Canadian customer: Instead of conventional steel containers, lubricants are now delivered in fluid bags. The latter not only weigh much less, but can also be emptied by the customer practically without residue. Moreover, the material for the fluid bags is recyclable.

In our digitalization offensive, we use software to improve the speed and efficiency of the communication between our customer service teams and their respective customers. In light of the large number of simultaneous orders, it is a major challenge for our customer service employees to keep track of changes across the entire order acceptance, production and delivery process. Here, we are assisted by software solutions that continuously search our ERP systems for changes in order data records, factor in external information and compare it against dynamic specifications. The responsible customer service advisor thus obtains constantly updated information about the key influencing factors

and changes that Order Management, for example, has made to the orders – such as postponements of delivery dates or quantity changes. Our customer service is therefore able to inform customers immediately and promptly tackle any problems arising from the changes. We have already been able to measure the positive effect of such technology in our Polymer Additives business unit: Here, the OTIF (on-time-in-full) ratio, which measures the percentage of orders that are shipped on time in full and is thus an important indicator of customer satisfaction, improved by seven percentage points within a year.

Regular customer surveys conducted by an external service provider bring us important findings about our customers' loyalty, their expectations, and their perception of our services in comparison to competitors. LANXESS conducts an anonymous online survey of all relevant customers with and in all business units once every two years. In the 2019/2020 survey, the customer retention index (CRI) score was 77 and thus slightly higher than in the previous year (75). Based on these encouraging results of the customer satisfaction analysis, we will continue to implement targeted measures in the business units in order to at least maintain this very good level of customer satisfaction and keep successfully retaining our customers in the long term.