

CORPORATE RESPONSIBILITY

Assuming responsibility

Our commitment to sustainability is aimed at achieving the best possible balance between the demands of the economy, ecology and society.

Product portfolio analyzed

For the first time, we have assessed the impact and benefits of our products on the basis of sustainability criteria that are relevant to our company and our stakeholders.

Increased transparency

Also for the first time, we have published our Scope 3 emissions, thus taking a further important step toward achieving maximum transparency in respect of our greenhouse gas emissions.



GRI
G4-18
G4-24
G4-25
G4-26
G4-27

Good for Business, Good for Society

Through its performance capability and innovative strength, the chemical industry is improving the quality of life of people across the world. It is also making an important contribution to solving societal challenges. We see it as our corporate responsibility to create lasting value for all stakeholders and therefore to very consciously address the impact of our actions. The only way to futureproof our company is if our strategy balances the demands of the economy, ecology and society. This is summed up in one short sentence: "Good for business, good for society."

The chemical industry expressly committed itself to sustainable development decades ago, one of the first industry sectors to do so. Since then, awareness of both the necessity to act sustainably in the broader sense and of the opportunities this presents has steadily grown and matured across industry and national borders.

Through the Sustainable Development Goals (SDGs) agreed in September 2015, the international community is seeking to foster global economic progress and social justice while recognizing the ecological limits of our planet. The 17 SDGs represent the first time that equal consideration has been given to all three dimensions of sustainability – society, ecology and the economy. LANXESS, too, is committed to the SDGs. In 2016, against this backdrop, we initiated a review of our current sustainability position and analyzed where our business activities already make a positive contribution to achieving the SDGs. We see opportunities for LANXESS to make a positive difference in areas such as addressing climate change, developing sustainable cities, securing the supply of food and clean water for a steadily growing world population, and giving people around the world access to high-quality education.

However, the SDGs make equally clear what strategic challenges the chemical industry faces: achieving consistent growth while making responsible use of resources, avoiding harmful emissions into the air, soil and water, and ensuring the safe handling of chemical products along the value chain. This is also reflected in more stringent regulation – in the form of national climate protection goals, for instance – and growing public awareness.

Our portfolio includes substances that are classified as dangerous and are therefore subject to very particular requirements in terms of product stewardship. The production processes for some of our products are energy-intensive; they generate greenhouse gas emissions and create wastewater and solid waste. Many of our key strategic raw materials are petroleum-based so their availability is finite. In addition, we are required to ensure maximum possible safety and environmental compatibility in the distribution of our products worldwide, which sometimes involves large volumes. Lastly, we are responsible for almost 17,000 employees around the world who are committed to our company's success. In this context, corporate responsibility is a prerequisite to being

able to operate successfully in the future and create value for all stakeholders. Given this awareness, sustainability is a key success factor that is at the heart of LANXESS's corporate culture. For us, actively demonstrating corporate responsibility involves knowing and evaluating the impact of our actions – whether positive or negative – and maintaining a dialogue with stakeholders that enables us to satisfy their expectations to the best of our ability.

ACTIVE STAKEHOLDER DIALOGUE

The stakeholders of relevance to LANXESS are the groups, institutions and people with whom we are linked directly or indirectly through our business activities and who therefore have a justified interest in what we do. Our most important stakeholder groups are customers, employees, capital market participants, suppliers, the media, neighbors of our sites and representatives of politics, public authorities and non-governmental organizations (NGOs). We conduct an intensive dialogue with all these groups with the aim of constantly identifying the issues that they consider to be significant in terms of our corporate responsibility. At the same time, we seek to encourage mutual understanding and build trust through an open and constructive exchange of views.

We participate in powerful global networks, such as the U.N. Global Compact, where we combine our competence in sustainable development with the expertise of other partners. As well as state institutions, NGOs in particular have a crucial role here. Trade shows and congresses are important forums for discussion with potential and existing business partners, competitors, scientists and opinion leaders. In addition, we often contribute to studies concerning socially relevant issues such as an environmentally friendly approach to mobility.

We also conduct an open dialogue with government representatives and authorities. The focus is on an active exchange of ideas on issues such as environmentally friendly product and process innovations, developments on raw material and energy markets, and issues relating to the labor market and education policy. Another important element of our stakeholder communication is structured dialogue with residents in the immediate

vicinity of our sites. For example, our affiliate Currenta operates Chempunkt neighborhood offices in Leverkusen, Dormagen and Krefeld-Uerdingen to serve as a point of contact for local residents interested in discussing issues concerning the Chempark sites.

Stakeholder	Key issues	Dialogue forums
Customers	<ul style="list-style-type: none"> • Product quality • Compliance • Human rights • Environmental standards • Product safety information 	<ul style="list-style-type: none"> • Trade shows • Customer visits • Customer events • Customer surveys • Customer audits
Politicians	<ul style="list-style-type: none"> • Education and training • Energy and resource efficiency • Occupational safety • Sustainable procurement (supply chain) • Responsible handling of chemicals 	<ul style="list-style-type: none"> • Collaboration in industry associations • Site visits • Discussions • Workshops
NGOs	<ul style="list-style-type: none"> • Climate protection and resource efficiency • Environmental standards • Occupational safety • Anti-corruption 	<ul style="list-style-type: none"> • Round table events • Consultation processes • Projects at our sites
Media	<ul style="list-style-type: none"> • Investment in sustainability • Development of sustainable production processes • Plant, process and occupational safety • Emissions reduction • Research and development 	<ul style="list-style-type: none"> • News conferences and briefings • Editorial visits • Media days • Annual Stockholders' Meeting
Suppliers	<ul style="list-style-type: none"> • Responsible handling of chemicals • Anti-corruption • Environmental management • Product quality • Training 	<ul style="list-style-type: none"> • Supplier meetings and audits • Together for Sustainability initiative • Collaboration in industry associations • Conferences and symposiums
Capital market representatives	<ul style="list-style-type: none"> • Sustainability of the business model • Board of Management compensation model • Targets and target attainment • Anti-corruption • Risk management • Toxicity • Occupational safety 	<ul style="list-style-type: none"> • Roadshows • Conferences • Capital market days • Conference calls • Annual Stockholders' Meeting

Most external stakeholders regard LANXESS as a company that acts sustainably and they rate us highly – in our latest stakeholder survey, for instance – for fulfilling our corporate responsibility. They see room for improving sustainability communications through face-to-face discussions – customers in particular would welcome a more active information policy from LANXESS regarding the sustainability characteristics of our products. One way in which we aim to do more to meet this expectation is through our extensive quality campaign launched in the fall of 2016, in which sustainability is centrally positioned as an important aspect of product quality. In our future communication with stakeholders, we also intend to make targeted use of the findings from the portfolio analysis based on sustainability aspects that we performed for the first time in 2016 (see page 77).

Furthermore, we are consistently working to give the best possible consideration to our stakeholders' interests in our combined financial and sustainability reporting. In this Annual Report, for example, we have expanded the information about preventing corruption (see page 67). We have also enlarged our reporting on the issues of health and safety, starting on page 74. In the future, we will be integrating details about compliance management into the Corporate Governance Report starting on page 96. We have also again expanded the information we provide about our work to achieve sustainability in the supply chain.

SYSTEMATICALLY PRIORITIZING SUSTAINABILITY

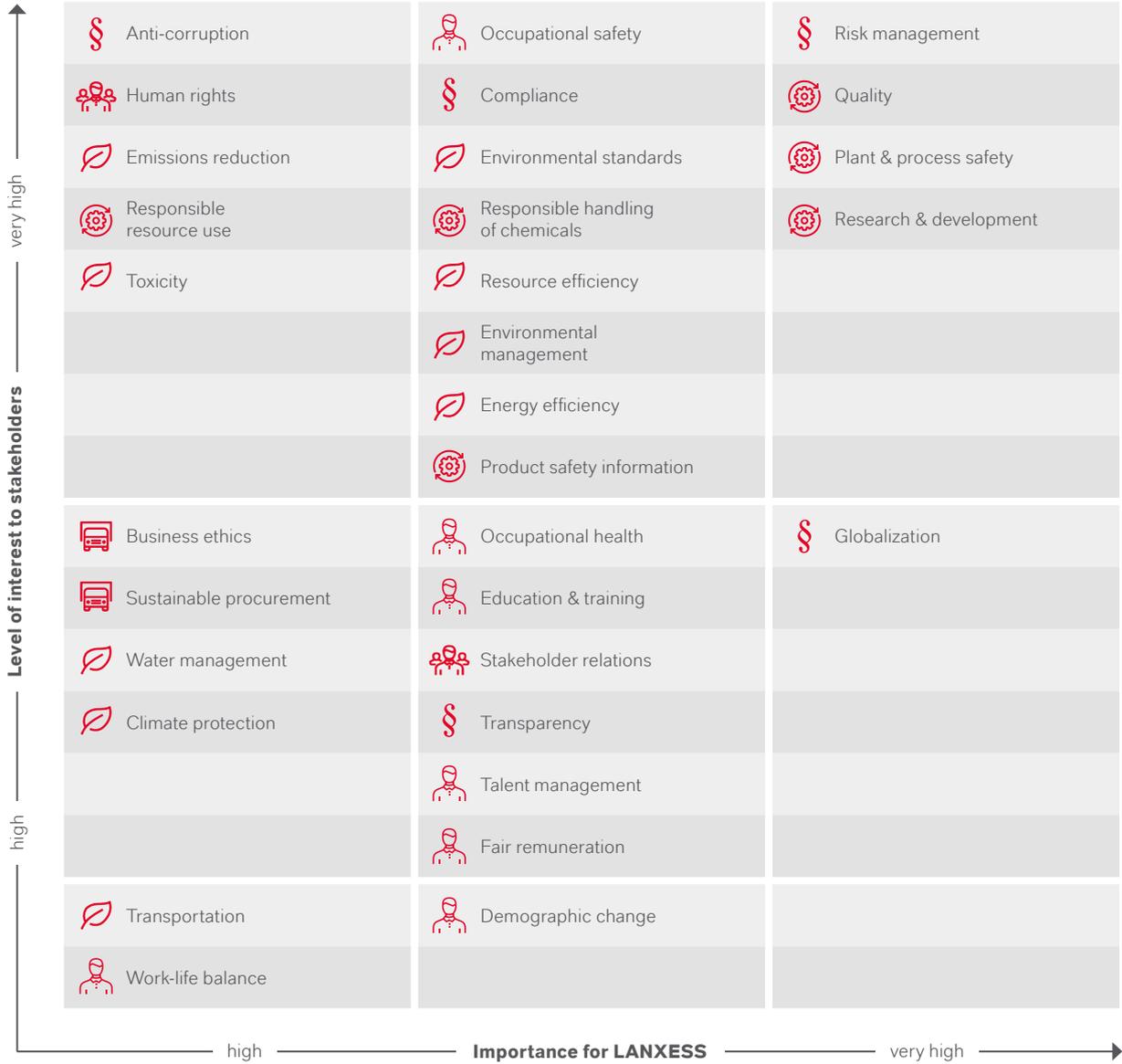
Alongside our own evaluation, our stakeholders' main interests and concerns form the second dimension of our materiality analysis based on the requirements of the Global Reporting Initiative (GRI). This is an important tool that enables us to systematically prioritize the various areas of activity and thus deploy resources as effectively as possible. The materiality analysis is based on four principles: sustainability context, materiality, completeness and stakeholder inclusiveness.

GRI
G4-18
G4-24
G4-25
G4-26
G4-27

GRI
G4-18
G4-19
G4-26
G4-27

LANXESS Materiality Matrix

-  **Corporate governance**
-  **Responsibility toward employees**
-  **Environmental responsibility**
-  **Product and process stewardship**
-  **Responsibility in the supply chain**
-  **Social responsibility**



We and our stakeholders consider four issues – risk management, quality, plant and process safety, and research and development – to be very important.

We view efficient and effective **opportunity and risk management** as indispensable to successfully operating in the long term in markets that are complex and increasingly difficult to predict. The impact of risk management is reflected, for example, in our decisions to enter into a strategic partnership for our rubber business and to improve our diversification by means of acquisitions (see “Strategy” section on page 50 and the “Opportunity and risk report” on page 155).

Quality is an important element of our corporate culture, which requires all our employees to display an entrepreneurial mindset, to quickly take solution-oriented decisions and to be open to new approaches. Our goal is for quality to be reflected not only in our products but also in our processes – for example, in high levels of **plant and process safety**. We see clear evidence for our comprehensive understanding of quality in the positive feedback we receive from our customers, our industry-leading matrix certification for quality and environmental management (see page 64) and the constant reduction of our MAQ figures since 2012 (see page 76).

In the area of **research and development**, our efforts are systematically aligned to making our products and processes as sustainable as possible and thereby securing the foundation for our long-term entrepreneurial success. Examples of our successful research and development work are presented starting on page 116 of this Annual Report.

The dialogue with our stakeholders has revealed a shift in the importance of certain issues, primarily due to the significant changes at our company in the past two years. Societal developments and challenges have without doubt also had a role here. Starting in 2017, therefore, we will be performing a new materiality analysis to review and if necessary adjust our priorities in a systematic process of dialogue with our stakeholder groups.

➔ **Customer satisfaction as a measure of success**

In connection with quality, customer satisfaction and loyalty are among the main measures of success. Our central inquiry management system provides customers with information about our products, their applications and potential risks, and with product certificates. Critical feedback from customers gives us valuable pointers for further improving our products and processes. Based on a central CRM system and a uniform complaints management platform, each of our business units has its own complaints management process aligned to its markets and customers. Regular customer surveys conducted by an external service provider using recognized opinion research methods deliver vital information about the loyalty of our customers, their expectations and how they perceive our products and services compared with

those of our competitors. Over a two-year cycle, each business unit carries out an anonymous online survey. In the 2015/2016 cycle that has just been completed, a total of 787 customers used the opportunity to give us feedback. Positive ratings were received for our technical expertise, process efficiency and delivery reliability in particular. On the other hand, the customers surveyed still saw room for improvement in terms of pricing and delivery flexibility.

Our daily commitment to high quality and customer satisfaction is regularly recognized and honored with awards and prizes. For example, our subsidiary Bond-Laminates GmbH, in conjunction with the Fraunhofer Institute for Production Technology and HBW-Gubesch Thermoforming GmbH, received the JEC Innovation Award in the process category for the combination of our Tepex continuous-fiber-reinforced thermoplastic composite with local tape reinforcements, which optimizes mechanical performance, material thickness and weight. In addition, an all-plastic brake pedal with an insert made from our Tepex dynalite high-tech plastic was awarded first place in the “Body Interior” category of the Society of Plastics Engineers (SPE) Automotive Awards, which are among the most prestigious innovation awards for the automotive industry and its suppliers.

SUSTAINABILITY TARGETS

As part of our strategy and aligned to the areas of activity in our materiality matrix, we have formulated specific targets for sustainable development at LANXESS. Their common aim is to generate added value for our stakeholders and, at the same time, to improve the quality of life for present and future generations. One element of the variable compensation for senior management is the extent to which certain sustainability targets are attained.

LANXESS Sustainability Targets

Clusters and Subject Areas in the Materiality Matrix	Target	Target Date	Status 2016 and Target Attainment	Page
 Responsibility for the Environment				
Resource management	<p>Improved eco-efficiency within the LANXESS Group by consolidating existing efficiency measures in a global resource efficiency program with the following goals:</p> <ul style="list-style-type: none"> • Development of an integrated business strategy/operational eco-efficiency • Further development of the LANXESS Climate Strategy (see climate protection targets) • Establishment of a water management system at all sites in water-scarce areas 	2016	<p>The Operational Eco Efficiency project is dedicated to the issues of resources and eco-efficiency and focused in the first phase solely on energy efficiency. It will be continued in 2017.</p> <p>In 2016, a comprehensive risk analysis was performed for each of our sites on the basis of the WWF Water Risk Filter and the WBCSD Global Water Tool.</p>	81
Climate protection	Reduction in specific Scope 1 CO ₂ e emissions by 25% for the LANXESS Group (base date: December 31, 2015)	End of 2025	Despite higher absolute values, specific Scope 1 emissions were kept at roughly the prior-year level.	79
	Reduction in specific Scope 2 CO ₂ e emissions by 25% for the LANXESS Group (base date: December 31, 2015)	End of 2025	Despite higher absolute values, specific Scope 2 emissions were slightly below the prior-year level.	79
	Reduction in specific energy consumption by 25% for the LANXESS Group (base date: December 31, 2015)	End of 2025	Despite an increase in absolute values, specific energy consumption was reduced in 2016.	80
	Reduction in emissions of volatile organic compounds (NMVOC) by 25% (base date: December 31, 2015)	End of 2025	Emissions were further substantially reduced in 2016.	80
 Responsibility in the supply chain				
Development and establishment of a new sustainability standard for our suppliers	<p>Work on advancing the development of the sustainability standard for our suppliers in tandem with relevant industry initiatives, with the aim of further expanding a sustainable supply chain</p> <p>Support for the Together for Sustainability initiative, which aims to standardize and share sustainability assessments of suppliers in the same industry</p>	2020	<p>A standardized on-site third-party audit process for partners and suppliers was developed and rolled out under the auspices of TFS.</p> <p>Significant progress was made: Suppliers assessed by TFS account for 60% (2015: 57%) of LANXESS's relevant procurement spend.</p>	114
Sustainability of LANXESS as a supplier	Neutral assessment of LANXESS's sustainability performance by the EcoVadis rating agency and possibly audits	Continuous	<p>In the online assessment by the EcoVadis rating agency, LANXESS achieved an improved CSR Performance Score of 72% worldwide and thus again attained Advanced Level in 2016/2017. As a result, the company's Gold Status – first obtained in 2013 – was confirmed.</p> <p>In November 2016, LANXESS itself underwent a TFS audit at its Leverkusen site to assess its CSR practices as a supplier. The site received the best possible assessment.</p>	115
 Responsibility toward employees				
Development and introduction of a global HSEQ risk identification and evaluation process	<p>Strengthen awareness of occupational safety</p> <p>Foster continuous improvements in support of LANXESS's "Xact" global safety program</p>	2020	<p>Up to and including 2016, a total of 13 global HSE standards were rolled out. They describe technical activities with increased risk potential and culture elements such as accident investigations as binding elements of our conduct and daily workflows. Also, three "Xact" focus projects were established in 2016.</p> <p>The LTIFR and RIR were reduced to 2.0 and 0.7, respectively.</p>	74
Diversity	Increase proportion of women in senior and middle management to 20%	2020	The proportion of women as of December 31, 2016, was 16.29%.	70
Training	Fulfill social responsibility through the provision of training	Continuous	The number of people in vocational training increased by 23% in 2016.	69
	Hire rate of at least 80% on completion of vocational training		81% of those who completed their vocational training were hired.	

Clusters and Subject Areas in the Materiality Matrix	Target	Target Date	Status 2016 and Target Attainment	Page
 Responsibility toward employees				
Demography initiative	Flexibilize worktime models Make life easier for employees with families and for older employees	Continuous	The "Flexi 95" pilot project for managerial employees was launched. 50 demography positions were created.	72
 Product and process stewardship				
Product stewardship	Sustainability assessment of the LANXESS product portfolio	2016	In 2016, the entire product portfolio was systematically analyzed on the basis of sustainability aspects.	77
Development and introduction of a global HSEQ risk identification and evaluation process	Reduction and prevention of • Incidents relating to plant and process safety • Environmental incidents and their impact • Transport incidents	2020	In the course of preparations for the upcoming standard revision (ISO 9001/14001 Revision 2015), risk-related requirements were identified and transferred to HSEQ-related areas of activity. Transportation safety: In 2016, LANXESS India focused on transportation safety and held a large number of workshops and training sessions for transport service providers and their drivers. The technical requirements for trucks were greatly tightened.	238
 Corporate responsibility				
Social activities	Global support for science education Enhancing awareness of climate change and water scarcity – for drinking and industrial use Cultural commitment	Continuous	87 projects worldwide were implemented, benefiting around 200,000 mainly young people. A total of €1.5 million was made available.	86
 Corporate governance				
Anti-corruption	Avoidance of all cases of active and passive corruption	Continuous	Special corruption training was carried out for exposed professional groups and countries. The number of cases of passive corruption is in the single-digit range.	67
Human rights	No human rights violations	Continuous	A risk assessment that specifically addressed human rights issues was performed in five countries (Brazil, China, Germany, South Africa and the United States). Individual cases of misconduct were reported by employees in respect of colleagues or third parties. There were no reports or other indications of human rights violations by suppliers.	66

WELL STRUCTURED

We regard acting and thinking sustainably as the responsibility of each and every employee at LANXESS. However, appropriate organizational structures, strategies, operational guidelines and goals are needed to enable our employees to act sustainably in their day-to-day work and to translate the abstract concept of corporate responsibility into a specific factor of entrepreneurial success.

LANXESS combines corporate governance, sustainability and corporate citizenship under the umbrella of corporate responsibility (CR).

Committees and functions

We have established various committees and functions to ensure compliance with and the ongoing optimization of our CR strategy and our rules and standards.

CR Committee

Representatives from selected group functions develop our CR strategy and ensure that all LANXESS's CR activities are in line with this 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. The Board of Management is represented on the CR Committee by Dr. van Roessel.

HSEQ Committee

LANXESS's senior executives, under the direction of Board of Management member Dr. Hubert Fink, ensure worldwide compliance with uniformly high quality management, safety, environmental, energy and climate protection standards. The committee 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.

Compliance organization

The global compliance organization – which is made up of the Group Compliance Officer and a network of local compliance officers – is the central point of contact for all employees on compliance-related issues. It also works with the relevant 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 detail in the Corporate Governance Report starting on page 96 of this Annual Report.

In addition, in 2016, an interdisciplinary team headed by Board of Management member Dr. Hubert Fink examined certain aspects of sustainability management and corporate responsibility at LANXESS, focusing on product stewardship, climate protection and environmental efficiency. The results have been included in the relevant sections of this Annual Report. For example, the methodology used in our portfolio analysis based on sustainability aspects is described on page 77, while we give a first-time report of our Scope 3 emissions on page 80.

Integrated management system creates transparency

At LANXESS, a central management system provides the necessary global structures in all business processes to ensure responsible commercial practices. Worldwide, we apply the ISO 9001 and ISO 14001 international standards for quality and environmental management and ISO 50001 for energy management.

Confirmation of our compliance with ISO 9001 and ISO 14001 takes the form of a global matrix certificate. This certificate brings with it a number of advantages:

- › A high degree of process standardization
- › Uniform company directives and operating procedures
- › Transparent, efficient and effective procedures and controls
- › Substantially reduced external effort for maintaining and optimizing the management system, for integrating other management systems (e.g. ISO 50001, sustainability standards) and for integrating new locations or business entities

External, independent experts regularly audit the progress of integrating new sites into our management system and the performance of our management system worldwide. In 2016, we successfully completed a follow-up audit and obtained global certification for new company ARLANXEO. The certificate now covers Bond-Laminates GmbH as well. In 2017, we intend to integrate our production sites at Neville Island, United States, and Joo Koon, Singapore, into the certificate. As of August 31, 2016, we gained three production sites – in Memphis and Kingstown, United States, and Sudbury, United Kingdom – through the acquisition of the Clean and Disinfect business of U.S. chemical company Chemours. All these sites already have ISO 9001 and/or ISO 14001 certification. Inclusion in the LANXESS management system and thus in our matrix certificate is part of the integration process. Our Rustenburg site in South Africa, which is a chrome ore mine, cannot be assigned to LANXESS's other chemical industry businesses in the matrix certificate. We are therefore seeking separate ISO 9001 and ISO 14001 certification for this site.

As of December 31, 2016, our matrix certificate covered 49 certifiable companies (companies with employees and in which LANXESS has a holding of more than 50%, as well as ARLANXEO companies) with 79 sites in 23 countries. In relation to employee headcount, this equates to coverage of 98%. Despite many changes in our company's portfolio, we have consistently maintained coverage at above 90% since 2011, thanks to what has become a highly efficient integration process.

In addition, since 2012, we have successively obtained certification to ISO 50001 for energy management for LANXESS AG and all its subsidiaries (companies in which it has a holding of more than 50%, as well as ARLANXEO companies) in Germany. As of December 31, 2016, our certification coverage for energy management in Germany stood at 100% in relation to employee headcount. Outside Germany, the energy management system of ARLANXEO Belgium N.V. was certified according to ISO 50001. At the distribution site in Bratislava, Slovakia, an energy audit was successfully completed by the national authority.

Additionally, LANXESS operates other specific management systems and has further certifications, such as EMAS, RC14001 (RC = Responsible Care®), OHSAS 18001 and KTA 1401 (German Nuclear Safety Standards Commission). The status of our certificates can be viewed at any time in the Corporate Responsibility section of our website.

Alignment to international standards and frameworks

The *U.N. Global Compact* is the world's biggest and most important initiative for responsible corporate governance. On the basis of ten universal principles, it pursues the vision of an inclusive and sustainable global economy that benefits all people, communities and markets. As a signatory, we acknowledge these principles to be an inalienable right. We again renewed our commitment to the U.N. Global Compact for the 2016 reporting year.

Responsible Care® is the name of the chemical industry's initiative to achieve progress in safety and environmental protection independently of legal requirements. By signing the Responsible Care® Global Charter, we have documented our commitment to the visions and ethical principles of this initiative launched by the International Council of Chemical Associations (ICCA). Our corporate directives ensure that the principles of the charter are integrated into our management principles and corporate strategy.

Among the internationally recognized principles of business activity to which we are committed are the *employment standards of the International Labour Organization*, an agency of the United Nations. These are aimed at ensuring compliance with globally recognized social standards and thereby improving the employment and living conditions of all people.

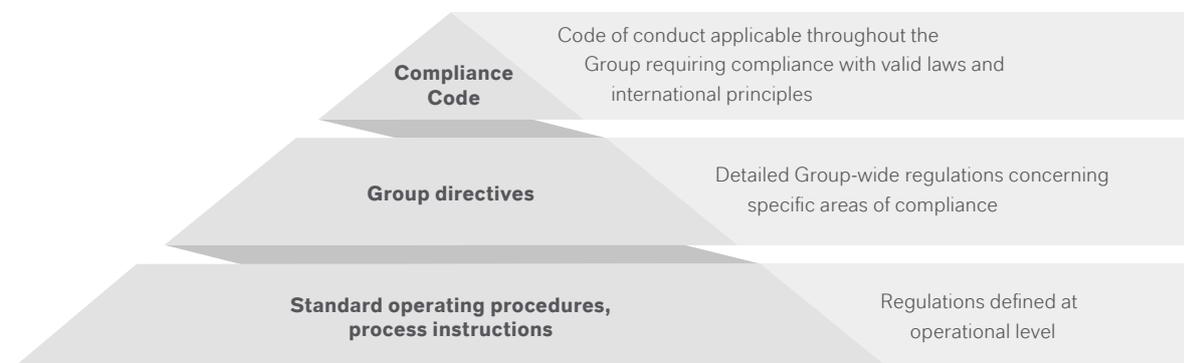
We also believe that the *Sustainable Development Goals* explained earlier in this section provide important impetus for corporate responsibility which will guide us in the future.

The Ten Principles of the U.N. Global Compact

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

Company Guidelines and Regulations

Clear Rules Provide Guidance



The “Code of conduct – Code for integrity and compliance at LANXESS,” which is applicable throughout the Group, is the binding framework for our corporate culture and 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 required to contribute to preventing harm to LANXESS and increasing the company’s value over the long term. The code covers issues such as anti-competitive behavior, anti-corruption, data protection, occupational, product and plant safety, and environmental protection.

It can be found on our website at www.lanxess.com under Corporate Responsibility/Corporate Governance/Compliance at LANXESS.

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 LANXESS employees. All globally applicable LANXESS directives and guidelines are contained in a system that is accessible to all employees. On the basis of these directives, more detailed regulations that also take account of local requirements are defined at the operational level in standard operating procedures and process instructions.

We expect our suppliers to commit to our values and rules, especially the Global Compact, 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. Reviewing compliance with these requirements is a key aspect of our collaboration in the Together for Sustainability initiative we operate jointly with 18 other international chemical companies (see page 115).

Human rights

Respectful and fair treatment of all stakeholders is a key pillar of our corporate culture that is reflected in our core values of respect, ownership, trust, professionalism and integrity. As a global enterprise, 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. At LANXESS, human rights and ethical principles apply without restriction, even if they are not stipulated in the legislation of individual countries.

The respective site management, supported by local compliance officers, is directly responsible for ensuring the observance of human rights at all times. At Group level, human rights are subject to regular evaluation as part of our risk management system. At the beginning of 2016, we performed a risk assessment that specifically addressed human rights in five countries (Brazil, China, Germany, South Africa and the United States). This confirmed that there is a high level of awareness for the subject and that suitable mechanisms are in place to prevent human rights violations. 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. In fiscal 2016, audits were performed at 17 country units, which equates to around 60% of our sites worldwide.

Human rights principles are so firmly anchored in LANXESS’s corporate culture that we do not consider further training to be necessary. 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.

We have no reports or knowledge of any systematic discrimination against LANXESS employees. This includes discrimination on the basis of race, skin color, age, gender, sexual orientation, origin, religion, disability, 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. Such incidents are processed decentrally at LANXESS and there is no central reporting system.

All acquisitions of companies or interests in companies 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 that include aspects such as compliance with our Supplier Code of Conduct. As well as a duty to respect human rights, this code includes the obligation not to use child labor or forced labor. In fiscal 2016, we received no reports or other indications of human rights violations by our suppliers. The same applies to child labor and forced labor.

Anti-corruption

By signing the U.N. Global Compact, we have undertaken to actively counter all forms of corruption. A Group-wide directive provides our employees with clear guidance regarding incentives. 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, LANXESS does not provide financial support to political associations and parties. All donations must be approved by the Board of Management. Also in fiscal 2016, LANXESS made no donations to political parties. 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.

To enhance our employees' awareness of these rules of conduct, the issue of corruption is regularly covered by compliance training. Specific corruption training targets exposed professional groups and countries. The proportion of employees trained in anti-corruption practices is over 15% of the total workforce.

The analysis and monitoring of risks related to corruption is the responsibility of our Corporate Audit function. Various analytical approaches and scopes are applied:

1. Assessment of the risk of exposure to corruption and general monitoring of the internal control system: all business units
2. Transaction monitoring to ensure compliance with company regulations with an influence on the prevention of corruption in the standard SAP system: at least 80% of all transactions
3. Dedicated corruption scans in seven countries which Transparency International deems to be particularly at risk: approximately 20% of all transactions

In fiscal 2016, we received no reports or other indications of cases of active corruption by LANXESS employees. In individual cases of verifiable corruption of LANXESS employees (passive corruption), we take disciplinary action (usually dismissal) and, if the legal chances of success are high enough, initiate civil damage claims (damages and criminal litigation). In fiscal 2016, we recorded a single-digit number of cases of passive corruption.

→ Awards for commitment to sustainability

Our commitment to sustainable development was again recognized with various awards in 2016.

For instance, the North Rhine-Westphalia branch of the German Chemical Industry Association (VCI) selected us as the winner of its Responsible Care competition for our nitrous oxide reduction plant at the Krefeld-Uerdingen site in Germany.

Our site in Mannheim, Germany, was named one of the "100 facilities for resource efficiency" by the Ministry of the Environment, Climate Protection and the Energy Sector Baden-Württemberg.

In China and India we received several awards in 2016 for our range of measures to achieve resource efficiency and sustainability in the supply chain and for our wider social commitment. More detailed information about all the awards can be found in the Corporate Responsibility section of our website. On page 80, we report in detail on the various awards we received in 2016 from the Carbon Disclosure Project.

EMPLOYEES

LANXESS's long-term entrepreneurial success is fundamentally based on our employees' sense of responsibility, professionalism and focus on finding solutions. Our global HR activities are supporting the fundamental change processes within the Group – both organizationally and culturally – which makes them more important to strategic success than ever before.

Following our realignment, LANXESS's identity as an employer 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 irreprehensible actions and striving for performance do not contradict each other. LANXESS aims to be a company whose success is driven by the personal commitment of each and every employee – fully in keeping with our corporate claim of "Energizing Chemistry."

Of particular importance were the significant HR strategy and operational support for the spin-off of ARLANXEO, the integration of employees acquired as a result of the Chemours transaction and the preparation of the planned acquisition of Chemtura. We have also applied a great deal of attention to expanding our "Xcare" demographic program (see page 70).

A focus on fostering talent

As part of our sustainable, value-based corporate policy and against the backdrop of demographic change, LANXESS is continuing to invest in well-qualified young talents – both apprentices and university graduates – and in experienced specialists and managers. Our global talent management activities are consistently

aligned to the different strategies of our business units and their specific demands in terms of employee qualifications.

A total of 1,294 new employees joined the company worldwide in fiscal 2016. 209 new employees were hired in Germany, where our focus was on the recruitment of specialists from various disciplines. In Germany, the turnover resulting from voluntary resignations was 1.03% in the reporting period (2015: 1.1%). Globally, it was 2.45% (2015: 2.9%).

LANXESS has a dedicated program which gives preferential support to master's degree students who are the ideal fit for our company. In 2016, we also awarded more than 50 scholarships to students at the seven German universities with which we collaborate.

Turnover Resulting from Voluntary Resignations



Turnover Resulting from Voluntary Resignations (%), Excluding Reduction Programs)

Age group	EMEA (excluding Germany)		Germany		North America		Latin America		Asia-Pacific	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
<20										
20–29	9.0	4.9	1.3	3.4	7.4	4.5	1.8	4.1	8.3	14.3
30–39	3.1	2.7	3.4	1.8		4.2	1.5	1.3	6.4	6.5
40–49	2.0	1.0	0.7	0.7		1.1	5.6	0.3	3.8	3.3
50–59	1.9	0.2	0.9	0.4	2.2	3.0		0.4		4.1
≥60		5.9			10.3	9.2		3.3		
Total	3.1	1.7	1.4	1.0	3.0	3.5	2.2	1.3	5.8	6.8

Total Turnover (%), Including Reduction Programs)

<20										
20–29	14.3	7.9	1.3	4.0	7.4	4.5	7.2	8.1	10.8	16.1
30–39	5.7	5.7	3.7	2.3		8.0	5.4	3.9	9.0	9.6
40–49	2.6	3.5	2.0	1.4		1.8	13.0	3.3	3.8	8.4
50–59	6.5	5.6	5.1	3.7	3.7	9.0	13.4	6.7	5.5	11.9
≥60	22.9	38.0	19.3	29.6	12.3	17.5		13.3	44.4	97.0
Total	6.4	6.3	3.8	4.1	3.9	7.4	8.2	5.3	8.1	11.1

New Employees by Age Group, Gender and Region

Age group	EMEA (excluding Germany)		Germany		North America		Latin America		Asia-Pacific	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
< 20	1	2							1	5
20–29	27	50	16	43	6	40	17	18	31	79
30–39	19	71	12	66	8	40	15	17	27	90
40–49	16	51	15	34	6	29	8	14	21	148
50–59	9	33	3	19	12	28	1	3	1	113
≥ 60	3	4		1	3	17				1
Total	75	211	46	163	35	154	41	52	81	436

A key tool for attracting young talents in Germany is our international trainee program, which in 2016 was awarded a quality certificate by Germany's "Initiative for career-promoting and fair trainee programs." Particularly highly qualified master's degree graduates spend 18 months being prepared for challenging specialist and managerial roles within the company

Developing our own skilled workers

We have always given priority to training young people as a means of safeguarding the company's future and as an element of our social responsibility. Vocational training is the foundation of our strategy to develop our own skilled workers for our German sites. In 2016, 171 (2015: 139) young people (25 women and 146 men) started a vocational training or combined vocational training and study program at LANXESS in Germany. We thus increased the number of new training places by almost a quarter within a year. As of December 31, 2016, LANXESS had a total of 535 young people (70 women and 465 men) training in 18 different career paths, including six combined vocational training and study programs. We hired 81 % (2015: 80 %) of those who completed their vocational training and are targeting a hire rate of at least 80 % in the years ahead.

Redefining leadership and performance

Successful change is primarily the result of successful leadership, which in turn is underpinned by clear, globally binding values and standards. For that reason, we have translated our new value model into five management principles that are applicable worldwide. A key tool for implementing these principles is the Performance Dialogue, which we are rolling out from the top down, starting with senior management in early 2016. The

purpose of the Performance Dialogue is to support our managers and their employees in gaining a better comparative view of each other's expectations regarding tasks, goals and responsibilities, giving each other continuous feedback and thus improving the way we collaborate for the long term. By the end of 2016, around 1,300 managerial staff worldwide had attended training courses on using the Performance Dialogue – this equates to more than 50% of this target group and 7.77 % of the employees worldwide who will be receiving regular feedback in this form. The plan is to complete the global rollout in the first quarter of 2017.

Our operating and leadership principles also have a key role in our performance management. We place great emphasis on consultation with our employees to agree both on our business objectives and how to achieve these objectives within the framework of our corporate culture. We use an IT tool called the Talent Database to document targets and feedback and to manage global talent by recording employee profiles, assessments of potential and individual development needs. By March 2017 all management employees will have access to this tool. The information contained in the Talent Database is also the basis for our annual HR development conferences, another element in our succession planning process.

We focus especially on providing our talents with the skills they need in an extremely dynamic working environment and challenging market conditions. Suitable candidates are identified using our global Performance Management System and, more recently, by Functional Communities working across the company. There are currently three Functional Communities for Sales & Marketing/Global Procurement, Finance and Technology & Production. These Communities actively foster suitable candidates with development potential and prospects, for example, by rotating them through different business units. Our LANXESS Academy

has an important role in providing individual support to promising talents through tailored management and specialist programs and individual coaching and mentoring.

Employee training in general remained an important element of our HR development activities in 2016. Alongside formal training sessions and seminars, which amounted to 8,137 hours in France, for example, employees were able once again to take advantage of many informal measures, such as mentoring and peer-to-peer coaching, which foster continuous knowledge sharing across the company. In Germany, we further expanded our training program in the reporting year to offer 15 training courses. A total of 145 employees (57 women and 88 men) attended these courses, with participation averaging 82 % of capacity.

In an environment of perpetual change, internal knowledge management is also becoming increasingly important. At the same time, the opportunity to share their knowledge with colleagues is a great motivation for our employees. For that reason, since 2015 we have been inviting our employees in China to develop and lead their own in-house training sessions – with great success. This not only reduces costs but, with an average of 4.89 out of a maximum possible 5 points, this type of training is actually rated more highly than training led by external providers.

Success through diversity

Our global alignment is a key strategic advantage. LANXESS currently employs people from 70 (2015: 69) countries across the world. Our Diversity & Inclusion (D&I) project is aimed at enhancing diversity at LANXESS and using its positive effects to benefit our company and our employees. This project is focused on the dimensions of age, gender and nationality. Our D&I Dashboard provides detailed analysis of data pertaining to these three dimensions and enables us to see what progress is being made at country, regional and global level so we can define appropriate strategic measures. In the reporting year, we again extended the range of available data to include employees by gender and hierarchy level.

An important task in 2016 was to anchor our D&I concept within our value culture and leadership principles and to add specific details.

International assignments are a key component of our systematic HR development process. In the reporting year, we therefore further diversified our international assignments and introduced specific assignment guidelines for both commuters and those em-

ployees who are transferred on local contracts. At year end 2016, a total of 76 employees (2015: 87 employees) – around 2.3 % (2015: 2.7 %) of our specialists and managers – were working as expatriates outside their home countries. The focus continued to be in the EMEA and Asia-Pacific regions. Assignments in the Americas region increased compared with 2015.

In addition to achieving a focused global transfer of knowledge by sending experts and managers abroad, our goal is still to develop local management with the necessary expertise and international competencies at our international sites and to transfer challenging tasks to suitable employees. At sites outside Germany, 82.2 % (2015: 81.1 %) of our management functions are currently filled by local employees.

Our D&I activities are also making an important contribution to reaching the goal we set ourselves in 2012, in connection with the voluntary undertaking by the DAX 30 companies, of raising the proportion of women in middle and upper management to 20 % worldwide by 2020. The figure currently stands at 16.29 %.

In accordance with the law on the equal representation of women and men in management positions in the private and public sectors, in Germany we are required to define targets for the proportion of women on the first two management levels below the Board of Management and to specify when these targets are to be met. Against the backdrop of LANXESS's restructuring program, the Board of Management of LANXESS AG resolved to retain the existing proportion of women as the target for the first and second management levels through June 30, 2017. At the time this resolution was taken in 2015, the proportion of women on the first and second management levels below the Board of Management was 9.8 % and 20.5 %, respectively. The target for both management levels together is 18.6 %.

Meeting demographic challenges

The regions of key economic importance for LANXESS – Europe (especially Germany) and China – are particularly affected by the problem of aging demographics. As a result, the competition for qualified young talents is intensifying. This is particularly true in the case of technical career paths, where declining applicant numbers mean we now have to invest considerably more effort to fill positions with suitable staff.

In order to address these challenges, we have developed a comprehensive demographic program called "Xcare." This program, which applies to our German companies, aims to find

answers to the challenges posed by a steady rise in the average age of our workforce, coupled with a shortage of skilled young people. The measures brought together within the “Xcare” program encompass five areas of activity:

- › People and health
- › Work and training
- › Time and organization
- › Career and family life
- › Savings and retirement provision

At the end of 2015, aware that the steps already taken might not be sufficient to adequately counter demographic risk, we launched a range of new initiatives and thus intensified our work in all areas of activity. All benefits with respect to work and family, health and retirement provision apply to the core workforce. Individual benefits may vary regionally and be adjusted locally to our employees' needs. Our core workforce comprises all employees with a permanent full-time or part-time position. As of December 31, 2016, they made up 93.4% (2015: 93.3%) of our total workforce worldwide.

Where preventive measures in the context of health management are no longer applicable, we take other measures to ensure that older employees in particular can stay in their posts. Since January 2017, one position in our Human Resources Group Function has been responsible for planning the deployment of employees with impaired working ability. This includes looking at options for government support, particularly for severely disabled employees.

We have successfully deployed reintegration management at all German sites for a number of years. In 2016, 39% (2015: more than 40%) of the employees invited to participate accepted the offer of an individual consultation with the respective site workplace integration team.

We also offer employee health promotion initiatives at our sites outside Germany. For example, all our employees in the United States have access to health check-ups paid for by their health insurance. In Canada, our employees receive financial support to pay for membership at a gym or other health-promoting establishment. Our Employee Assistance Program in South Africa offers support in a range of areas over and above health. Employees with personal, family, financial or health issues can turn in confidence to qualified external advisory services.

LANXESS Employee Structure by Age Group, Gender and Region

Age group	EMEA (excluding Germany)		Germany		North America		Latin America		Asia-Pacific	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
<20		2		1						2
20–29	61	206	166	529	26	97	59	167	120	435
30–39	197	662	271	980	59	198	137	376	270	1,010
40–49	159	863	394	1,904	67	294	57	307	165	672
50–59	115	875	443	2,532	137	367	29	269	37	295
≥60	12	99	38	344	51	122	1	33	2	9
Total	544	2,707	1,311	6,289	340	1,078	283	1,152	594	2,423

People and health

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 reporting year, for example, the occupational health management team organized a healthy living event at all the Lower Rhine sites and in Brunsbüttel to provide information and advice on various health-related topics. More than 1,000 employees took advantage of this offering. We hope to replicate this success in 2017 with similar events at other locations.

The issue of occupational safety is addressed by our “Xact” global program (see page 74).

Work and training

In the mid-term, illness and retirement – both regular and early (mainly for non-managerial employees) – will mean that many vacancies require filling, especially in career paths such as chemical production technician, fitter and engineer. Over the coming three to five years, it is our aim to establish a company-wide HR and succession planning program for the aforementioned key positions and to review these on an annual basis. In this connection, the Board of Management has approved 45 additional demography positions in the aforementioned career paths.

We are also exploring new approaches to recruiting and retaining new talents. For example, we have accelerated the process of hiring successful trainees in order to maintain a high hire rate and expand it in line with our needs.

Some of our measures to increase the proportion of women in our workforce are part of the “Xcare” program. They include employer branding activities targeting women and the implementation of objective selection procedures involving systematic multiple review. Other measures are aimed at promoting regular contact between managers and female employees on parental leave and discussing their plans for returning to work at an early stage. To ensure more thorough monitoring in the future of the proportion of women in our business units and group functions, this was made a fixed aspect of regular reporting to the Board of Management at the beginning of fiscal 2017. Areas with a below-average proportion of women will be supported by the development of suitable measures including objective hiring practices.

Time and organization

We use flexible worktime models to make life easier in particular for employees with families but also for older employees, retain their expertise within the company and make our company more attractive to prospective employees. In January 2017, we began piloting the Flexi 95 model for managerial employees which facilitates intelligent part-time working at senior management levels. Managers reduce their working time to 95%, initially for two years, with a corresponding adjustment in their pay. As a result, they are entitled to 13 additional vacation days each year. These might be used, for instance, to look after their children when schools or daycare centers are closed. At the same time, the model aims to strengthen our managers’ awareness of part-time options for their employees and to increase general appreciation of this worktime model.

More flexible worktime models are becoming increasingly important at our sites outside Germany as well. For example, we introduced three new working time models in 2015 for our administrative employees in China, encompassing flextime, part-time and home office working. In Brazil, meanwhile, we offer our administrative employees a model with flexible starting times.

As of December 31, 2016, we employed a total of 146 temporary staff (7 women and 139 men) at our German companies – LANXESS GmbH, Saltigo GmbH and IAB Ionenaustauscher GmbH.

Career and family life

Balancing work and family life is important to a steadily growing number of employees. A total of 6.8% (2015: 7.0%) of our employees in Germany aged between 20 and 40 made use of the option to take parental leave. Of this figure, almost 50.3% (2015: 43%) were fathers. 96% (2015: 97%) of the employees who ended a parental leave period in 2016 returned to a job at LANXESS.

Our “Xkids” daycare center in Leverkusen offers around 50 places – all of which are full – for children aged between six months and six years in two preschool groups and one crèche group. We also offer our employees places in daycare centers in Cologne, emergency childcare places and a nationwide agency service for childcare staff and provision.

Statutory maternity leave is a matter of course in Germany and similar models are in place in other European Union countries. However, it is by no means standard practice around the world. For that reason, we investigate whether we can introduce or expand country-specific models for our employees at sites outside Europe. In Brazil, for example, we have reached an agreement with the trade unions to benefit our employees by extending maternity leave from the statutory four months to over six months. Also in Brazil, we pay preschool fees for children up to the age of two whose parents return to work for us after their parental leave.

Against the backdrop of demographic change, caregiving is an important issue in Germany. Caregiver leave is at the heart of the LANXESS caregiving program. This allows employees to reduce their working time to a greater extent than their salary during the care phase and to make up the shortfall when they return to work. To date, 60 employees in Germany have taken advantage of caregiver leave and other job release options.

LANXESS Employee Structure by Employment Type, Gender and Region (Also Including Employees on Fixed-Term Contracts)

Employment type	EMEA (excluding Germany)		Germany		North America		Latin America		Asia-Pacific	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Permanent contract, full-time	450	2,530	899	5,474	324	1,076	282	1,152	586	2,421
Permanent contract, part-time	94	177	412	815	16	2	1		8	2
Temporary contract, full-time	46	54	113	553	1	1	37	64	20	50
Temporary contract, part-time	3	2	13	25	1	2	9	6	3	
Total	593	2,763	1,437	6,867	342	1,081	329	1,222	617	2,473

Savings and retirement provision

In 2016, we continued the long-term account for non-managerial employees as regulated by the agreement with the employee representatives and the collective agreement. The participation rate remained very good at the high level of 97%. A total of 63.8% (2015: 64.7%) of our employees worldwide benefit from unfunded company pension plans.

Rewarding performance transparently and fairly

LANXESS offers its employees worldwide transparent, market-rate compensation, which also includes a bonus system linked to the company's long-term success. Overall, 91.9% (2015: 88.3%) of our employees worldwide receive variable compensation.

The fixed salaries of managerial staff – and of non-managerial staff in most countries – are supplemented by a performance-based variable compensation component known as the Annual Performance Payment (APP), which is paid to employees in countries that participate in this program. The Annual Performance Payment is linked to the attainment of the Group's defined EBITDA target. Additional individual targets are set for top management. In 2016, our employees around the world shared in the company's success in 2015 with a payout totaling around €101 million.

During the course of the year, supervisors are also able to reward outstanding employee performance quickly and unbureaucratically with an Individual Performance Payment (IPP). In fiscal 2016, payments of around €12 million worldwide (€8 million in Germany) were made solely for outstanding individual performance. Around 77.9% of our employees around the world are currently eligible for IPP, which also provides them with a prompt assessment of their performance and career prospects.

Following a two-year break, we again offered an employee stock plan in 2016. All LANXESS Group employees in Germany were given the opportunity to buy LANXESS shares at a 30% discount. The shares were purchased at an average price of €55.47 on the Frankfurt Stock Exchange. The participation rate was 60%. At the reporting date, our employees and Board of Management members held around 1% of LANXESS shares through stock plans.

In addition, we offer a long-term incentive program for managers in Germany and similar programs in the United States, Canada, India and the Netherlands. The Long-Term Stock Performance Plan (LTSP) 2014 – 2017 consists of four tranches, one commencing each year, and compares the performance of LANXESS stock against the MSCI World Chemicals Index over a four-year period. Since participants make a personal investment and there is the chance that the stock will increase in value, this program is an attractive long-term incentive and a means of enhancing employee loyalty. The participation rate for all eligible employees in the current program was 99.5% in 2016 (2015: 99.8%).

Recognizing, rewarding and using good ideas

Our idea management system fosters the development and implementation of suggestions for improvements to ensure that we continually receive proposals for enhancing cost-effectiveness, occupational safety and environmental protection. 2016 was a particularly successful year for idea management. Of the 2,048 ideas that were implemented, 20 have yielded annual savings of more than €25,000, while 12 ideas have led to annual savings above €50,000.

In the reporting year, employees at our German companies submitted a total of 2,442 (2015: 2,027) new suggestions, a rate of 318 (2015: 274) per thousand employees. In the same period, 902 ideas (2015: 1,077) were implemented, yielding total savings of €2.26 million (2015: €2.56 million). 528 of these led to improvements in occupational safety and 344 concerned environmental protection (2015: 789 together). A total of €0.795 million (2015: €0.95 million) was paid out to employees whose ideas were put into practice.

Addressing global developments in partnership

Close cooperation between employee representatives and management, including trade unions and employers' associations, in line with the principle of active codetermination, is practiced globally at LANXESS. This means that we also comply with International Labour Organization (ILO) standards and the U.N. Global Compact in respecting our employees' freedom of association and valid collective agreements. Worldwide, 66.9% (2015: 66.9%) of our employees are covered by collective agreements; in Germany the figure is 91.7% (2015: 90%).

We maintain a dialogue with employee representative bodies in Germany, Europe and around the world to discuss our corporate goals on a regular basis and involve these bodies in organizational changes at an early stage. In the context of the realignment and associated global restructuring program, management and the employee representatives in various countries collaborated during the reporting period to develop and implement socially acceptable solutions. As well as the annual European forum, which brings together the works councils in Europe, there was a meeting in 2016 of the Executive Committee, which comprises employee and employer representatives from Belgium, France, the Netherlands and Germany.

Outside Europe, too, we give high priority to fair dealings with employee representatives and trade unions. In South Africa, for instance, we comply with International Labour Organization (ILO) standards with respect to our employees' freedom of association. This includes regular dialogue between local management and trade union representatives as well as binding collective agreements on compensation and working conditions.

GRI
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G4-27

HEALTH, SAFETY, ENVIRONMENT AND CLIMATE PROTECTION IN THE VALUE CREATION CHAIN

Today, more than ever before, sustainable conduct by the chemical industry means taking responsibility for products and production processes. Globally, we are seeing a convergence of environmental and product standards at a high level. What were once competitive advantages in the area of sustainability will soon be fundamental requirements worldwide for companies producing and selling chemical products.

As a supplier of important precursors, LANXESS will also be expected by its B2B customers to exercise greater responsibility. However, we would be failing to live up to our commitment to quality if we sought merely to fulfill standards – even if those standards are more stringent than they were in the past. We firmly believe that we can continue to stand out positively in the way we embrace and exercise our responsibility going forward.

This responsibility spans the entire supply and value creation chain – from the global procurement of raw materials and product development, through production, storage and transport, to use and disposal. At each of these stages, the highest priority is given to the health and safety of our stakeholders – employees, contractors, customers, end users and the immediate neighbors of our production sites.

Company-wide standards ensure the responsible application of chemistry at LANXESS, defining requirements and responsibilities for health and environmental protection, the handling of chemicals, plant safety and workplace safety precautions. Through the ongoing training of our employees and regular auditing of our health, safety and environmental management, we ensure that the requirements are systematically and sustainably implemented in our processes.

Responsibility for health and safety

Our “Xact” global safety program is aimed at encouraging all employees to work together to improve safety throughout the company. Six “Xact” safety regulations, the central principles of safe working at LANXESS, address the main areas in which every employee – whether they are employed in production or administration and irrespective of their function or position in the hierarchy – can actively contribute to their own safety and that of their colleagues.

In 2016, we introduced three more technical HSE standards within the framework of “Xact.” Like existing standards, these incorporate stricter regulations than before for technical activities with a higher risk potential, such as the use of tools or working on electrical plant. After receiving extensive training from the “Xact” regional managers, our managerial staff communicated these standards throughout the entire organization during the reporting year. In matters of safety, we generally attach great importance to active and continuous communication. One key format in this regard is the safety dialogue, which is a forum for discussing positive and critical behaviors and possible improvement measures.

Another important tool is the Pulse Check survey, which we conduct each year among all LANXESS employees. This gives them the opportunity to describe their personal experience of key safety aspects at LANXESS. Among other things, the anonymous survey seeks to establish the importance that individual employees attach to safe working practices, whether they feel involved in safety activities – as we would like – and whether they receive positive feedback for working safely.

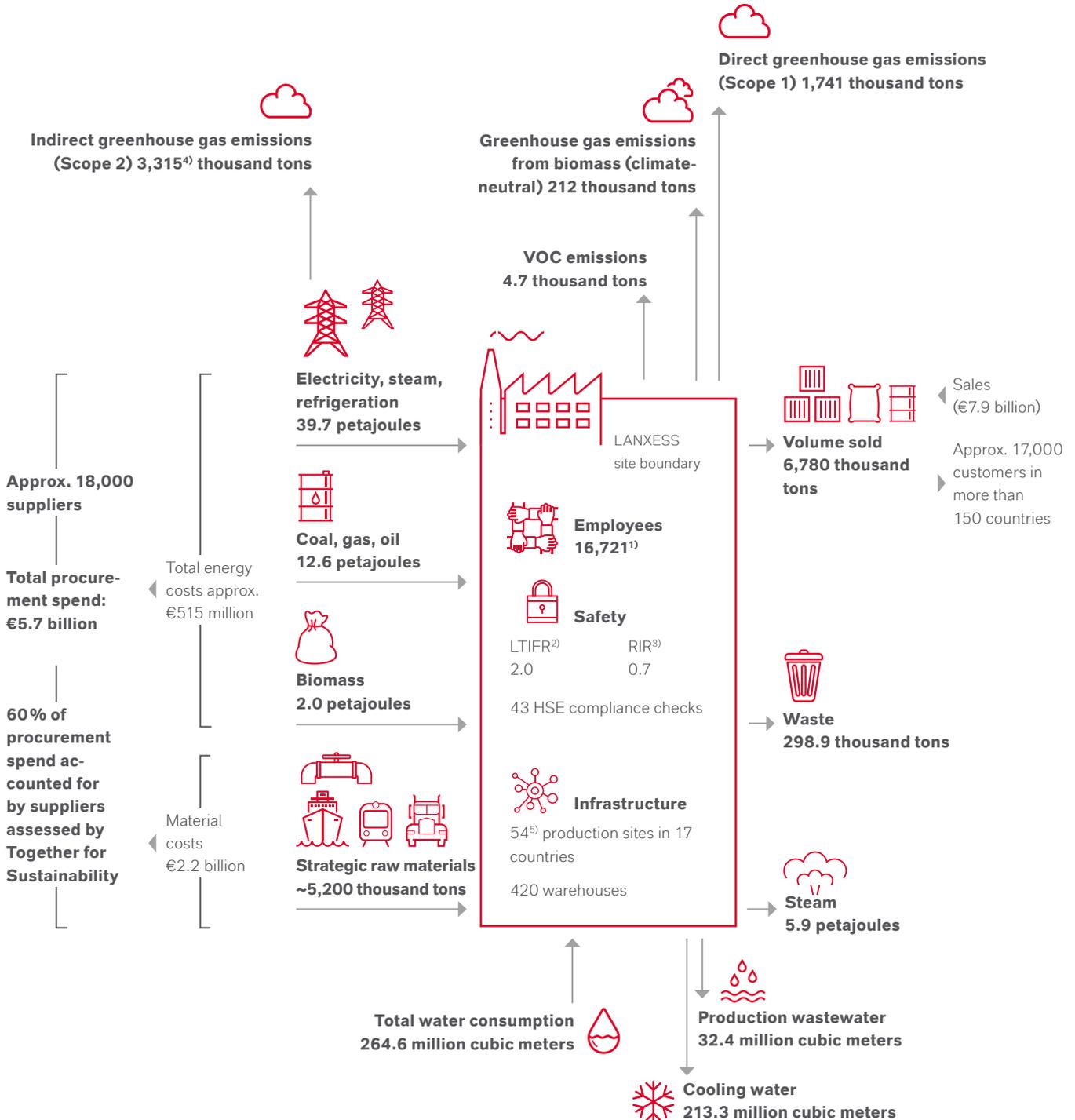
We are also seeking to achieve an improved mutual understanding of occupational safety with our providers of technical services, for example, and are therefore integrating them into our safety culture. Here, we apply the principle of “select, train, support and evaluate.” Among other things, our partners must provide verification of their own safety management system and that their employees who work for us have received certain safety training. Independent of this, we give employees of our partner companies individual safety briefings as a matter of course.

Thanks to our electronic Incident Reporting System (IRS), we are able to record accidents and incidents worldwide using standardized procedures. We document accidents involving people, transport accidents, near accidents, safety-relevant incidents, environmental incidents and downtime caused by, for example, bad weather or strike action. Each incident is carefully analyzed to identify measures that can be taken to avoid comparable incidents in the future.

LANXESS uses the recordable incident rate (RIR, the number of injuries per 200,000 working hours that are reportable as per OSHA rules) and the lost time injury frequency rate (LTIFR, known as MAQ in Germany and describing the number of injuries for every million hours worked) as indicators for evaluating occupational safety. The LTIFR was 2.0 in 2016, lower than the level of 2.2 recorded in 2015. This positive development is due not least to a safety project at our site in Antwerp, Belgium, which made it

Input-Output Balance Sheet

LANXESS reporting ceiling

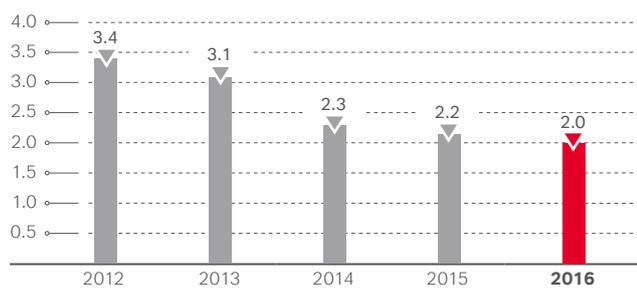


1) Permanent workforce at the core companies (excluding temporary workers) as of December 31, 2016
 2) LTIFR: accident rate per million hours worked resulting in one workday or more lost following the day of the accident, calculated for all employees (including temporary workers) at all sites
 3) Number of recordable work-related accidents per 200,000 hours worked in accordance with OSHA regulations
 4) Calculated using the market-based method in accordance with the GHG Protocol
 5) The following sites are not yet included in the environmental data on account of their recent acquisition by LANXESS: Memphis and North Kingstown, U.S.A.; Sudbury, U.K.

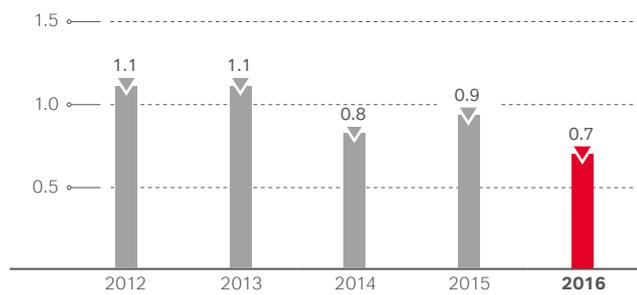
GRI
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possible to significantly reduce the number of injuries at the site within the space of a year. The RIR, which enhances international comparability, was 0.7 in 2016, also down year on year from 0.9. This substantial medium-term reduction shows that the measures implemented in recent years to improve occupational safety at LANXESS are taking 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)



→ Safely does it!

In complete contrast to the improvement in the LANXESS Group's occupational safety indicators, our site in Antwerp, Belgium, recorded an LTIFR of 10.4 in 2015. This unacceptably high value prompted us to initiate the "Xact 2.0" safety project specially tailored to that site. The starting point was a detailed analysis of the accidents and near accidents that had been recorded there and a survey of around 200 employees. In a second step, we benchmarked the results against performance at our Leverkusen and Krefeld-Uerdingen sites in Germany. It quickly became apparent that the main problem was not technical but an issue of behavior and communication. The solution was to establish an extensive safety network made up of all the site's managers,

12 "Xact" coordinators and 110 "Xact" ambassadors. Numerous workshops were held at which these multipliers were able to familiarize a large number of the site's some 900 employees with effective methods of safety-conscious behavior for use at all times. The measure was a success. Within just one year, the number of accidents fell by more than half. The ambitious goal for 2017 is zero accidents.

Global product stewardship

LANXESS is committed to the Responsible Care® Global Charter, a comprehensive product stewardship initiative launched by the International Council of Chemical Associations (ICCA) that was the key factor in the development of the Global Product Strategy (GPS). This aims to provide basic information and risk assessments for substances so that the harmful impact of chemicals on human health and the environment can be minimized and products can be manufactured and distributed in such a way as to prevent injury to people and damage to the environment. In line with the aforementioned commitment, our product stewardship covers the safe handling of chemical substances and products throughout their life cycle – from research and development, procurement and production, through storage and transportation to marketing, downstream processing and disposal.

The Product Safety Management at LANXESS Directive steers the Group-wide observance of product stewardship and secures the participation of everyone involved. This applies in particular to those substances in our product portfolio that are classified as hazardous. Our Central Product Surveillance Directive systematically governs worldwide tracking of our products and their use in respect of potential health and environmental impacts. The information acquired is used by our product developers and product safety experts in their evaluations. In the reporting year, we revised our Development of New or Changed Products, Processes and Applications Directive to take account of sustainability aspects. The directive now officially defines what has long been standard practice at LANXESS – that development ideas themselves be analyzed systematically in terms of their potential economic, environmental and social impact. In this way we ensure that non-sustainable products, processes or applications do not find their way into our development work.

Management of chemical control regulations

Compliance with global chemical control regulations is the condition for the marketability and safe handling of our chemicals and products along the value chain.

LANXESS has an electronic safety data system to ensure compliance with both mandatory and voluntary control requirements. Material safety data sheets in more than 30 languages inform our customers worldwide about substance data and the safety

measures that are necessary when using the relevant chemicals. We regularly adapt our electronic safety data system to reflect changes to the GHS (Globally Harmonized System of Classification and Labeling of Chemicals) in various countries. The GHS is a system under the umbrella of the United Nations that aims to harmonize existing classification and labeling systems used in various sectors such as transportation and consumer, employee and environmental protection. We observe regional variations in the implementation of the GHS such as the European Union's CLP (Classification, Labelling and Packaging of Substances and Mixtures) regulation.

Before manufacturing, exporting or selling our products in a given country, we examine their marketability in accordance with the chemicals legislation in force there. We register our substances and products in line with local requirements and support the substance analysis programs of the responsible authorities by supplying all available information and collecting new data if necessary.

We expressly support the protection goals of the E.U. REACH regulation. We have so far pre-registered or registered all the substances that are relevant for LANXESS with the European Chemicals Agency (ECHA) by the stipulated deadlines. By the third deadline on May 31, 2018, all substances we produce in or import to Europe in amounts exceeding one ton will have been registered in Europe. Registration involves the systematic evaluation of information concerning our substances and their uses. In doing this, we consider the entire product life cycle. Within the context of a voluntary commitment made by the German Chemical Industry Association (VCI) in 1997 to record and assess substances, we go beyond the legal requirements to determine a meaningful basic data set for our intermediates as well, in line with the REACH regulation.

In the case of consumer applications in particular – such as additives for use in food or animal feed, for food and drinking water contact or for use in cosmetic, pharmaceutical or medical products – we ensure that our products comply with national and international laws, standards, certificates and quality hallmarks. In this way, we actively support our customers, for example, in the certification of their materials for drinking water contact applications or in the downstream processing of our products into certified goods for end users.

Comprehensive analysis of our product portfolio based on sustainability criteria

Effective sustainability requires that we have as precise a picture as possible of the impact of our business activities – both positive and negative. For that reason, we have for the first time performed a systematic analysis of our product portfolio based on sustainability aspects.

The dedicated evaluation system we developed in the reporting year provides us with a strategic management tool for systematically evaluating and improving the sustainability performance

of our product portfolio from an economic, environmental and social perspective. The system analyzes the impact and benefits of our products on the basis of criteria that we regard as relevant to our company and to 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

We applied these criteria in evaluating our entire product portfolio, with subsequent review of the results by an internal committee of experts. 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. It also shows where action is still needed. This information may be used to develop specific improvement processes or to create acceptance for certain issues in our dialogue with stakeholders.

Evaluation Processes



Across the LANXESS Group, we are applying the findings of this analysis to further improve the sustainability performance of our product portfolio. Our now deeper understanding of our products' properties may also provide important impetus for innovation. Going forward, the assessment of our product portfolio will form part of our annual strategy process. We will also work to continuously optimize the set of criteria we use.

Environmental responsibility

As LANXESS sees it, conserving natural resources – for example, through the most efficient possible use of raw materials and energies – and identifying further potential for reducing emissions and waste are an ongoing mission and an inherent part of our ecological responsibility to which we must apply our expertise. While taking account of local requirements, we equip all new production sites with state-of-the-art technology that is also in line with environmental standards. This often sets us apart from local competitors.

→ Operation Clean Sweep started

The handling of plastic pellets is a good example of how we use the findings from our product monitoring activities in developing our own measures to protect users and the environment. These plastic pellets may be inadvertently released into the marine environment at various stages of the value chain. They themselves do not react chemically but may have an undesired impact on account of their small size and volume.

In previous years, as part of the No Pellets Emission project, our most strongly affected business unit – High Performance Materials (HPM) – developed a self-assessment process in Germany to identify the sources and circumstances of possible pellet emissions at our plants and to define corresponding countermeasures. Due to the positive results of this self-assessment process, it will now be rolled out to all HPM sites around the world.

Processes like this are among the central requirements of the global Operation Clean Sweep program established by the Society of the Plastics Industry, a program that LANXESS joined in 2016. By participating in this program, we have made a commitment to train relevant employees, to perform regular checks on the success achieved and to require our business partners to also take active steps to prevent pellet emissions. Our goal is to systematically integrate the program's requirements into LANXESS's management system and to implement them across the company.

At the start of 2016, we set new long-term targets for CO₂ and VOC emissions and for energy consumption. By 2025, we aim to cut our specific CO₂ and VOC emissions by 25% (base year: 2015). We also aim to reduce specific energy consumption by 25% through 2025. In the future, assessment will no longer be based on the performance of the reporting segments, but rather on that of LANXESS as a whole. This approach takes account of the company's altered organizational structures.

Reduction of climate gas emissions

With the Paris Agreement, which entered into force in November 2016, the international community committed itself to the goal of limiting global warming to less than two degrees Celsius above pre-industrial levels. This goal is achievable only if global greenhouse gas emissions are radically reduced in the decades ahead. All the signatory nations have correspondingly set themselves ambitious reduction targets. Germany's Climate Action Plan 2050, also launched in November 2016, has an interim target of cutting greenhouse gas emissions by at least 55% through 2030 compared with the base year in 1990. Industry is expected to contribute with a reduction of between 49% and 51%. Internationally, the United States, for example, aims to reduce its emissions by between 26% and 28% through 2025 compared with their level in 2005.

In common with many other European chemical companies, LANXESS had already made an express commitment before the Paris Conference to protect the climate and fulfill the obligations that entails. Since our company was established, we have been working continually to reduce climate gas emissions – and with considerable success. In the past ten years, we have cut our Scope 1 emissions worldwide by more than half. Our sites in Germany have already satisfied the national reduction requirement set for 2030. Nevertheless, we are continuing to work hard across the Group to cut our CO₂ emissions. At our Leverkusen and Krefeld-Uerdingen sites in Germany and the Baytown site in the United States, for example, we have been able to return a substantial amount of steam – equivalent to around 10% of our total energy requirement – to the local integrated networks by consistently using our process heat to generate steam (waste heat). The average CO₂ factor of these networks has declined as a result. Compared with steam generated by conventional means at these sites, the steam returned to the networks is equivalent to 650 to 800 kilotons of Scope 2 CO₂ emissions. In the reporting year, for the first time, we extensively determined our Scope 3 emissions for the past two fiscal years, thus taking a further important step toward achieving a very high level of transparency in respect of the greenhouse gas emissions caused by our operations.

➔ **Full steam ahead for climate protection**

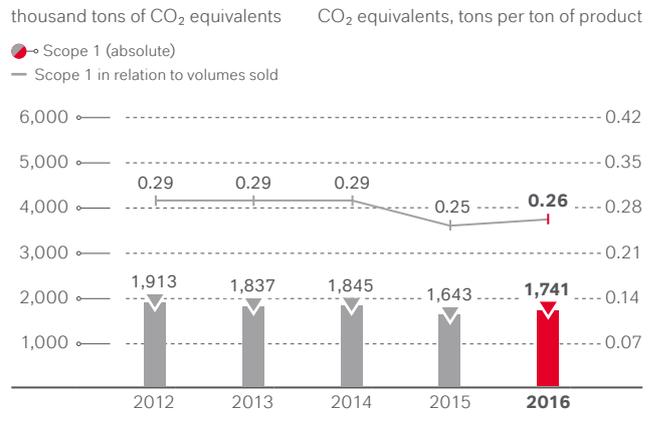
A new project at our Antwerp, Belgium, site demonstrates that we are not only thinking about our own footprint but also about benefiting society when it comes to climate protection. We and four other chemical companies share an integrated network for steam at this site. Starting in 2019, a pipeline more than five kilometers long will supply the site with over 80% of the process steam required. Overall, this project will cut CO₂ emissions by 100,000 tons per year. It was awarded the first sustainability prize of the Port of Antwerp in November 2016. We will be able to virtually stop producing our own steam from gas, replacing it with centrally produced steam from the waste incinerator. This will reduce the Scope 1 data in our emissions calculation while increasing the data for Scope 2 emissions. Whether the project will ultimately lead to lower emissions by LANXESS itself will not be known until the pipeline is in operation, but it will significantly improve the climate footprint of the Port of Antwerp.

In Europe, 17 LANXESS facilities and/or sites are subject to the European Emissions Trading System. Trading in CO₂ emission rights – or allowances – is a cost-effective way of reducing harmful CO₂ emissions. Since all our facilities that are eligible for emissions trading are at the cutting edge of technology and compete on the international market, we expect to receive an adequate number of free allowances up to the end of the third trading period in 2020 to cover our anticipated CO₂ emissions.

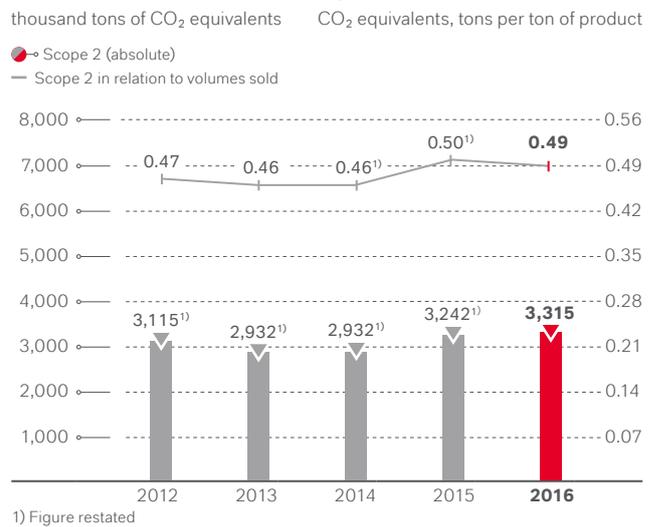
The year on year increase in our absolute Scope 1 emissions was largely due to the 4.4% rise in volumes sold. At the same time, reduced availability meant that we used less biomass to generate energy. However, despite the higher absolute values, we kept our specific Scope 1 emissions at roughly the prior-year level.

The higher absolute Scope 2 emissions were also attributable to higher volumes sold. Here too, the specific values were level year on year.

Greenhouse Gas Emissions (Scope 1)



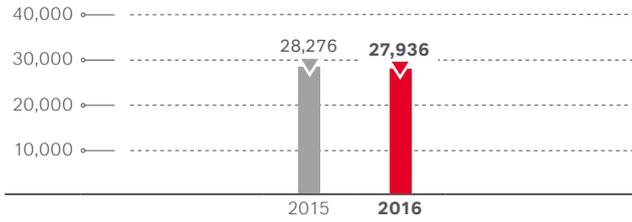
Greenhouse Gas Emissions (Scope 2)



Greenhouse Gas Emissions (Scope 3)

thousand tons of CO₂ equivalents

● Scope 3 (absolute)



→ **And the winner is...**

For more than a decade, we have been participating in the Carbon Disclosure Project (CDP), each year sharing data and information on climate protection and the reduction of emissions. 2016 was a particularly successful year for us as far as the CDP is concerned because this international investor initiative recognized our efforts in several categories. Firstly, LANXESS was one of 193 companies worldwide to be included on the CDP Climate A List, putting us in the top 9% of the more than 2,100 companies that participate in the initiative. We were also named "Sector Leader Energy & Materials," ranking us among the best 11% in the Germany, Austria and Switzerland region. In an index comparison, LANXESS was placed as an "Index Leader" among the top 4% in the MDAX. Last but not least, we achieved the most substantial year-on-year improvement of all the German companies participating and were thus also honored as Best Improver Germany. CDP gave special recognition to our transparency and performance in the following areas: climate strategy, risk assessment, actual reductions achieved in greenhouse gas emissions intensity and handling of indirect emissions, for example through CO₂ emissions in the supply chain (Scope 3 emissions). These gratifying results gave us encouragement to continue systematically pursuing our climate protection strategy.

Other atmospheric emissions

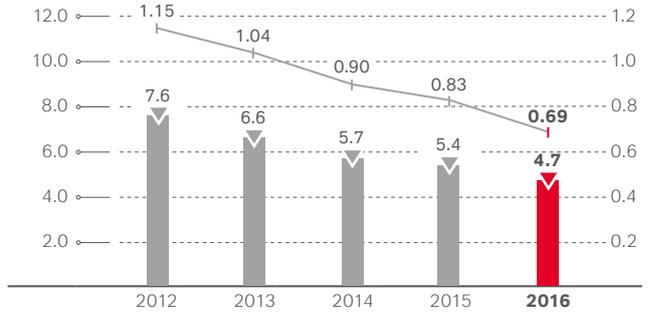
VOC Emissions

tons

VOC, kilograms per ton of product

● Absolute

— In relation to volumes sold



As far as our VOC emissions are concerned, the positive trend seen over past years has continued since we achieved our Group target for this indicator in 2015.

Systematic energy management

A high level of energy efficiency improves not only our emissions footprint but also our cost position and thus ultimately the competitiveness of LANXESS. In Germany, we have established an energy management system in accordance with ISO 50001. Our certification was reconfirmed in 2016. Outside Germany, we continue to pursue our strategy of regional and local certification.

Energy Consumption (Balance Sheet)

petajoules

gigajoules per ton of product

● Absolute

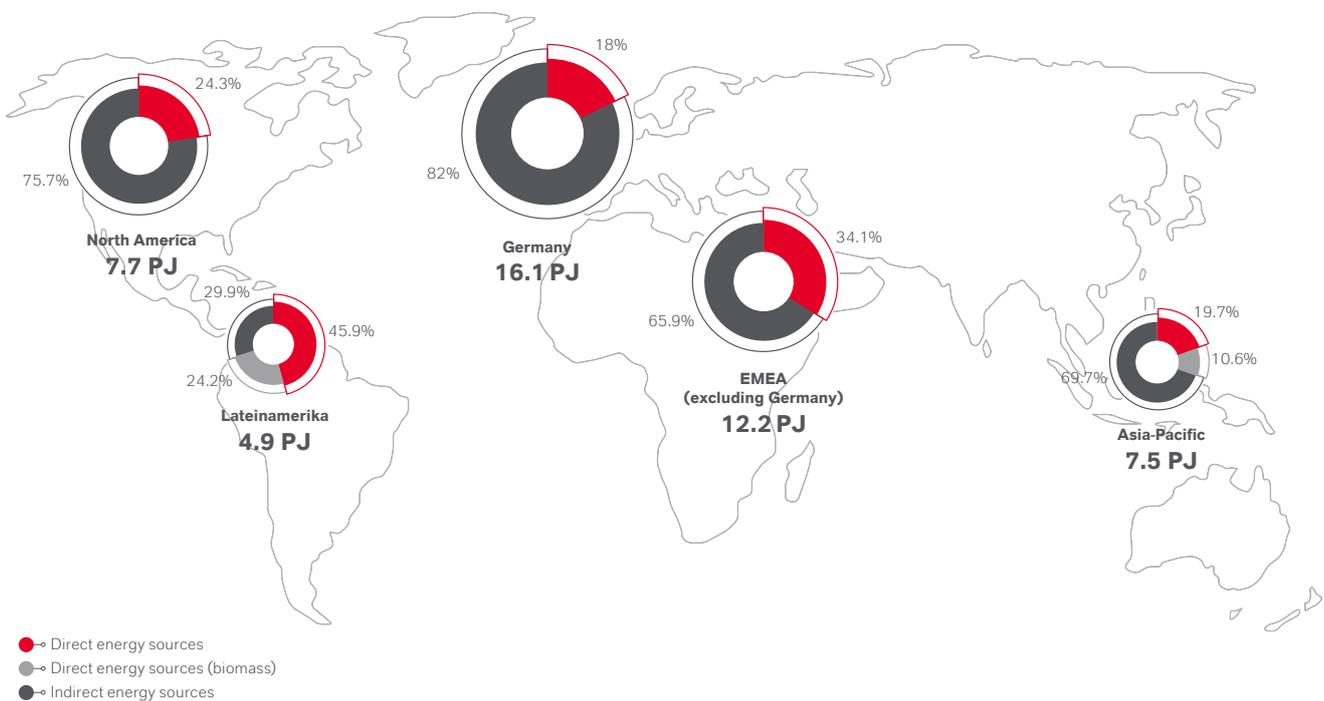
— In relation to volumes sold



Mirroring the development of emissions, the slight increase in our absolute energy consumption reflected the higher volumes sold in 2016. The energy balance produced retroactively for the prior years for the first time in 2016 also includes the amount of steam (waste heat) emitted by LANXESS. As far as our specific energy consumption is concerned, we were able to continue the positive prior-year trend in 2016.

Direct and Indirect Energy Consumption by Region

petajoule/%



Responsible use of water resources

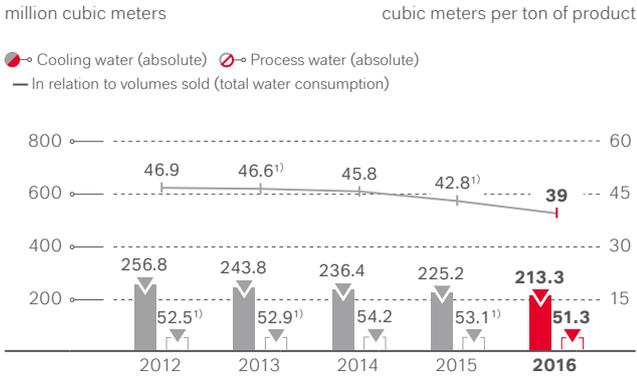
Access to clean water is not only crucial to the health and nutrition of a constantly growing world population, it is also an important economic factor. According to the United Nations World Water Development Report 2016, 75 % of all jobs worldwide are dependent on a reliable supply of water. Careful use of this scarce resource is therefore securing our future – particularly at sites in water-stressed areas where water is a scarce resource and more than 60% of the available supply is extracted for human use.

All wastewater and surface water discharges at our sites are subject to legal and permitting requirements. We use both technical (wastewater treatment) and organizational (monitoring) measures to comply with these requirements. Before the authorities issue an operating permit, an assessment is carried out on the potential economic, social and environmental impact of water extraction on the surrounding area. At all LANXESS sites,

this takes place under approved conditions. The issue of water extraction is also addressed by our environmental protection compliance program.

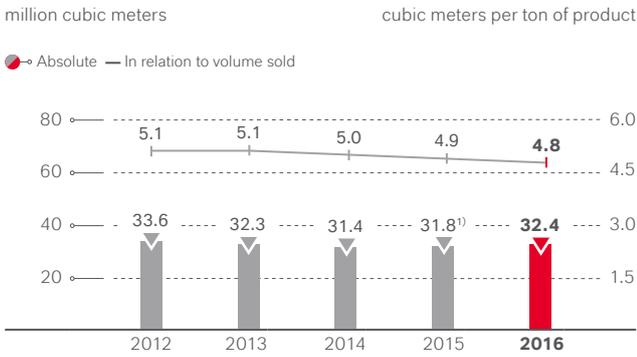
In 2016, as part of our ongoing efforts to improve our water management, we conducted a comprehensive risk analysis based on the geographical location of our sites. In addition to water extraction, we considered other physical and regulatory indicators as well as reputational risks. To conduct the analysis, we used two internationally recognized risk evaluation tools – the Water Risk Filter from the World Wide Fund For Nature (WWF) and the Global Water Tool from the World Business Council for Sustainable Development. Analysis of LANXESS's sites on the basis of the WWF Water Risk Map shows that our most of sites are located outside water-stressed areas. As a next step, we will be carrying out individual risk evaluations at the few sites in water-stressed areas in 2017.

Water Consumption



1) Figure restated

Production wastewater



1) Figure restated

As in past years, we reduced our water consumption in 2016. This was due particularly to the declining volumes of cooling water used. Despite the increase in volumes sold, the proportion of process water in our overall consumption was lower than a year earlier. The positive trend identified in the absolute figures is also mirrored in the specific values.

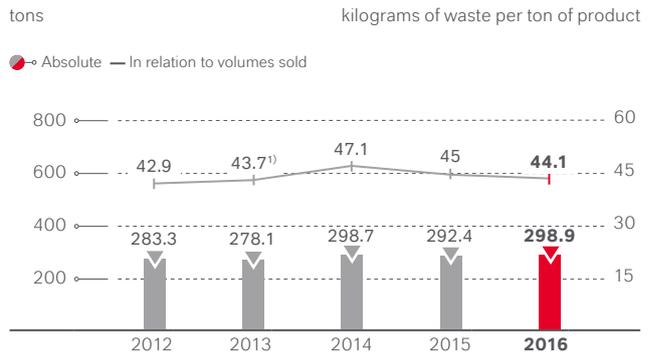
Wastewater volumes increased at a substantially lower rate than volumes sold. As a result, the specific amount of wastewater per ton of product sold decreased year on year.

Sustainable waste management

The company aims to employ a consistent material flow management process – from the use of raw materials to the manufacture of the final product – so as to deploy resources as efficiently as possible and minimize the amount of waste we produce. Some

forms of waste can be used as secondary raw materials and are thus a valuable resource. Sustainable waste management therefore involves systematically avoiding waste and, if this is not possible, using waste as a raw material or energy source. In order to minimize the amount of waste requiring disposal, we seek to continuously improve the yields achieved in our production processes. All forms of waste are disposed of or reused in compliance with statutory requirements.

Total Waste

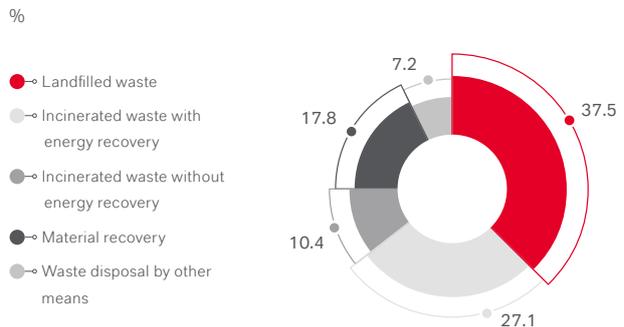


1) Figure restated

Compared with the previous year, the total amount of waste generated increased slightly. This was largely due to the amount of waste sent to landfill.

A substantial increase in production at our site in Newcastle, South Africa, which processes chrome ore, resulted in a larger amount of waste there going to landfill. Most of this was mineral ore waste. In 2016, we continued the positive trend in respect of the volume of waste per ton of product sold.

Waste for Disposal



Responsibility for the supply chain

Responsible action begins in procurement. At LANXESS, raw and other materials, plant and services must satisfy globally uniform safety and environmental protection requirements. Raw materials in particular are subject to stringent monitoring to ensure safe processing in our production facilities. For example, the procurement of any raw material is dependent on the submission by the supplier of a current material safety data sheet. Our procurement department clarifies which of the REACH requirements must be satisfied in the case of raw materials from non-European suppliers. In close dialogue with the respective producers and importers, we are actively seeking to ensure that materials procured by LANXESS that were not previously registered will be registered by the applicable deadlines.

In order to minimize our procurement risks and enhance supply chain transparency, we and five other international chemical companies founded the Together for Sustainability initiative in 2012 (see page 115).

Sustainable logistics

We select our transport solutions worldwide on a case-by-case basis, applying the principles of safety, punctuality and cost-effectiveness. We also take into account the CO₂ emissions resulting from our transports.

We are focusing especially on further expanding our use of ships as the means of transport with the lowest emissions. In 2016, we piloted a preloading concept for marine tank containers at our Leverkusen site. This will enable us to use inland vessels to transport these special containers to the seaports, thereby increasing transport safety and reducing CO₂ emissions. Following the successful conclusion of the pilot phase in November 2016, we are now working to implement the concept in our regular operations.

In Germany, we continue to use the TÜV SÜD-approved Eco Plus solution offered by logistics provider DB Schenker Rail for transporting our products by rail. The electricity required for transport is obtained from renewable energy sources. This enables us to reduce the CO₂ emissions from our German rail transport operations by almost 75 % compared with the standard solution.

Packaging is often a critical aspect in sustainable logistics processes. However, it is of lower significance to a chemical company like LANXESS because at least 60 % of our products are transported in reusable containers. Nonetheless, in this area too, we have set ourselves the goal of reducing our CO₂ emissions on a lasting basis. Wherever possible we use recyclable packaging materials.

Global dangerous goods and transport safety management

Through our global dangerous goods and transport safety management system, we ensure the avoidance of hazardous situations in the relevant processes. Safety can often be improved just by choosing the right packaging materials. For instance, load securing devices can be used to attach barrels to palettes more reliably, which prevents them from slipping during transportation and thus reduces the risk of accidents. We have a dedicated department to centrally coordinate, monitor and review the implementation of relevant dangerous goods and transport safety regulations and internal company guidelines.

The central classification of our products ensures uniform interpretation of international, regional and local dangerous goods regulations, while at the same time respecting regional and local specifics. Classification determines, among other things, the form of encapsulation (packaging and tanks), marking and labeling, permitted modes of transport and transport routes and the measures that emergency services must take in the event of a transport incident. The corresponding classification data are archived in LANXESS's safety data system for chemicals. In recent years, we have successively integrated various countries and LANXESS Group companies into this system. In 2016, we transitioned dangerous goods classification for Argentine and Australian products in line with local and international rules. Also in 2016, we assessed the entire portfolio (raw materials, intermediates, products and waste) of our subsidiary Rhein Chemie Rheinau GmbH in terms of dangerous goods regulations and incorporated it into LANXESS's global safety data system.

Storage management

We have over 420 warehouses worldwide, around half of which we operate ourselves while half are run by 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.

Uniform standards in production

LANXESS operates at a total of 54 production sites in 17 countries (sites in which it holds an interest of more than 50% and ARLANXEO sites; as of December 31, 2016). The diversity of the company's product portfolio necessitates the use of many different chemical and technical processes. Uniform standards for planning, engineering and operating facilities are applied to ensure a high level of process, plant and occupational safety. Handling chemical substances and working with technical equipment fundamentally involve health and safety risks. Wherever in the world we operate, we systematically identify these risks and the hazard potential – both for existing and new facilities – and minimize them by implementing defined preventive and protective measures. To help us achieve this, we have established LANXESS-specific guidelines within the context of our global management system. These govern our procedures for all safety-critical processes and environmental protection measures in our production facilities and cover aspects such as the formulation and implementation of technical and organizational protective measures and the environmentally friendly handling of raw materials, products and waste.

To ensure compliance with LANXESS directives and local regulations for the safe operation of facilities, experts on site conduct audits based on targeted spot checks that are carried out with a frequency appropriate to the relevant risk profile. At each facility across the globe, compliance with the safety standards must be certified regularly, at least at the intervals required by local legislation. A total of 43 production facilities (2015: 45), 15 of them in Germany (2015: 19), were audited in the context of

HSE (Health, Safety, Environment) compliance checks in 2016. The result of the audits in 2016 showed further improvements against previous years.

Systematic recording of key performance indicators

We use an electronic system for the systematic global recording of key performance indicators (KPIs) in the areas of safety and environmental protection. This system enables us to define a broad range of HSE performance data for each business unit and site worldwide. These provide a valid basis for strategic decision-making and for internal and external reporting. The data also map the progress we are making toward achieving our globally applicable HSEQ targets (see table on page 62). Generally speaking, data for all indicators except LTIFR and RIR (used to measure occupational safety) are gathered only at those production sites in which the company has a holding of more than 50%. As LANXESS has an interest of exactly 50% in ARLANXEO, the latter continues to be reflected in the LANXESS consolidated financial statements and will be fully consolidated from 2016 to 2018; the environmental data pertaining to the ARLANXEO sites will continue to be included in our key data for this period.

PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft assessed our HSE indicators for 2012 to 2016 and the necessary data recording processes in the course of a business audit, with a view to achieving a "limited assurance" rating. The current audit certificate can be found on page 234.

Environmental and Safety Performance Data*

	2014	2015	2016
Safety			
Occupational injuries to LANXESS employees resulting in at least one day's absence (per million hours worked) (MAQ ¹⁾)	2.3	2.2	2.0
Volume sold²⁾ in thousand tons/year	6,343	6,496	6,780
Energy in petajoules (10 ¹⁵ joules) ³⁾	47.3	48.3	48.4
Direct energy sources (EN3)			
Non-renewable	13.1	12.2	12.6
Renewable	0	0	0
Indirect energy sources (EN4) ⁴⁾			
Non-renewable	32.2	33.9	33.8
Other direct energy sources			
From biomass	2.0	2.2	2.0
Water in million cubic meters			
Total water consumption (EN8)	290.6	278.3	264.6
Surface water	120.5	107.0	92.1
Groundwater	6.1	6.8	6.8
Rainwater	0.4	0.3	0.4
Wastewater	1.2	1.2	1.0
Other water sources	162.4	163.0	164.3
Cooling water in total water consumption⁵⁾	236.4	225.2	213.3
Process water in total water consumption	54.2	53.1 ⁶⁾	51.3

Environmental and Safety Performance Data*

	2014	2015	2016
Atmospheric emissions in thousand tons			
Total greenhouse gas emissions CO₂e	4,777 ^{a)}	4,885 ^{a)}	5,056
Direct (Scope 1) ⁶⁾	1,845	1,643	1,741
Indirect (Scope 2) ⁷⁾	2,932 ^{a)}	3,242 ^{a)}	3,315
Ozone-depleting substances	0.00132	0.00113	0.00182
NO_x, SO_x and other emissions			
NO _x ⁸⁾	2.8	2.8	2.6
SO ₂ ⁹⁾	1.1	1.0	1.1
CO	2.1	2.2	2.0
NH ₃	0.1	0.1	0.1
NM VOC ¹⁰⁾	5.7	5.4	4.7
Wastewater in million cubic meters			
Total wastewater discharge (EN21)	267.8	257.0 ^{a)}	245.7
Cooling water (uncontaminated, without treatment) ⁵⁾	236.4	225.2	213.3
Production wastewater (with treatment)	31.4	31.8 ^{a)}	32.4
Emissions in wastewater (after treatment) in thousand tons			
Total nitrogen	0.52	0.54	0.59
Total organic carbon (TOC)	2.2	1.9	2.2
Heavy metals ¹¹⁾	0.0065	0.0059	0.0049
Waste in thousand tons			
Total weight of waste (EN22)	298.7	292.4 ^{a)}	298.9
Incineration with energy recovery	82.4	84.0	81.2
Incineration without energy recovery	26.7	30.3 ^{a)}	31.1
Landfilling	110.9	93.4	112.1
Material recovery	56.7	59.7	53.1
Other forms of disposal	22.0	25.0	21.4
Type of waste			
Hazardous	191.1	188.4 ^{a)}	196.6
Non-hazardous	107.6	104	102.3

Explanations concerning our environmental and safety performance data

* The aggregate data refer to all LANXESS production sites in which the company holds an interest of more than 50%. As LANXESS has an interest of exactly 50% in ARLANXEO, the latter continues to be reflected in the LANXESS consolidated financial statements and will be fully consolidated from 2016 to 2018; the environmental data pertaining to the ARLANXEO sites will continue to be included in our key data for this period.

The following sites are not yet included in the environmental data on account of their recent acquisition by LANXESS: Memphis and North Kingstown, U.S.A.; Sudbury, U.K.

2013/2014/2015: Some of the data are based on estimates and projections.

From this reporting period, to allow more accurate representation, the indicators are no longer displayed in 0.5 steps but are correctly rounded. Actual corrections are identified by a).

The indicators were assessed (limited assurance) by PwC GmbH Wirtschaftsprüfungsgesellschaft in the course of a business audit.

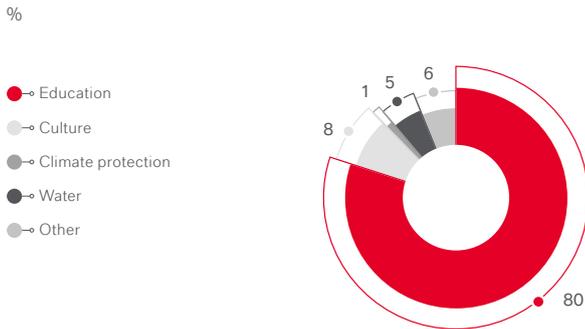
- 1) LTIFR: accident rate per million hours worked resulting in one workday or more lost following the day of the accident, calculated for all employees (including temporary workers) at all sites
 - 2) Volume sold of goods manufactured by LANXESS and sold internally to another LANXESS company or externally (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) Equivalent to circulating cooling water
 - 6) 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: 2012: 225 kt CO₂, 2013: 223 kt CO₂, 2014: 217 kt CO₂, 2015: 236 kt CO₂, 2016: 212 kt CO₂.
 - 7) All Scope 2 greenhouse gases are calculated as CO₂e. The conversion factors used were provided by the energy producers for 2008 or 2009. Where these were not available, factors from the IEA (International Energy Agency) for 2012 were used for fiscal year 2014, factors from 2013 were used for fiscal year 2015 and factors from 2014 were used for fiscal year 2016.
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 2016 amounted to 4,446 kt.
 - 8) Nitrogen oxide (NO_x) calculated as NO₂ (excluding N₂O – nitrous oxide)
 - 9) Sulfur dioxide (SO₂) + SO₃ calculated as SO₂
 - 10) Total VOC (volatile organic compounds) excluding methane and acetone
 - 11) Heavy metals (arsenic, cadmium, chromium, copper, mercury, nickel, lead, tin, zinc)
- a) Values restated due to supplementary notifications

SOCIETY

As a company, we draw numerous benefits from the society of which we are part – well-trained employees, satisfied customers, legal and political stability and an excellent infrastructure. We therefore believe it is only right that, in the context of corporate citizenship, we take responsibility for the development of the social environment in which we operate. Our social commitment is aligned to our corporate expertise and targets and is focused on four areas of activity: education, climate protection, water and culture. In this respect, we concentrate especially on ensuring that people benefit from our projects. We also aim in the future to more specifically monitor the measurable effect of our commitment.

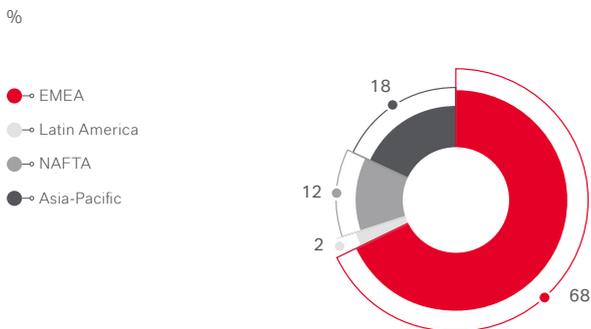
Europe remained the regional focus of our activities in the reporting period. Overall, around 200,000 (2015: more than 335,000) mainly young people benefited from our projects, which we funded with some €1.5 million in 2016 (2015: around €2 million).

Social Activities by Topic*



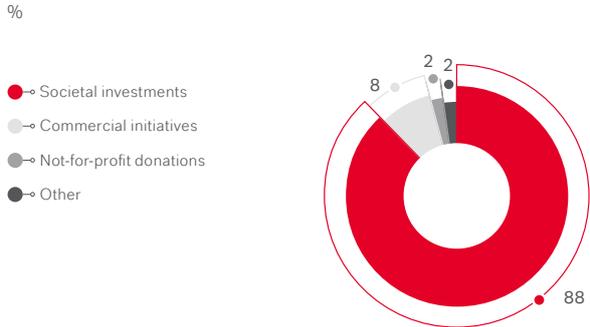
*Number of projects: 87

Social Activities by Region*



*Number of projects: 87

Social Activities by Type of Investment*



*Number of projects: 87

In this Annual Report, for the first time we have additionally evaluated our projects as to whether they are purely not for profit (“Not-for-profit donations”), represent investments in the social environment where our sites are located (“Societal investment”) or couple corporate objectives such as image, sales and earnings with social motives (“Commercial initiative”). Also, in the reporting year, we began to develop performance indicators to measure the social impact of our activities. The results of the first projects evaluated show that a large majority of participants in our activities regard them as having a major to very major impact. We are seeking to progressively expand and optimize the evaluation system.

LANXESS promotes education

We endeavor to encourage young people worldwide to develop a passion for chemistry at a young age and in this way make them aware of the diverse career opportunities that the LANXESS Group offers. Within the context of the LANXESS education initiative, we have established projects at many of our sites to pursue these objectives in varying ways.

We underscore our clear commitment to Germany as a business location and a base for the chemical industry not just through financial assistance for schools close to our sites but also through collaboration in the provision of scientific teaching materials. For instance, the teaching materials we have produced on the subjects of mobility, globalization, urbanization and water are used in around 270 German elementary schools. In the reporting year, we also provided financial support for “Your Turn 2016 – Bewege Köln!” (Your Turn 2016 – Move Cologne) – a new program for school students aged between 14 and 16. They spent three days looking at how they could take responsibility in their city, make a contribution or work as a team to achieve change.

A very successful commitment initiated in 2010 is our partnership with Teach First in Germany and Teach For India (TFI). We are one of the main sponsors of these not-for-profit organizations. Both are national network partners of the global Teach For All initiative, which aims to help school students who have had a difficult start in life, fostering their individual talents and developing their career prospects. Particularly highly qualified university graduates who also have the requisite soft skills act as fellows for a period of two years, helping schools in socially disadvantaged areas with education and schooling tasks.

We have also been active for many years in supporting education initiatives in South Africa. For instance, we have funded the construction of new classrooms at a school for physically and mentally disabled children close to our site in Newcastle. The last of a total of four buildings was completed in June 2016.

Since its launch, the LANXESS education initiative has reached hundreds of thousands of children, adolescents and young adults worldwide. Feedback from teachers, principals and school authorities shows that the initiative has significantly enhanced the importance of the MINT subjects in school timetables.

Committed to climate and water

A further focus of our corporate responsibility is enhancing awareness worldwide of the causes and consequences of climate change and water scarcity – for both drinking and industrial uses.

In Brazil, we promote scientific knowledge and environmental awareness at our various sites through the “Green Cycle” competition, which gives participants the opportunity to develop their own environmental protection projects. LANXESS provides full funding for implementing the winning projects. Participants receive assistance from an agency that specializes in environmental projects. Since the competition began in 2010, we have successfully initiated 40 projects that have included raising the awareness of children, adolescents and adults for the importance of environment- and climate-friendly behavior, establishing recycling communities and remediating polluted land.

In China, we organized a research competition entitled “Clean water for a better life” for the second year running. Students from nine universities along the river Yangtze were asked to develop approaches for protecting water as a vital resource. Statistically, China has one of the lowest per capita water supplies in the world. We supported the research teams with funding, training and specialists who assisted on a voluntary basis. The competition saw a significant increase in popularity compared with the first year. 15 projects from nine universities were included in the final selection and twice as many people – more than 18,000 – took part in the public vote to determine the winners. A team from Tongji University won the most votes for its research into a cleaning agent for treating industrial wastewater.

Promoting art and culture

We are convinced that successful scientific work and, ultimately, social progress can only flourish in a culture of thought, research and critical evaluation. As part of our cultural commitment, we therefore sponsor both literary and musical talents. We have been the main partner to lit.COLOGNE, Europe's biggest literature festival in Cologne, since 2010. The second mainstay of our cultural commitment is support for musical training. The Young Euro Classic initiative brings together talents from Germany and LANXESS's main markets around the world. In Japan, we support the Ozawa International Chamber Music Academy, which enables talented young musicians from across Asia to receive a top-quality musical education. Furthermore, we are a partner to the “Kölner Philharmonie.” In addition to the “Acht Brücken” (Eight Bridges) contemporary music festival, we support initiatives such as a discounted concert subscription for university students.

→ Alleviating distress, creating opportunities

Since the beginning of 2015, more than one million refugees have come to Germany to escape war and poverty in their countries of origin. We, like others, wish to make a helpful contribution to alleviating the immediate distress of these people and to providing them with opportunities for the future. To this end, we are participating in the Germany-wide initiative “Unternehmen integrieren Flüchtlinge” (Companies integrate refugees). As part of this commitment, we are offering refugees individual assistance in choosing a career and enabling them to participate in specially tailored internships, training and work shadowing programs. In addition, we have accepted two young refugees from Syria and Iran to our one-year “XOnce” orientation program with which we are currently helping ten young people prepare for vocational training who were not yet ready to take this route. In October 2015, we announced that we would provide €400,000 to support selected refugee aid projects in Cologne, Leverkusen, Dormagen, Krefeld and Brunsbüttel. These funds were used mainly to finance language teaching for children at schools as part of their preparatory classes and for adults at further education centers. In addition, we have encouraged our employees' personal involvement by granting them up to eight days of paid vacation.