

GRI SUPPLEMENT 2018

Supplementary
sustainability information
and GRI Index as part of the yearly
reporting of Covestro AG





»TOGETHER«

A sustainable world.
A pleasant, simple life for as
many people as possible.

This does not need to be a utopia,
but we can only reach this
goal together. Working together,
supporting others
and inspiring others –
this is the Covestro path.

The path to our vision:

To make the world a brighter place.

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Reporting principles

Non-discrimination

We are committed to non-discrimination. For the sake of readability, this report generally avoids using gender-specific wording. All references to persons are intended to apply equally to all genders.

Rounding

As the indicators in this report are stated in accordance with commercial rounding principles, totals and percentages may not always be exact.

Language versions

This GRI Supplement is available in both German and English. If there are any differences, the German version is authoritative.

Key



References to **websites**



References to the **Management Report**



References to the **Notes of the Consolidated Financial Statements** of the Covestro Group



References within the **GRI Supplement**

Publication date

This GRI Supplement was published on February 25, 2019.

1. About this Report

Covestro provides comprehensive and transparent information on issues that are material to the company and our stakeholders. We measure our sustainability performance using both financial metrics and material nonfinancial indicators, all of which are published in the Covestro Annual Report. Through this process, we aim to illustrate how environmental and societal considerations are closely linked to our long-term business success.

The Annual Report and the supplementary sustainability information contained in this GRI Supplement comprise our annual sustainability reporting. The contents of this GRI Supplement are a further contribution to transparent reporting, by which we fully comply with the requirements of the "core" option of the internationally recognized GRI Standard. The reporting period covers the period from January 1 to December 31, 2018. The most recent Annual Report and its associated GRI Supplementary Report were published in February 2018.

Covestro's sustainability reporting follows international guidelines and recommendations, including those on the definition and selection of nonfinancial indicators and on reporting. Our sustainability reporting is prepared in accordance with the "core" option of the Global Reporting Initiative's (GRI) Sustainability Reporting Standards (SRS). A GRI Index can be found at the end of this document. The United Nations Sustainable Development Goals (SDGs) are a guiding force behind our corporate strategy. They are key to shaping the direction of our company, for example by also serving as a source of innovation. In this Report, the UN Sustainable Development Goals were not linked to the individual GRI indicators in the GRI Index. How the SDGs relate to the individual GRI indicators can be seen on the GRI website.

In this reporting period, we have for the first time separately referenced content that follows the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). A corresponding overview immediately precedes the GRI Index.

As required by the German Commercial Code (HGB §§ 315b, 315c in conjunction with §§289c to 289e) relating to nonfinancial statements (NFS), reporting on sustainability matters is included in the Group Management Report and the associated statements were audited along with the consolidated financial statements.

In selecting and measuring indicators, the relevant GRI aspects focusing on key sustainability issues were taken into account. Our greenhouse gas emissions (Scope 1 and 2) are recorded in line with the requirements of the Greenhouse Gas Protocol (GHG Protocol).

Data collection for nonfinancial metrics

We compile our nonfinancial metrics, on areas such as safety and environmental performance for example, for the Group as a whole using our site information system. With this system we cover all fully consolidated companies in which Covestro generally holds at least a 50% share. This framework is used to globally compile all the local environmentally relevant figures and indicators from defined sites, predominantly our production as well as research and development (R&D) centers. Irrespective of Covestro's stake in these companies, their environmental performance metrics are fully consolidated. If other external companies are present at a site (e.g. in chemical parks) or if joint venture partnerships exist, only the part attributable to Covestro's operating activities is reported. Data on workplace accidents, transportation and environmental incidents are collected at all sites worldwide.

Our human resources metrics are obtained from our global human resources information system. Compliance incidents throughout the Group are compiled in an incident database. These are then carefully reviewed so appropriate remedial action can be identified and implemented. Similarly, we record violations and complaints about our products in a reporting system, evaluate them and initiate appropriate measures.



www.un.org/sustainabledevelopment



www.globalreporting.org/standards/resource-download-center



www.fsb-tcfd.org



See section 11 "TCFD and GRI Indexes"



For more information, see our Annual Report, Independent Auditor's Report

As one of the six founding members of the “Together for Sustainability” (TfS) initiative launched by leading chemical companies, Covestro is working toward the global harmonization of its suppliers’ sustainability assessments and audits. Covestro evaluates the sustainability performance of its suppliers by means of assessments conducted online via the TfS platform or with on-site audits. All results of the sustainability assessments and audits are available to TfS members on an online platform. This platform provides them with information for continual monitoring with a view to encouraging improvements using the supplier evaluations.

External assurance

KPMG AG has audited this report on a limited assurance basis to assess compliance with the requirements of the GRI SRS. The audit was conducted in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised). The data calculated by the external provider EcoVadis and TfS is not a component of this audit. The independent assurance report forms part of this report. The sustainability section in the combined management report for the 2018 fiscal year has been audited in full with “reasonable assurance” by the external auditor in accordance with §317 of the German Commercial Code (HGB).



Limited Assurance Report
of the Independent Auditor
regarding the GRI
Supplement 2018

2. Embedding and Management of Sustainability Aspects

Company policies and voluntary commitments

Specific requirements regarding important sustainability issues are set forth in our six Corporate Policies. They serve as the basis upon which we realize the sustainability aspects of our strategy.

Creating value: Covestro aims to develop products and solutions that create value for customers, society and the environment, as well as employees and investors. We accomplish this with products that have superior material properties, environmental compatibility, user friendliness and cost effectiveness. Covestro targets a range of economically important industries. In doing so, it strives for resource efficiency over the whole life cycle, thus maximizing the value created from the resources used.

Sustainability: Our aim is to combine economic success with environmental and social goals. This type of sustainable business activity is in line with our vision of "making the world a brighter place". Our decisions and our actions therefore take account of all three pillars of sustainability – people, planet and profit – and are based on the principle of avoiding negative impacts in all three of these areas. Our sustainability policy underpins this intention. Specific committees have been appointed at Covestro to define and manage important sustainability issues. These include the development and implementation of targets and action plans.

Covestro regards the UN Sustainable Development Goals (SDGs) as highly relevant: therefore we have integrated them in our corporate strategy. Among other things, we have set out to align our R&D project portfolio even more closely with the UN SDGs.

Innovation: Innovation is vital if we are to master the global challenges of our changing times and create value in the long term – in accordance with and inspired by the principles of sustainability. Accordingly, we are continuously developing new products, applications and technologies that offer new perspectives. Every single employee is involved with innovation.

Employees: Covestro's success is based on the skills and strong commitment of our employees. We therefore offer an attractive and safe work environment and promote both the professional and personal development of our employees. Curiosity, courage and diversity are the values that shape our corporate culture and enable our workforce to contribute to the success of the company. The core skills and leadership abilities that guide the professional development of our employees are aligned with these values.

HSEQ (Health, Safety, Environment and Quality): Occupational health, safety, environmental protection, energy efficiency and quality management are key factors in achieving our goals. We set high standards and always aim for continuous improvement. That is the primary goal of our integrated HSEQ management system, which is used to ensure implementation of our HSEQ Group guidelines in accordance with internationally recognized standards (OHSAS 18001, ISO 9001, ISO 14001 and ISO 50001).

Compliance: Covestro's corporate conduct is characterized by a sense of responsibility as well as ethical principles. Strict compliance with all statutory requirements and voluntary commitments is therefore considered to be of the utmost importance and is anchored in internal regulations that apply to all employees worldwide.

Further codes and voluntary commitments additionally govern the behavior of and interaction between employees and suppliers in specific areas. In its voluntary commitment to responsible lobbying, Covestro has created clear and binding rules for its involvement in the political sphere. In conjunction with the more comprehensive directive, this voluntary commitment applicable across the Group requires transparency and openness when working with representatives of political institutions. It stipulates that Covestro shall make no direct donations to political parties, politicians, or candidates for political office.



For more information, see our Annual Report, Group Management Report, section 2, sub-section "Strategic goals and activities"



See section 2 "Embedding and Management of Sustainability Aspects", sub-section "Covestro and the UN Sustainable Development Goals"



See section 3 "Innovation"



For more information, see our Annual Report, Group Management Report, section 4



For more information, see section 7 "Integrated Management System for Occupational Health, Safety, Environmental Protection and Quality"



For more information, see our Annual Report, Group Management Report, section 24

In accordance with local law, a political action committee (PAC) was set up in the United States which is only open to Covestro employees, but remains completely independent of the Group. The PAC manages individual voluntary donations by employees to support political candidates, ballot initiatives or legislative decisions in the United States. In addition to its externally published voluntary commitment, Covestro has signed up on a voluntary basis to the European Transparency Register. The purpose of this register is to record and monitor lobbying activities at the EU level, requiring companies to disclose certain information such as their activities in various areas of interest or the number of staff involved in lobbying, for example. Detailed regulations also apply to lobbying activities in the United States, including a duty to report all political interactions on a quarterly basis, which Covestro meets in full.



ec.europa.eu/transparencyregister

Covestro and the UN Sustainable Development Goals

In their entirety, the United Nations Sustainable Development Goals (SDGs) are crucial for the development and improvement of living conditions throughout the world. We therefore place importance on not losing sight of these overarching UN Sustainable Development Goals. In our opinion, the UN SDGs are all equally important and are closely interconnected. We seek to contribute to and maximize our influence on reaching these goals. Above all, the UN Sustainable Development Goals are a source of inspiration for innovations and indicators for the future direction of the company.

We are aware that as part of the chemical industry, Covestro bears a special responsibility. We therefore seek to make positive contributions, also in particularly challenging areas or at least ensure our activities do not have a negative impact. It is with this in mind that we published our voluntary "Corporate Commitment on our Contribution to the United Nations Sustainable Development Goals" on our website in 2018.



www.covestro.com/en/sustainability/service-downloads/policies-commitments

Our focus in 2018 was on raising the overall awareness of the United Nations Sustainable Development Goals within the Covestro organization. To this end, our study about Covestro's contribution to achieving the UN SDGs from the previous year was summarized and presented to our employees.

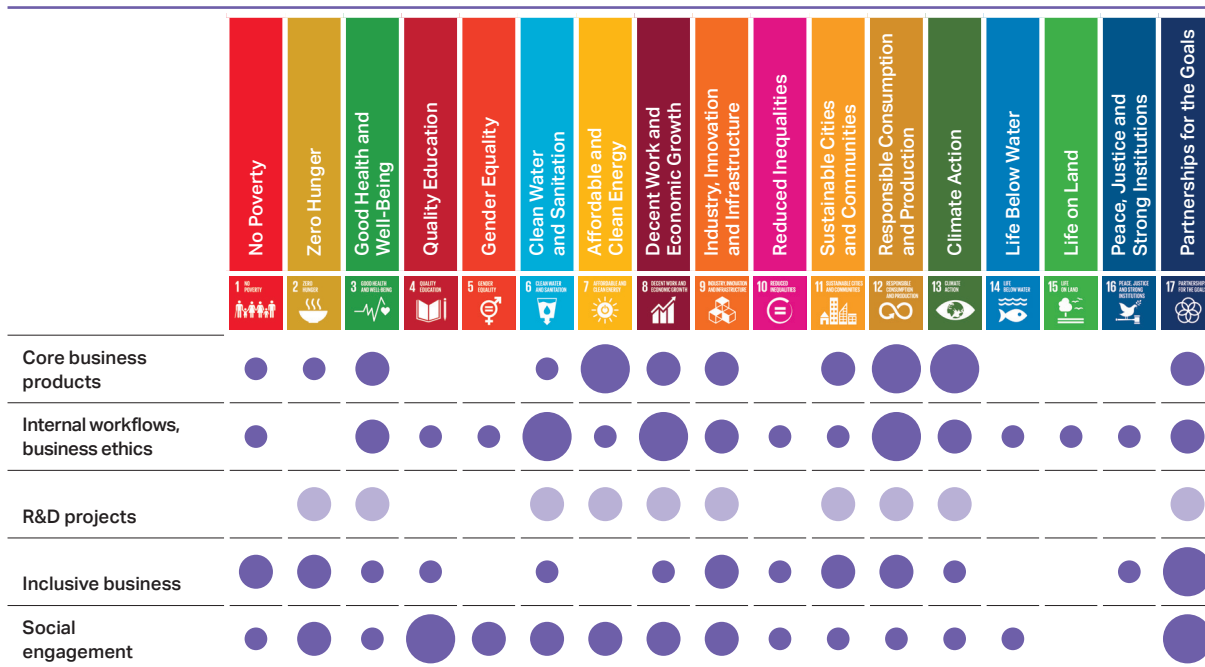
In this 2017 internal study on our contribution to the UN Sustainability Goals we considered the 17 main UN Sustainable Development Goals as well as their respective sub-goals and covered five categories (see figure on the following page):

- Products of our core business
- Own operations and business ethics
- R&D projects
- Inclusive business (using innovative solutions to improve the living standards of low-income communities)
- Social engagement (mostly through donations undertaken together with partners, educational activities and employee volunteering).



covestro.com/en/sustainability/lighthouse-projects/inclusive-business

Covestro's Current Contribution to UN Sustainable Development Goals (2017 Internal Study)¹



¹ Assessment of contribution using for example the sales amount for core products, internal processes, business practices, portion of R&D project spending, donation budgets, etc.



The study found that Covestro is making positive contributions to all 17 UN sustainability goals, with different contribution levels.

Most of these contributions relate to our core products, whose use helps to save large amounts of energy, and to our own workflows and business practices.

In addition to evaluating the positive contributions to UN Sustainable Development Goals already being made by Covestro, we believe that such an analysis must also aim to identify any additional challenges Covestro may face. We define these as issues that, if ignored or not addressed, could potentially be seen by our stakeholders as having a negative impact on individual UN Sustainable Development Goals. For instance, we are aware that our production processes require considerable amounts of energy. This is why Covestro has set itself the goal of reducing the specific greenhouse gas emissions arising from our production activities by 50% by the year 2025 compared with the base year 2005. To this end, we have taken many initiatives to cut energy consumption in production and lower our greenhouse gas emissions. In addition, some of our products help conserve energy during their use phase. Many of these products save more energy in use than was consumed during their production; a good example is building insulation.



See section 9 "Environmental Protection", sub-section "Energy consumption"

The UN Sustainable Development Goals were once again included in the interviews and discussions conducted with stakeholders during the reporting period. The majority of our stakeholders found that Covestro's approach was a good starting point for addressing this thematic area.

Nonfinancial goals

Since 2016, Covestro has been following a specific Group-wide sustainability program which sets forth ambitious goals through 2025. The individual goals address key aspects of individual areas from innovation and procurement through to production and marketing. Our five nonfinancial goals are aligned with the UN Sustainable Development Goals and contribute positively in various ways to the implementation of all 17 SDGs.



See section 2 "Embedding and Management of Sustainability Aspects", sub-section "Covestro and the UN Sustainable Development Goals"

In addition, occupational health and safety, environmental protection, energy efficiency and quality management goals have been defined as part of our integrated HSEQ management system.



For more information, see our Annual Report, Group Management Report, section 7

Our five nonfinancial goals are outlined below:



Our R&D project portfolio is aligned with the UN Sustainable Development Goals
 By 2025, our target is to have 80% of research and development expenditure go toward fields that contribute to reaching the UN SDGs. Many of our innovations and research activities already help to master global challenges. These include the development and popularization of low-carbon solutions, innovations aimed at improving resource efficiency, and cost-effective products that are both environmentally friendly and serve the advancement of society.



For more information, see our Annual Report, Group Management Report, section 3, sub-section "Innovation management"



100% of our suppliers comply with our sustainability requirements
 Conducting business activities in a sustainable manner is of the utmost importance – and that commitment applies to our suppliers as well. All suppliers must comply with our code of conduct, which they commit to by accepting the conditions of our purchase orders or contracts. Suppliers with recurrent annual invoicing exceeding €100,000 are continually assessed by external accredited auditors, either online or locally on-site, and must comply with our sustainability requirements. This represents some 95% of our total purchasing volume. We partner with our key suppliers to assist them in improving their sustainability performance.



For more information, see our Annual Report, Group Management Report, section 6



Reduce specific greenhouse gas emissions by 50% from the 2005 baseline figures
 By 2025, we aim to halve our specific greenhouse gas emissions – i.e. emissions generated per metric ton of product produced – compared with the base year of 2005. To this end we have established an energy management system which has been gradually rolled out around the globe since 2008 and now covers many of our production plants. Besides optimizing specific energy consumption and associated CO₂ emissions, we have also taken steps to reduce the emissions of other greenhouse gases such as nitrous oxide, methane and partially fluorinated hydrocarbons.



See section 9 "Environmental Protection", sub-section "Energy consumption"



Ten million people in underserved markets benefit from our solutions
 We are working to help improve the lives of at least ten million people in underserved markets, primarily in developing and emerging countries, by the year 2025. In collaboration with customers, governmental and non-governmental organizations, we intend to develop affordable solutions based on our technologies and products that will open up new business models to improve the economic and social situation in these regions. Our focus is on affordable housing, sanitation and food security.



For more information, see our Annual Report, Group Management Report, section 3, sub-section "Strategic partnerships"



Getting the most out of carbon
 Our products are based on carbon and we want to use it as intelligently as possible. Increasing carbon productivity means creating more value using less carbon-based fossil resources. We are currently working with a group of international organizations in the Carbon Productivity Consortium to develop a generally recognized methodology for assessing carbon productivity.



For more information, see our Annual Report, Group Management Report, section 3, sub-section "Strategic partnerships"

3. Innovation

Innovations aimed at improving overall sustainability play a crucial role at Covestro. In the reporting period, the close link between innovation and sustainability was evident across our various business activities, in particular in the development of sustainable technologies, advances in the use of biobased raw materials, and the use of renewable energy. Our innovation activities also include new developments in process engineering, business process optimization and the development of new business models. To implement these initiatives as speedily as possible, Covestro is actively pursuing a range of different measures. For instance, it is fostering the innovation potential of its workforce, collaborating with academic and industrial partners, cooperating with technology platforms and start-ups, exchanging best practice within international consortia and actively promoting participation in political forums and initiatives.

Covestro is continually making progress in developing new technology. Global collaboration with partners from academia and industry under the banner of open innovation is of great strategic importance for Covestro. Already since 2008, Covestro and RWTH Aachen University have operated the CAT Catalytic Center which conducts basic research in the field of catalysis. One of the partnership's particularly successful breakthroughs was enabling the use of CO₂ as a raw material in plastics production. At the CAT Catalytic Center, fundamental research is also being conducted for the new Carbon4PUR project funded by the European Union. This research project run by Covestro along with 13 other partners from seven European countries aims to promote sustainable resource-efficient technologies that reduce the overall use of petroleum. The project focuses on employing waste gases from the steel industry, such as CO₂, in the manufacture of polyurethanes. Covestro already uses CO₂ from chemical industry waste gases as an alternative raw material to produce a key component for polyurethane foam. These research activities and their implementation in production illustrate the promising route toward a circular economy and the intelligent use of closed carbon cycles.

As part of its efforts to develop its business model, since midway through the reporting period Covestro has been partnering with the Plug and Play Tech Center, an innovation center and one of the world's top start-up accelerators based in Silicon Valley, USA. Through its partnership with this accelerator Covestro is seeking to promote a start-up culture over the long term, while at the same time exploring new business opportunities in the fields of innovative materials and digitalization.

In product development too, Covestro scored further successes during the reporting year, for example in the field of LED technology. Our polycarbonate-based materials solutions, were instrumental in shaping the development of LED technologies for the lighting market. Another innovation is updating our thermally conductive Makrolon™ portfolio based on customer feedback and the addition of types with electrical insulation properties. Compared with conventional aluminum heat sinks, the new Makrolon™ allows the development of an unprecedented variety of heat management applications for LEDs. In turn, this will enable new designs for lighting that optimally leverage the advantages of LED technology. The key to success here is a new application technology employing multi-component injection molding systems.

Solutions for the healthcare sector also benefit from technological innovations: polycarbonate-based materials contribute to continual improvements in quality and safety standards. In order to reduce the risk of infection, hospitals are cleaning medical devices such as infusion pumps and patient monitors with increasingly aggressive disinfectants. Our latest polycarbonate-based composite materials help protect this equipment against such chemicals.

In addition, Covestro is constantly striving to improve the technologies and processes it uses in its own production plants with a view to efficiency and environmental impact. In this context, research is underway on new high-performance thermoplastics in collaboration with the German Ministry for Education and Research (BMBF) and partners. These plastics theoretically have a much more advantageous environmental footprint than other alternatives currently available on the market.

Alongside the investment in technology, the research and development of products based on biobased raw materials also plays a key role. One of Covestro's aims is to use alternative, non-fossil raw materials and biobased processes in production. To this end, Covestro is participating in international consortia such as Biorizon, a cross-border initiative of independent research institutions which partner with



For more information, see our Annual Report, Group Management Report, section 3



For more information, see our Annual Report, Group Management Report, section 3, sub-section "Resource-efficient circular economy solutions"

numerous companies for the purpose of working on joint research and development projects focused on biobased aromatics. Together with other partners, we were also able to produce initial laboratory-scale quantities of the important basic chemical aniline entirely from biomass. To date, aniline has been manufactured worldwide solely from fossil resources such as petroleum. Our next research steps aim to scale up the production of biobased aniline, ultimately enabling industrial-scale production. Aniline is used in the chemical industry as a feedstock for numerous products and at Covestro for manufacturing a precursor for polyurethane insulation foam.

Covestro and our partners also engage in dialog with political decision-makers on seminal issues. In the interests of providing a platform for the interdisciplinary exchange of ideas relating to sustainable sources of raw materials, Covestro organized a raw materials summit in 2017 in collaboration with the Technical University of Berlin and DECHEMA Gesellschaft für Chemische Technik und Biotechnologie in Berlin. During the reporting period, the summit was held for the second time in Berlin, sponsored by the German Ministry for Education and Research (BMBF). The participants discussed the use of renewable resources as a replacement for petroleum in the chemical industry. Five international start-ups were honored as 2018 Resource Innovators at this event.

In 2018, Covestro also made further significant progress in the use of plant-based raw materials in plastics production with the aim of reducing dependence on fossil resources and improving the CO₂ footprint of production. These biobased hardeners, which contain up to 70% carbon sourced from biomass, are used not only for traditional coating and adhesives applications such as in the furniture industry for example, they are also particularly important in our specialty solutions for textiles, cosmetics and elastomers as well as in thermoplastic elastomers, now part of our Coatings, Adhesives, Specialties (CAS) segment.

As well as optimizing its own processes, Covestro also helps customers to develop and roll out sustainable and environmentally friendly CAS systems. In China in particular, we were able to tap into the market trend and support our customers in shifting to less solvent-intensive or water-based systems. We also developed hardeners, binding agents and formulations tailored to the local Chinese market. Based on a strong product portfolio, we will continue our work on water-based systems.

As part of our sustainability program, Covestro is also developing materials and technologies for generating renewable energy, with a current focus on wind power. In particular, Covestro has developed innovative technology for manufacturing rotor blades for wind turbines. A special casting system is used to produce the innovative rotor blades from polyurethane resin and woven fiberglass. The first polyurethane wind turbine in the world is being tested for electricity generation by a Chinese customer: a 2.2 megawatt wind turbine from Envision powered by TMT-manufactured rotor blades. At a length of 59.5 meters, the three-component polyurethane blades exceed the properties achievable to date. The outer coating consists of epoxy.

To better leverage Covestro's own internal innovation potential the company runs a global "Start-up Challenge" employee innovation program specifically to promote creativity, ideas and entrepreneurial thinking at Covestro. Employees from all divisions had the opportunity to submit their business and project ideas to Covestro products and corporate goals in the second half of 2017. Around 600 employees from all over the world participated in the Group-wide contest. The winning team was announced in February 2018. Its members were partly released from their work duties for a year and given a project budget of €1 million to implement their project idea. The next milestone will be to develop the prototype for a new product for automotive paint shops for testing on the market. Furthermore, the other ideas submitted are also being systematically pursued.



press.covestro.com/news.nsf/id/Employees-become-founders

4. Employees

People strategy and processes

Covestro's people strategy is derived from our corporate strategy. Its targets are guided by our corporate goals and our corporate values. The overarching goals are set by the Head of Human Resources in conjunction with Covestro's Board. The HR organization plays a key part in our company's success by promoting the strategic action fields employee engagement, skills development, leadership and work environment. It creates a framework for professional and innovative employee life cycle management and provides proactive support to employees during their entire tenure at the company. Based on this people strategy, all divisions in the company set specific job-related goals which are agreed with the next level(s) of management. Monitoring, coaching and reviews, as well as any necessary changes, are carried out in the regular meetings between employees and line managers.

To assure agility in the HR function, we are continually developing our organization, processes and system environment. For instance, a state-of-the-art human resources management system was introduced in 2018.

Employee metrics

Diversity and internationality

As of December 31, 2018, Covestro had 16,770 employees worldwide, of which 76% were male and 24% were female. Their average age was 43.2 years. The company-wide Diversity & Inclusion program aims to make progress on and promote diversity in the Group. This includes professional succession planning with a special focus on diversity targets.

In the reporting year, Covestro's worldwide workforce comprised people of 84 different nationalities, with 11 nationalities represented at executive management level.

The majority of Covestro's employees (57.1%) worked in Europe, the Middle East, Africa and Latin America (EMLA region). 26.4% of our employees were based in the Asia-Pacific region (APAC), while the United States, Canada and Mexico (NAFTA region) accounted for 16.5% of the workforce.

The percentage of temporary employees amounted to 1.5%.

Employees¹ by Employment Status, Region and Gender in 2018

	APAC		EMLA		NAFTA		Total
	Women	Men	Women	Men	Women	Men	
Permanent employees	1,278	3,113	2,016	7,352	624	2,132	16,515
Temporary employees	16	20	62	151	3	3	255
Total	1,294	3,133	2,078	7,503	627	2,135	16,770

¹ The number of employees on either permanent or temporary contracts is stated in full-time equivalents (FTE). Part-time employees are included on a pro-rated basis in line with their contractual working hours.

Worldwide, 14.8% of all permanent employees worked part-time.

Percentage of Permanent Employees¹ by Type of Employment and Gender in 2018

	Women	Men	Total
Part-time	709	1,783	2,492
Full-time	3,389	11,004	14,393
Total	4,098	12,787	16,885

¹ The number of employees (headcount) irrespective of their degree of employment is stated.



For more information, see our Annual Report, Group Management Report, section 4

The percentages of male and female employees by employee group have remained largely constant.

Percentage of Employees¹ by Employee Group and Gender in 2018

Employee group	Women	Men	Total
Senior management	2.4	9.5	11.9
Junior management	6.7	15.7	22.4
Skilled workers	14.7	51.0	65.7
Total	23.8	76.2	100.0
Trainees	18.9	81.1	100.0

¹ The percentage of employees on either permanent or temporary contracts is calculated on the basis of full-time equivalents (FTE). Part-time employees are included on a pro-rated basis in line with their contractual working hours.

Percentage of Employees¹ by Employee Group and Age Group in 2018

Employee group	< 30 years	30 to 49 years	≥ 50 years	Total
Senior management	0.0	6.0	5.9	11.9
Junior management	1.2	14.5	6.7	22.4
Skilled workers	11.3	34.2	20.2	65.7
Total	12.5	54.7	32.8	100.0

¹ The percentage of employees on either permanent or temporary contracts is calculated on the basis of full-time equivalents (FTE). Part-time employees are included on a pro-rated basis in line with their contractual working hours.

Work-life balance

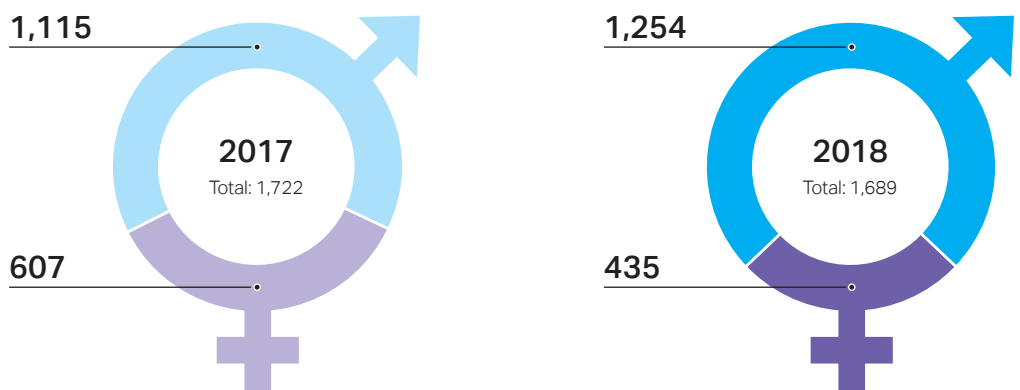
We support work-life balance for our employees. For instance, partnerships with day care centers and financial support for vacation care for school-age children are among the solutions we offer to enable employees to combine work with their family responsibilities. The programs offered by Covestro can differ from site to site.

Provided it is compatible with operational requirements, Covestro allows employees to take extended leave from work for personal projects such as scientific research, university studies or other purely personal reasons. Employees around the world take advantage of this offer from time to time.

To both male and female employees we grant parental leave as required by law, and we offer support when employees need to care for relatives.

Attracting and retaining qualified employees

New Hires, Total 2017/2018



1,689 new employees were hired worldwide in the reporting year, the majority in the EMLA region. Since production and associated jobs accounted for over 55% of new hires (previous year: 42%), where

traditionally the majority of applicants are male, the percentage of male new hires is higher in 2018 than in the previous year.

In general we welcome applications from all candidates, irrespective of their ethnic origin, nationality, religion, ideology, gender, age, disability, appearance and/or sexual identity. We are committed to the principle of treating all applicants fairly and avoiding discrimination of any kind.

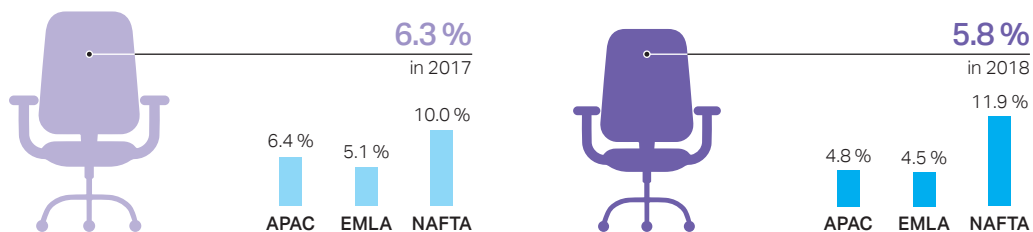
New Hires¹ by Age Group, Gender and Region in 2018

	APAC		EMLA		NAFTA		Total	
	Absolute	%	Absolute	%	Absolute	%	Absolute	%
Women	124	7.3	244	14.5	67	4.0	435	25.8
< 30 years	50	3.0	131	7.8	22	1.3	203	12.0
30 to 49 years	72	4.3	96	5.7	37	2.2	205	12.2
≥ 50 years	2	0.1	16	1.0	8	0.5	26	1.6
Men	286	16.9	734	43.5	233	13.8	1,254	74.2
< 30 years	121	7.2	360	21.3	94	5.6	575	34.1
30 to 49 years	155	9.2	327	19.4	109	6.5	592	35.0
≥ 50 years	10	0.6	47	2.8	30	1.8	87	5.1
Total	410	24.3	978	57.9	300	17.8	1,689	100.0

¹ Employee figures are stated in full-time equivalents (FTE). Percentages represent the distribution of new hires.

Covestro promotes young talent through internships, vocational training and trainee programs. Worldwide, the company employed 470 interns in total in 2018. In the previous year, this number was 499.

Turnover Rate, Total 2017/2018



Employee turnover rates in the different regions and age groups varied widely in some cases. This is primarily affected by cultural factors. The greater fluctuation in the NAFTA region compared with 2017 was due to the divestiture of the polycarbonate sheet business during the reporting year.

Employee Turnover¹ by Age Group, Gender and Region in 2018

	APAC		EMLA		NAFTA		Total	
	Absolute	%	Absolute	%	Absolute	%	Absolute	%
Women	79	6.3	93	4.4	70	11.0	242	6.0
< 30 years	24	13.3	37	9.3	9	9.9	70	10.5
30 to 49 years	51	5.1	26	2.3	19	6.3	96	4.0
≥ 50 years	4	5.6	30	5.0	42	17.2	76	8.4
Men	127	4.1	353	4.6	268	12.1	748	5.7
< 30 years	39	9.2	93	7.7	30	12.8	162	8.7
30 to 49 years	76	3.2	80	2.4	69	7.4	225	3.4
≥ 50 years	12	4.1	180	5.6	169	16.2	361	7.9
Total	206	4.8	446	4.5	338	11.9	990	5.8

¹ Employee figures are stated in full-time equivalents (FTE). The turnover rate is calculated as the ratio of the total of all employer- and employee-initiated terminations, the end of fixed-term contracts, retirements and deaths to the average number of employees (FTEs).

Conditions of employment and social responsibility

Covestro regards fair and respectful working conditions as essential. We provide information, advice and resources to prevent violations of laws or corporate guidelines. If any breach is suspected, employees can contact their Compliance Officer at any time, anonymously if wished. All suspected breaches of compliance are recorded using standard Group-wide criteria. This applies to all labor law-related matters such as working conditions, possible cases of discrimination and potential violations of the rights to exercise freedom of association and collective bargaining, as well as generally with regard to human rights. If material risks arise from legal disputes and proceedings, these are published in the notes to the consolidated financial statements.

In the year under review, around 55% of our employees worldwide were subject to collective bargaining or company agreements. The contractually agreed working hours of our employees do not exceed 48 hours per week in any country. An exception is made for operational reasons for fire brigade personnel at one German facility. At various country subsidiaries, the interests of the workforce are represented by elected employee representatives who have a right to be consulted on certain decisions affecting the workforce.

Covestro offers its employees competitive compensation and attaches importance to equal pay. As of December 31, 2018, around 77% of the workforce had access to a company pension plan. At all locations, personnel policy is aligned with the statutory requirements, such as those for severance, pre-retirement and retirement payments. For instance, in Germany employees are able to transfer salary and time components (converted into money) into a long-term account. The accumulated balance can then be used at a later date for certain legally defined purposes such as pre-retirement leave.

5. Company-wide Sustainability Management

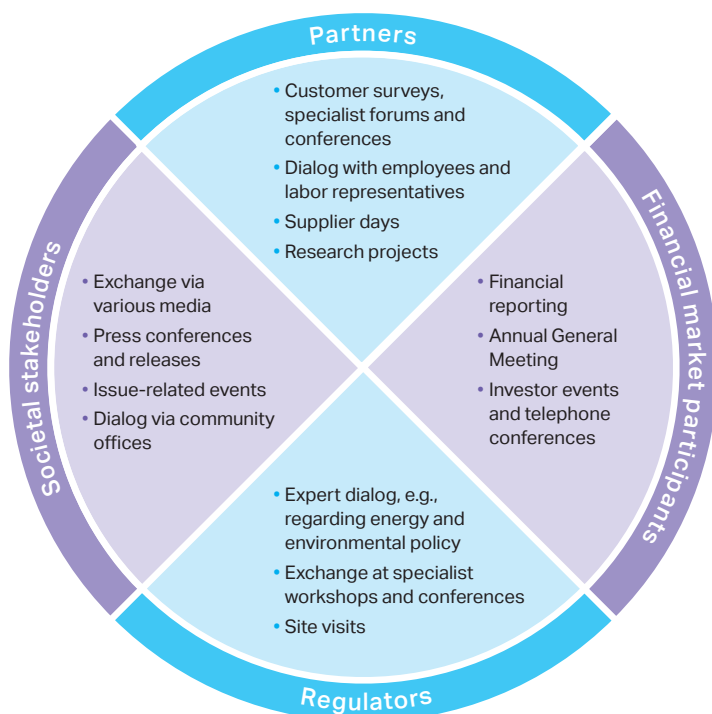


For more information, see our Annual Report, Group Management Report, section 5

Stakeholder dialog

We are committed to an active, open and constructive dialog with our stakeholders – whether at a regional, national or global level. In order to identify and address current developments and sustainability-related opportunities and risks at an early stage, we periodically review whether there are any new findings relevant to opportunity and risk management.

Main Stakeholder Groups and Dialog Formats



We focus on a transparent and open communication approach. Depending on the relevance of a particular issue, our various departments identify and prioritize key stakeholders and select appropriate channels for communication. We also update our materiality analysis every year by conducting surveys among selected internal and external stakeholders to determine the key sustainability issues for Covestro.

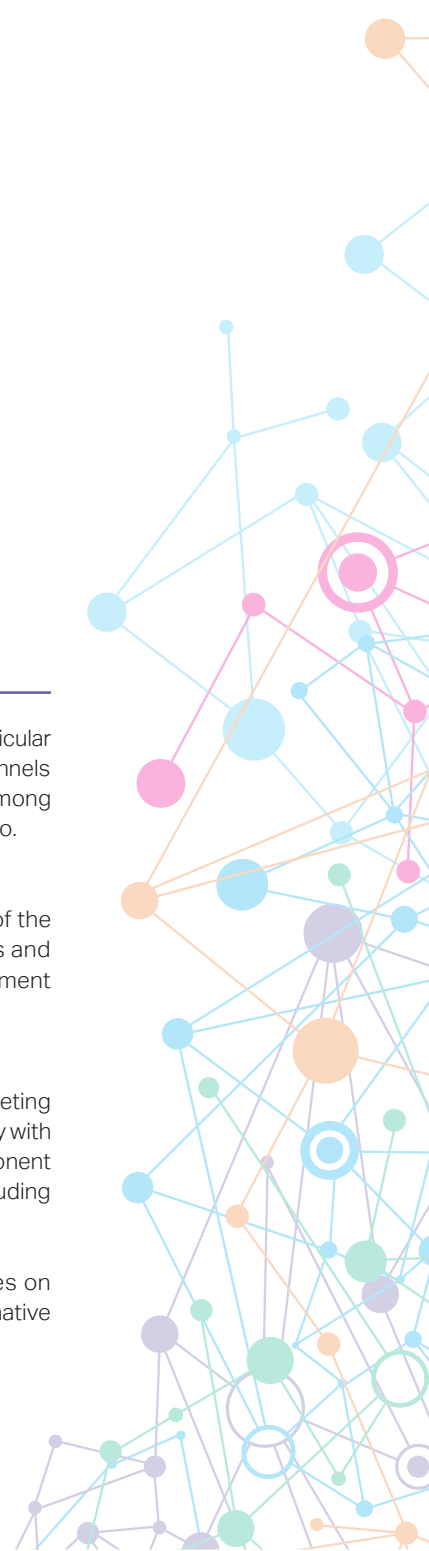
Partners

Collaboration with customers, employees and suppliers is crucial for the long-term success of the company. We also greatly value cooperation and active participation in industry associations and scientific institutions. We maintain close contacts with all these groups, both at senior management level and through various departments.

• Customers

We are in constant contact with our customers worldwide, primarily through our sales and marketing staff across the Group. At the technical level, our application technology specialists work closely with our R&D departments. Furthermore, we routinely evaluate customer satisfaction as a core component of our Integrated Management System and use this feedback for continual improvement, including the development of sustainable products.

In this context, we received the “Sustainability Award” from Henkel Adhesive Technologies on November 6, 2018. This award honors our ongoing commitment to the development of alternative



technologies for purposes such as replacing hazardous materials in production or expanding our polyurethane portfolio to include biobased materials. Covestro is therefore instrumental in the production of sustainable products at Henkel.

At regular intervals, we conduct branding and market research in-house or hire independent consultants. Existing and potential customers from all industries relevant to Covestro are interviewed in these surveys. We use the findings to continually improve our performance and customer-focused market positioning in relation to sales and marketing, innovation, product management, supply chains and communication. An example from 2018 is a market study conducted with an external partner on the use of rigid polyurethane foams in the construction industry.

- **Suppliers**

To ensure the smooth running of production processes and adherence to sustainability requirements, Covestro works closely with suppliers. As a founding member of the "Together for Sustainability" (TfS) initiative, Covestro maintains a regular dialog with suppliers and assesses their performance regarding the sustainability issues that are relevant to us. The TfS initiative aims to introduce its global audit and sustainability assessment program internationally and already cooperates worldwide with several organizations and associations.



www.tfs-initiative.com

Covestro regularly organizes sustainability events with suppliers. In 2017, a major supplier day was held in Düsseldorf under the motto "Pushing Boundaries Together". During this supplier event, the groundwork was laid for new and more intensive partnerships with Covestro's primary suppliers with regard to issues such as costs, reliability, innovation and sustainability. In the reporting period, several follow-up workshops were conducted with suppliers to advance these four strategic areas of interest. As promoters of sustainability in the supply chain, Covestro employees gave various presentations at conferences and association workshops, for example at the annual European Industrial Packaging Association (EIPA) conference in Milan, Italy.

- **Employees**

Covestro aims to be an attractive employer in order to recruit and retain motivated and talented employees. We regularly update our workforce about current business developments and seek their active involvement through dialog. We inform our staff promptly and fully about any upcoming changes as required by the applicable national and international regulations. Covestro regularly holds town hall meetings with members of the Board of Management and senior executives at all its major sites around the world. As well as business performance and the company's strategic goals, specific topics such as workplace safety and global or regional issues are discussed. Covestro also disseminates news through presentations, its employee newsletter "C³", occasional mailings, plus the company's intranet and social media. The Board of Management is in regular dialog with the Works Council and trade unions. Additionally, managers can exchange information about industry and department-specific issues with staff at round-table events and "Lunch & Learns". In 2018, we launched the "Wir sind 1" ("We are 1") campaign to boost employee motivation, show our appreciation and strengthen the sense of solidarity at Covestro. It was promoted with a series of posters by employees from various divisions.

In conjunction with the United Nations Environment Programme, Covestro launched the Young Champions of the Earth initiative in April 2017 to assist young people aged 18 to 30 in realizing their ideas for protecting the environment. Covestro was once again the primary sponsor of the initiative in 2018 and will continue this partnership in 2019. Covestro employees can participate actively in the initiative by helping the participants as experts or mentors.

- **Associations**

Covestro is currently an active member of more than 360 national and international associations. In addition, Covestro participates in many different committees in these organizations which are concerned with sustainability, energy and climate issues.

Our CEO Dr. Markus Steilemann has been active on the Board of Trustees of the Fonds der Chemischen Industrie since 2016. He joined the Steering Board of PlasticsEurope in July 2017, and he has served as President of the European Technology Platform for Sustainable Chemistry (SusChem) since October 2017. Dr. Steilemann is also head of the Programme Council for Innovation of the European Chemical Industry Council (CEFIC), a board member of the International Council of Chemical Associations (ICCA) and was elected to the board of the German Chemical Industry Association (VCI).

Chief Technology Officer Dr. Klaus Schäfer is a board member of VIK, the federation of power consumers from industry and business in Germany, as well as a board member of the North Rhine-Westphalia regional association of the German Chemical Association (VCI NRW). He was also elected chairman of the DECHEMA Gesellschaft für Chemische Technik und Biotechnologie, taking up office on January 1, 2019.

In the United States, Covestro participates in the American Chemistry Council (ACC), in which Jerry MacCleary, Chairman and CEO of Covestro LLC, was Chairman of the Executive Committee in 2018.

In addition, Covestro is active as a company in the International Council of Chemical Associations (ICCA) as well as other associations with particular relevance to sustainability issues important to the company, such as the World Energy Council Germany (member of the Presidium), the Forum für Zukunftsenergien (member of the Board of Trustees), the Innovationsforum für Energiewende of German industrial trade union Bergbau, Chemie, Energie (IG BCE), and econsense – Forum for Sustainable Development of German Business.

- **Scientific institutions**

Research and development is the central plank that enables Covestro to combine economic success with community involvement and environmental stewardship. These activities are therefore extremely important, both for the financial stability of the company as well as for our contribution to society and the environment.

Covestro maintains long-standing, national and international collaborative relationships with leading universities and public research institutions; for instance it cooperates closely with the Technical University of Berlin on materials development and cost estimation. In the United States, Covestro maintains partnerships with several universities and university-affiliated institutes such as Carnegie Mellon University's College of Engineering as part of a joint project with the Pittsburgh Penguins ice hockey team. The goal of the collaboration is to make ice hockey safer through the use of innovative materials. In China, Covestro and Covestro-Tongji Eco-Construction & Material Academy (formerly Bayer-Tongji Eco-Construction & Material Academy) have a long-term collaboration at Tongji University in Shanghai. The Academy was founded jointly by the School of Materials Science and Engineering, the School of Architecture and Urban Planning of Tongji University and Covestro. The Academy promotes innovation and sustainability in construction and in materials science through teaching, research and the development of programs for young talent.

Covestro is a member of the UNEP-Tongji Institute of Environment for Sustainable Development (IESD).

Since 2016, Covestro has been a partner to the Solar Impulse Foundation (SIF), and also a member of the World Alliance for Efficient Solutions founded by SIF since 2017. The latter aims to help the spread of resource-efficient solutions on a wide scale.

In addition, Covestro participates in many international industry trade shows. In the reporting period, this included major events such as Chinaplas, an international plastics and rubber expo; JEC World, an international composites trade show; UTECH Europe, the polyurethane industry's trade fair; plus the in-cosmetics trade show. Covestro additionally participated in the Plastics in Automotive Engineering congress organized by the Association of German Engineers (VDI); Fakuma, the international trade fair for plastics processing; and Light + Building, the world's premiere trade show for lighting and building services technology. At eMove360° Europe 2018, the international Mobility 4.0 trade fair, Covestro received the MATERIALICA Design + Technology Award 2018. This honor in the "CO₂ Efficiency" category was bestowed for Covestro's development of the world's first biobased hardener for lightfast polyurethane coatings.



For more information, see our Annual Report, Group Management Report, section 3, sub-section "Strategic partnerships"



www.cmu.edu/news/stories/archives/2018/march/rethink-the-rink.html

Financial market participants

Intensive dialog with capital markets is a high priority for Covestro. As well as with investors and lenders, we actively exchange information with rating agencies and analysts on an ongoing basis. In this way, we aim to contribute to achieving a fair share price and an appropriate credit rating. These efforts are focused on ensuring a comprehensive, consistent and timely exchange of information between the company and the financial markets.

- **Investors, lenders and analysts**

In addition to the Annual General Meeting and the publication of four quarterly reports, an investor teleconference was held every quarter in 2018. In June of the reporting period, Covestro held a Capital Markets Day event in London. Along with the business performance of the individual segments, important financial data and key investments were presented. Covestro attended other face-to-face investor meetings at various locations worldwide during the year under review.



investor.covestro.com/en/home

In order to further raise awareness of the importance of sustainability, each year Covestro participates in one or two investor conferences focusing on environmental, social and governance (ESG) issues. In October 2018, Covestro attended the dbAccess ESG Engagement Days conference in Frankfurt and answered questions. As in the previous year, Covestro also participated in the Exane BNP Paribas SRI forum at the end of November of this reporting year.

- **Rating agencies**

Sustainability ratings not only help institutional investors make decisions, they also provide an opportunity to continually review sustainability activities and adjust them where appropriate. Rating agencies' criteria include both the expectations of our relevant stakeholders as well as new issues that could be of relevance for Covestro in the future.

In 2018, Covestro again qualified to remain in major sustainability indexes such as the FTSE4Good Index and the Euronext Vigeo Index (Eurozone 120).

In addition, external rating agencies (e.g. ISS-oekom, Sustainalytics) assess the sustainability and climate protection achievements of companies and support investors in developing and implementing sustainable investment strategies.

In 2018, Covestro received special recognition from rating agencies such as ISS-oekom, in whose survey Covestro again did extremely well, achieving "Prime" status with an overall score of B-. This puts Covestro in the top 10% of companies in the chemical industry. With a score of 75 out of 100 points, Sustainalytics classified Covestro as an "outperformer" in 2017. Here Covestro ranked 10th overall out of the 133 chemical companies analyzed. Sustainalytics' updated rating for 2018 is expected in the first quarter of 2019.

The assessments by the main rating agencies were compiled and analyzed in detail in 2018 to systematically identify potential areas for improvement. Covestro then prioritized the results according to an internal list of criteria and passed the most important ones on to the relevant managers. By leveraging the information provided to us by rating agencies, we can drive continuous improvement.

Regulators

The focus of Covestro's representation of its public policy interests in 2018 was on chemicals and energy policy, the low-carbon circular economy, transportation, and environmental and climate protection. Specific examples of engagement with government agencies and political representatives are given in the Group Management Report.

Societal stakeholders

Covestro is in active contact with all relevant societal stakeholders, including the general public, local neighbors, non-governmental organizations (NGOs) and the media. Engaging with various societal stakeholder groups through a number of different channels and forums is a key component of our communications strategy.



FTSE4Good



For more information, see our Annual Report, Group Management Report, section 5, sub-section "Stakeholder dialog"

- **The public, neighbors, non-governmental organizations**

We are committed to open and constructive dialog between our sites and their immediate neighborhood. The specific forms this dialog takes are described in the Group Management Report.

Covestro supports a number of projects in the vicinity of its German sites with a transparent donation strategy. The company promotes initiatives that advance digitalization, especially in schools, and projects that make cities more livable ("brighter places"). Covestro backs up this commitment with financial assistance of approximately €200,000, thus underscoring the company's role as a reliable partner and good neighbor to the communities located near its sites.

We also maintain relationships with various organizations and NGOs as part of our wider engagement with society, for instance with the United Nations Environment Programme (UNEP) and Habitat for Humanity. Covestro is a signatory to the UN Global Compact (UNGC), a pact between the United Nations and corporations which aims to shape the social and environmental impact of globalization. Furthermore, Covestro was also honored for outstanding commitment and named a LEAD company at the 2018 UN Global Compact Leaders' Summit at the UN's New York headquarters. In addition, Covestro actively participates in several UNGC action committees: Breakthrough Innovation for the SDGs, Reporting on the SDGs, Sustainable Ocean Business, and Business for Humanitarian Action.

- **Media**

Another key component of stakeholder dialog is our relationship with the media. Our media work comprises press releases, press conferences, background discussions, individual interviews and journalist visits, as well as communication through social media channels such as LinkedIn, Twitter, Facebook and YouTube. We also regularly inform the media and all other stakeholders about current developments via our website. In addition to press releases, we publish financial information, such as annual and quarterly reports, as well as presentations and speeches from conferences and meetings.

Material sustainability issues

The sustainability issues and definitions from the previous year were used as the basis for the materiality analysis conducted in the reporting period. These issues were reviewed in interviews with selected external stakeholders, with topics being updated as necessary. In addition, the list was expanded to include topics that were identified as relevant for Covestro on the basis of the latest sector guidelines or in the course of stakeholder interviews or peer reviews. With current trends and developments in mind, the stakeholders assessed the degree of relevance for Covestro of each of these topics. The issues were subsequently discussed and analyzed from an internal perspective in a workshop and other one-on-one discussions with Covestro experts in various fields.

We reviewed and updated the materiality analysis in four stages:

1. **Review of previous year's sustainability issues**

Prior to the stakeholder interviews, some changes were made to the previous year's sustainability issues and their definitions. For instance, the "Sustainable Procurement" topic was renamed "Sustainability in the Supply Chain" to better reflect the actual thematic issues.

2. **Interviews with external stakeholders**

Specially trained Covestro personnel conducted seven structured interviews with stakeholder groups relevant to Covestro (suppliers, associations, non-governmental organizations, scientific institutions, the capital market and competitors). Covestro is continually in touch with customers worldwide through our sales and marketing staff and constantly evaluates their feedback. When selecting interviewees, the focus was on having key stakeholder groups represented through multipliers and on ensuring a broad international perspective. Sustainability issues from the previous year were discussed along with new topics identified by stakeholders. Both the direct impact of issues on Covestro's business success and indirect effects through the influence of third parties were considered.



For more information, see our Annual Report, Group Management Report, section 5, sub-sections "Stakeholder dialog" and "Social engagement"



www.unglobalcompact.org



press.covestro.com/news.nsf/id/Covestro-announced-as-Global-Compact-LEAD

3. Internal workshop with experts from various Covestro divisions

The correctness and completeness of the definitions of relevant topics were reviewed by experts from various Covestro divisions as part of a materiality workshop. The updated prior-year issues plus the new topics identified by external stakeholders were evaluated in terms of their relevance for Covestro from an internal perspective. The results of both the internal and external assessments were then plotted in a materiality matrix.

4. Updating the materiality matrix

The materiality matrix was updated and approved by the Chief Sustainability Officer (CSO) based on the results of the stakeholder interviews and the internal materiality workshop.

The materiality matrix is presented in the Group Management Report. The topics considered to be of high or very high relevance from an internal and external point of view were used to select the key aspects and indicators in line with the "core" option of the GRI Sustainability Reporting Standards (GRI SRS).

The various aspects of the material sustainability issues presented in the materiality matrix are outlined below. The sustainability issues are listed by priority according to external stakeholders, with the associated aspects in alphabetical order.

A further detailed explanation of the sustainability issues is provided in the individual sections of the present GRI Supplement and in the 2018 Annual Report.



For more information, see our Annual Report, Group Management Report, section 5, sub-section "Materiality matrix"

High or very high relevance from an internal and external perspective:

Innovative solutions for climate change mitigation and adaptation

- Development of solutions for optimal carbon productivity
- Reduction in greenhouse gas emissions along the entire value chain by developing products, business models and processes
- Solutions for adaptation to climate change



See section 3 "Innovation"

Innovative solutions that contribute to the UN Sustainable Development Goals

- Contribution to the UN Sustainable Development Goals through innovative products, processes and business models



See section 3 "Innovation"

Product stewardship

- Commitment and standards exceeding the statutory requirements
- Comprehensive assessment of health, safety and environmental risks and transparent presentation of results
- Safe products during their entire life cycle, from research, production, marketing and use by the customer through to disposal, including unintended consequences



See section 10 "Product Stewardship"

Resource-efficient circular economy solutions

- Development of innovative circular economy solutions
- Innovative products, business models and process improvements that make circular material flows resource-efficient and economically viable



For more information, see our Annual Report, Group Management Report, section 3

Occupational health and safety

- Prevention of accidents and incidents during everyday operations on premises and when traveling
- Promotion of health at the workplace in production facilities and when traveling



See section 8 "Safety"

Environmentally efficient operations

- Efficient use of resources such as water and energy
- Minimization of emissions into the air (particularly Scope 1 and 2 greenhouse gases) and into water
- Preventing the release of plastics into the environment
- Reduction of waste and its transport
- Responsible recycling



See section 9 "Environmental Protection"

Business ethics, human rights and transparency

- Adherence to internal standards for integrity, corporate governance, compliance, combating corruption, lobbying, respect for human rights, and zero tolerance for forced or child labor
- Strict compliance with all statutory requirements and appropriate conduct toward all stakeholders at all times
- Transparent and honest reporting



For more information, see our Annual Report, Group Management Report, section 24

Sustainability in the supply chain

- Adherence to sustainability standards by suppliers along the entire supply chain



See section 6 "Supplier Management"

Medium relevance from an internal or external perspective:

Employer attractiveness

- Adapting to the changing expectations of employees and applicants
- Digital transformation/future of work
- Encouraging volunteering
- Equal opportunities for a diverse workforce
- Right to collective bargaining, good relationships with employees, workforce representatives and trade unions
- Work-life balance, competitive compensation, opportunities for advancement



See section 4 "Employees"

Political and social acceptance

- Communicate openly about the negative aspects of plastic products
- Informing society of the positive contribution of high-quality materials
- Plastics industry is the key industry for innovative materials



See section 5 "Company-wide Sustainability Management"

Biobased plastics / resources

- Development of biobased alternatives to products from fossil sources irrespective of the concomitant changes in resource efficiency



See section 3 "Innovation"

Social engagement

- Donations, partnerships and volunteering
- Supporting and strengthening relationships with local communities in the vicinity of Covestro sites



For more information, see our Annual Report, Group Management Report, section 5

Inclusive business

- Cooperation with various industry, political and societal stakeholders at the national and international level to develop effective solutions for underserved markets



For more information, see our Annual Report, Group Management Report, section 3

6. Supplier Management

Procurement of key products

In 2018, the procurement spend of Covestro's main sites in Germany, the United States and China accounted for just under 79% of Covestro's global spend. Most of this amount – around 78% – went to local suppliers in the individual countries.

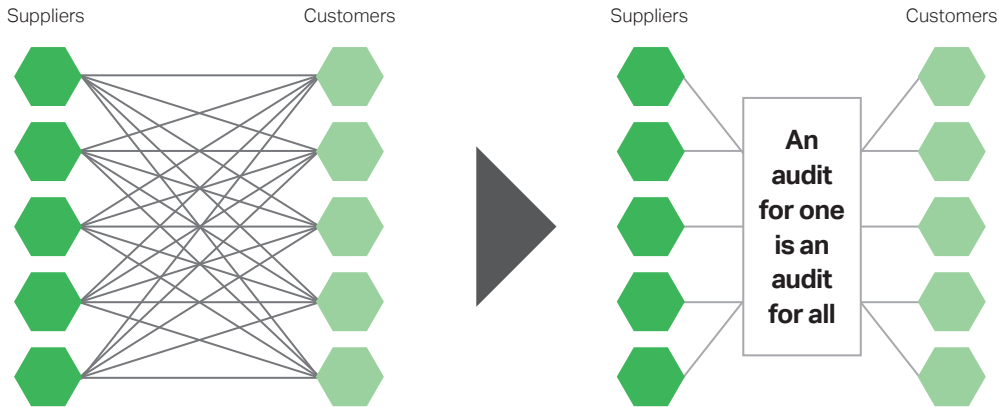
Supplier audits and online assessments

For Covestro, adherence to sustainability standards along the entire supply chain is a crucial factor in value creation and a key lever for minimizing risk. Auditing and assessing suppliers with regard to sustainability criteria is a key element of making procurement decisions.

The sustainability practices of our suppliers are regularly assessed in accordance with the standardized global "Together for Sustainability" (TfS) program. Since the launch of the TfS industry initiative, co-founded with five partners by Covestro predecessor Bayer MaterialScience in 2011, the now 22 members have evaluated the sustainability performance of a total of 10,566 suppliers through online assessments and 1,526 through on-site supplier audits.

All results of the sustainability assessments and audits are available to TfS members on an online platform. This platform provides members with information that enables them to continually monitor suppliers with a view to driving improvements. The TfS initiative also benefits suppliers because their standardized assessment can be viewed by all TfS members. This means they do not have to complete multiple assessment surveys by various potential customers.

A supplier assessment is accepted by all TfS members



Source: Together for Sustainability, [tfs-initiative.com/audit-process](https://www.tfs-initiative.com/audit-process)

In 2018, TfS members conducted a total of 1,491 online assessments and 358 audits across the globe.

The CPO representatives of all TfS member companies gathered for their annual meeting in April 2018. Discussions focused on optimizing the measurement of sustainability-related improvements in the supply chain and strategies for growing the membership and partnerships. New targets and KPIs were defined to increase transparency and boost the impact of the initiative as a whole. Two more members joined the TfS initiative in 2018 in order to improve sustainability in their supply chains. Its continually growing membership has allowed the initiative to extend its global reach still further. By extending their partnership agreement, TfS and EcoVadis confirmed their shared commitment to further advancing the development of sustainable practices in chemical industry supply chains.



For more information, see our Annual Report, Group Management Report, section 6



www.tfs-initiative.com



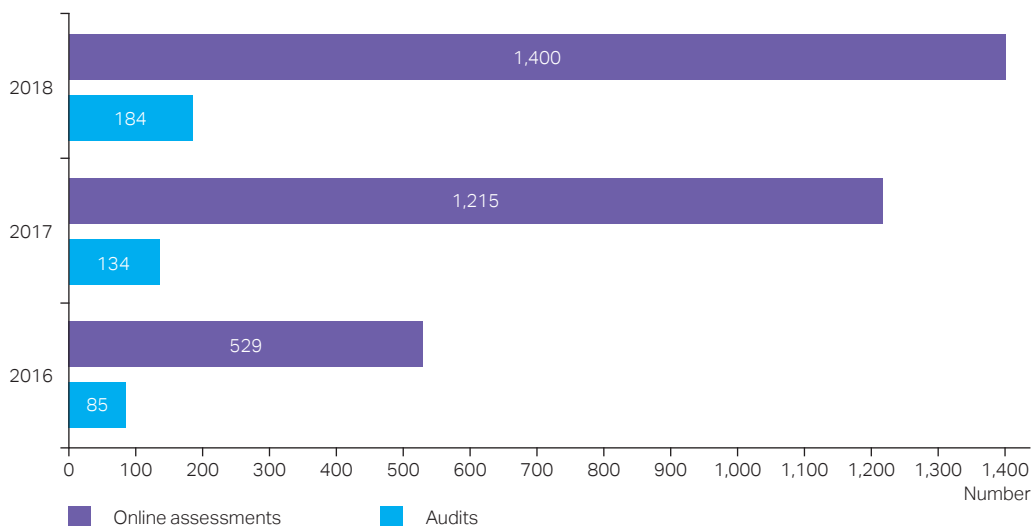
2018 saw further intensification of the collaboration between the TfS initiative and both the Responsible Care initiative and the China Petroleum and Chemical Industry Federation (CPCIF). Collaborative projects included supplier training on the topic of sustainability which was organized with Covestro's support and held jointly with CPCIF in Shanghai in September 2018.

At the "More than a Market" gala held in China in May 2018, the TfS initiative was a finalist in the "Supply Chain Management" category, and in September 2018 it received a further prize from the Chartered Institute of Procurement & Supply (CIPS) in the "Best third sector/not-for-profit procurement project" category.

Covestro selects suppliers for assessment based on a combination of country and material risk, along with their strategic importance in relation to our corporate goals.

Covestro aims to reassess suppliers at least every three years, or earlier if indicated. Reassessments are performed by independent, TfS-accredited audit firms.

Valid Online Assessments and Audits Conducted at Covestro Suppliers¹



¹ Valid online assessments and audits of Covestro suppliers initiated by Covestro and shared by TfS; no more than three years old

Covestro discusses improvements and measures to be taken directly with suppliers and agrees appropriate targets. Whether and how the required improvements are being implemented is reviewed on an ongoing basis. Based on these results, reassessments were conducted at 368 suppliers (previous year: 284) during the year under review, and approximately 67% (previous year: 66%) of these had improved their sustainability performance.

Results of audits and online assessments

None of the audits conducted revealed any indication of child or forced labor. The results did not indicate any substantial actual or potential negative impacts for the company or the environment. In China, some assessments identified deviations relating to matters of human rights, such as working hours, and aspects of health and safety. Appropriate corrective action was requested from the affected suppliers and implementation was verified in follow-up audits.

Sustainability training and dialog

It is also important for our own procurement staff to have a comprehensive understanding of the significance of sustainability in the supply chain. Along with sustainability road shows, company-wide sustainability training plus region- and country-specific training on the topic of sustainability audits communicated the necessary information to employees once again in 2018.

Dialog and close collaboration are essential in enabling suppliers to successfully comply with Covestro's sustainability requirements. We therefore offer a range of opportunities for training and dialog. This provides the foundation for building reliable relationships and enables us to identify and eliminate any issues at an early stage.

Supplier performance development is one of the goals of Covestro and the TfS initiative, which regularly organizes Supplier Days and promotes further training. TfS provides a wide range of information materials and online training courses on its website.

Conflict minerals

International regulations such as the Dodd-Frank Act in the United States obligate companies to disclose the origin of certain raw materials to ensure that "conflict minerals" such as tin, tungsten, tantalum and gold from the Democratic Republic of Congo or neighboring states do not enter their products through the supply chain. Covestro uses tin-containing compounds in production and therefore monitors all suppliers to make sure they do not source raw materials containing tin from the affected regions through their own supply chains.

Using a structured survey process, we verify that our suppliers and their upstream suppliers are obtaining tin-containing material free from conflict minerals. Confirmations of conflict mineral-free procurement are documented centrally in the respective material/supplier pairs in our Global Substance List Online (GSLO) database.

In order to clearly communicate our requirements regarding conflict minerals, we also included these in our Supplier Code of Conduct. Covestro has obtained confirmations of compliance as regards conflict minerals from 100% of suppliers from which it actively purchases such minerals (55 material/supplier pairs) and which were identified as potentially affected by this issue. A list of potentially affected suppliers is updated on an ongoing basis, and the validity of all existing supplier confirmations is permanently monitored. To date, there have been no critical results and no need for action regarding this issue.

7. Integrated Management System for Occupational Health, Safety, Environmental Protection and Quality



For more information, see our Annual Report, Group Management Report, section 7

Binding Group regulations designed to ensure HSEQ targets are met are accessible to all employees in an internal Group database. Compliance with these is checked annually by internal audits and external certification bodies. This can result in changes to the management system.

Coverage of our business activities with certified HSEQ management systems is as follows:

Certification According to External Standards (in percent)¹

	2017	2018
According to various quality management standards such as ISO 9001	100	100
ISO 14001 certified/EMAS validated (environment)	96	96
OHSAS 18001 certified (occupational safety)	88	89
ISO 50001 certified (energy)	46	48

¹ In percent of business activities based on energy consumption



8. Safety

Our safety management systems comply with globally applicable requirements and standards, and we are constantly developing our safety management along with our corporate culture. In doing so, we focus not only on the safety and health of our employees at work every day, but also on preventing potential environmental and health impacts as a result of leaks from production facilities or accidents while transporting hazardous goods and other materials. Our integrated HSEQ management system plays a key part in achieving these goals.

Occupational health and safety

Protecting the health and safety of our employees at work and during work-related activities is among our top goals. This aligns with our social and ethical responsibility as an employer and our business responsibility as a company.

In terms of prevention, potential risks are evaluated based on uniform Group-wide criteria to prevent workplace accidents and work-related illnesses as effectively as possible. Nonetheless, should an incident occur, we investigate the root cause. For this purpose we introduced a methodology that enables us to reach conclusions after objectively investigating incidents. Recommendations for further action are derived from these findings and implemented to prevent similar risks from arising again.

In this context, in 2018 we decided to focus on the hand safety of employees while at work and on human-machine interaction. Our long-term goal with these programs is to prevent all accidents that require medical treatment. To make our workforce more aware of this issue and generally increase their attentiveness during their daily work, a "Team Resources Management" training program will be rolled out – initially as a pilot project. This focuses on behavior-oriented interactions in a team in order to prevent interactions in risk situations becoming triggers for an incident. Moreover, rigorous implementation of safety standards when employing contractors led to a significant reduction in the contractor accident rate in 2018. Through the implementation of the "SafeGuard" program, we envisage injecting further impetus into the company to improve overall safety levels and consequently reduce the number of accidents.

In 2018, a total of 74 recordable incidents occurred involving our employees and those of third-party companies (contractors). The workplace accidents recorded were those resulting in days missed, alternative work or medical treatment (accidents requiring treatment beyond first aid).

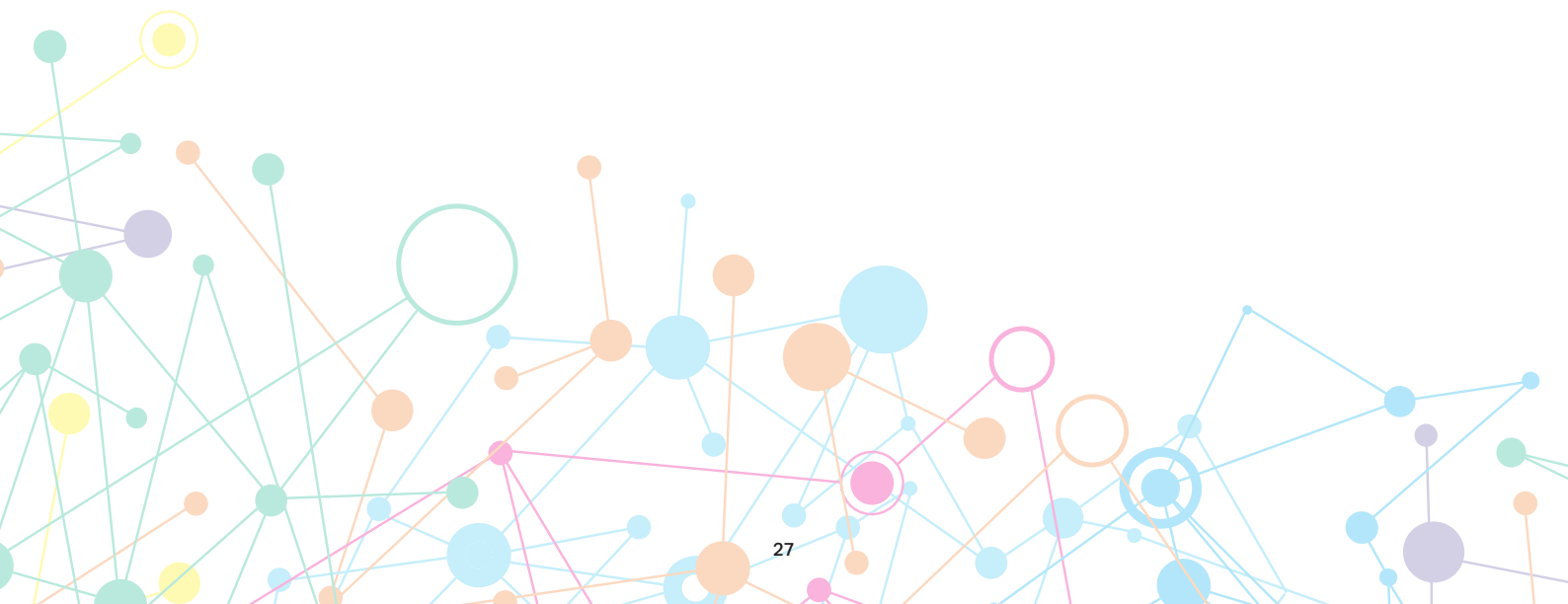
Accident rates are regularly analyzed by site, by region and by workplace accident hotspots. Fluctuations provide an indication of the structural differences that need to be discussed with the sites and business units when analyzing, then deciding on and adapting measures to local requirements.



For more information, see our Annual Report, Group Management Report, section 8



See section 7 "Integrated Management System for Occupational Health, Safety, Environmental Protection and Quality"



Process and plant safety

Safe, reliable operation of our production facilities is an essential prerequisite for protecting people and the environment and for achieving economic success. All work performed at a plant must be carried out with the requisite technical expertise and great care throughout its entire life cycle.

The foundation for safe operation is laid already during the planning and construction phases, e.g. by the selection of processes, the layout of machinery and equipment, and the use of suitable materials. All process conditions are systematically analyzed in multi-stage risk assessments, potential deviations or disruptions are identified, and appropriate safety plans are developed with the aim of effectively avoiding or mitigating their possible effects. This proven approach was a significant reason why new world-scale plants and additional capacity could be commissioned without problems.

In addition, existing facilities are continuously monitored and maintained. As well as keeping pace with technological advances, this also improves the efficiency and sustainability of plants and processes on an ongoing basis. Our products are also continually optimized. In turn this necessitates changes to our professionally designed and built plants and processes. These are implemented using a management of change (MOC) approach. This entails compliance with internal and external regulations and the applicable HSEQ laws when realizing technical changes.

Maintenance and inspections as well as technical alterations frequently necessitate potentially dangerous work. Such work is carried out during planned system downtimes – either individually or as a bundle of changes – and is organized using work permits. In addition to a detailed description of the work to be done, the permit includes an assessment of the hazards and an outline of the required safety and protective measures. Everyone involved in the work is informed of this and must sign to confirm they have received this information. The responsible plant and technical operatives involved – plus additional safety officers if necessary – monitor compliance with the measures and the safe performance of the work.

To provide integrated information security management, Corporate Security continually develops and improves processes and protective measures. The types of knowledge to be protected, availability and integrity are also addressed. The integrity of transmitted data and manipulation-free operation of the systems controlling our plants are essential for the security of our facilities. In the ongoing expansion of information security management, disruption-free operation of our plants is a goal we continually pursue. All relevant plant safety incidents are always recorded and investigated. The findings from investigations in previous years are evaluated in a company-wide program called "SafeGuard".



For more information, see our Annual Report, Group Management Report, section 8, sub-section "Process and plant safety"

Environmental and transportation safety

Covestro is committed to maintaining uniformly high global HSEQ standards along its entire value chain and to optimizing these on an ongoing basis in a continuous improvement process (CIP).

Transportation safety, as well as the safe handling and safe storage of intermediates and finished products (“transportation and logistics activities”), are critical for ensuring the safety of humans and protecting the environment.

All types of transportation and logistics activities pose potential risks for people and the environment. Identifying such risks, and defining and implementing safe procedures and processes at Covestro, forms the foundation for ensuring safety in transportation and logistics activities.

As all transportation activities and nearly all associated logistics activities, such as warehousing and transshipment, are performed by transportation and logistics service providers contracted by Covestro, it is imperative for Covestro to exercise a high level of control over the services provided by these numerous companies.

In order to minimize the risks associated with these transportation and logistics activities, compliance is strictly monitored on the basis of industry-specific statutory requirements and Covestro’s own specific requirements with the help of a series of systematic control points. For instance, risk assessments must be carried out for all hazardous goods to identify risks in a timely manner and then mitigate or completely eliminate them by implementing appropriate measures. To improve the practicality and productivity of efficiency analyses, a methodology was developed in 2018. Implementation in all regions is scheduled for the beginning of 2019. The corresponding description is intended to be incorporated into our corporate regulations.

9. Environmental Protection

Environmental protection and the efficient use of resources are fundamental objectives guiding Covestro's actions. With respect to our business activities, this means we aim to use all natural resources as efficiently as possible while reducing emissions into the environment to the greatest conceivable extent. The management tool we use for this purpose is our continuously updated integrated management system. We also use sophisticated data management systems to identify and realize potential efficiency improvements and reduce the environmental impact of our production activities as much as possible.

Covestro's goal is to halve by 2025 direct and indirect emissions of greenhouse gases per metric ton of product as compared with the 2005 base year levels. In addition, by 2030 we also want to halve the specific energy consumption of our production facilities compared with the same base year. This improvement in energy efficiency is a key lever for significantly lowering our specific greenhouse gas emissions.

Energy consumption

Our production volume fell by 0.7% in 2018. Energy consumption increased slightly over the same period, however. Although total energy input fell by 1.8%, the equivalent primary energy consumption stated below rose by 0.5%. As a result, the specific energy consumption figure went up by 1.2% compared with the previous year. Compared with the base year 2005, this represents an improvement of 35.7%. Our energy efficiency system STRUCTese™ significantly contributed to this achievement.

Equivalent primary energy consumption comprises the fuels used directly at Covestro for generating energy (primary energy) plus externally sourced energy (secondary energy), such as electricity, steam, and refrigeration, calculated to reflect the energy required to generate them.



For more information, see our Annual Report, Group Management Report, section 9

Energy consumption

	2017	2018
Primary energy consumption for the in-house generation of electricity and steam (net, TJ)	7,731	6,438
Natural gas	7,785	7,223
(Natural gas sold to external third parties)	(453)	(83)
Coal	0	0
Liquid fuels ¹	129	156
Waste	1,513	764
Other ²	-1,696	-1,705
Secondary energy consumption (net, TJ)	49,949	50,190
Electricity ³	24,014	24,458
(Electricity sold to external third parties)	(1,081)	(1,390)
Steam	25,046	23,937
(Steam sold to external third parties)	(523)	(569)
Steam from waste heat (process heat)	417	1,298
Refrigeration energy	472	497
(Refrigeration energy sold to third parties)	(119)	(128)
Total energy consumption (TJ)	57,680	56,628
Equivalent primary energy consumption⁴ (in TJ)	75,202	75,553
Production volume⁵ (million metric tons)	14.97	14.87
Specific energy consumption⁶ (MWh per metric ton of product)	1.40	1.41

¹ Liquid fuels from combustion for operating vehicles are only partially included.

² E.g. hydrogen

³ Secondary energy consumption for electricity is based on the raw material mix of the country concerned.

⁴ Sum of all individual energy figures translated into primary energy at our main production sites, which account for more than 95% of our energy consumption. Secondary energy usage is recalculated to equivalent primary energy consumption at all sites based on specified factors aligned with figures (literature values) for best-in-class energy generation plants operating at maximum efficiency.

⁵ Sum of the key products at our main production sites, which account for more than 95% of our energy consumption

⁶ Specific energy consumption: quotient of equivalent primary energy and in-spec production volume at our main production sites (1 MWh = 3,600 MJ)

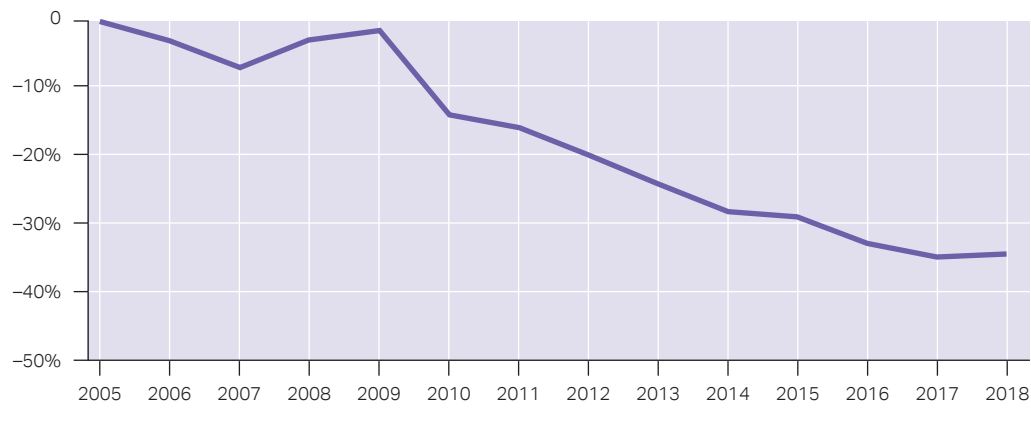
Covestro developed STRUCTese™ (Structured Efficiency System for Energy) which compares actual energy consumption in production with the realistic potential optimum. Eliminating inefficiencies results in permanent energy savings. STRUCTese™ comprises many different analysis, monitoring and benchmarking steps that can be used to identify potential improvement measures, which are known at Covestro as STRUCTese™ projects. The system, which has been gradually rolled out since 2008, is now used in 58 energy-intensive production facilities worldwide and will be implemented in other facilities going forward.

Every year, projects are implemented under STRUCTese™ that bring about lasting, annually recurring energy savings. For instance, over 60,000 MWh of energy was saved thanks to the greater use of waste process heat at several separate projects in Shanghai, China. In addition, optimizing processes in local nitric acid production resulted in reducing the amount of steam by the same order of magnitude. Thanks to these successful projects alone, around 24,000 metric tons less CO₂ were emitted at the site than with the previous production methods. Various other projects were carried out in 2018 resulting in annual savings totaling 139,000 MWh of primary energy and 30,000 metric tons of CO₂ emissions. Combined, all the projects implemented since the introduction of STRUCTese™ in 2008 result in lasting annual reductions totaling 1.98 million MWh of primary energy and 633,000 metric tons of CO₂.

These energy savings become particularly evident when viewing the significant fall in specific energy consumption in production since 2005 (see chart).

Development of Specific Energy Consumption

(Change in specific primary energy consumption per metric ton of product, compared with the baseline year, in %)¹



¹ (equivalent primary energy consumption/production volume) / (equivalent primary energy consumption 2005/production volume 2005) - 1

Air emissions

Greenhouse gas emissions

Covestro reports greenhouse gas emissions in line with the requirements of the Greenhouse Gas Protocol (GHG Protocol). The emission factors for calculating the CO₂ equivalents for the global warming potential were taken from the 1995 IPCC Second Assessment Report. Direct emissions from our plants (Scope 1) are determined at all production locations and relevant administrative sites. Emissions are calculated based on the specific activity rates, e.g. of the fuels used, and the relevant material parameters. In addition to CO₂, the calculation includes nitrous oxide (N₂O), methane and partly fluorinated hydrocarbons. Some greenhouse gas emission figures are based on estimates, e.g. are extrapolated from the previous year's figures.

Indirect emissions (Scope 2) are calculated in accordance with the methods outlined in the GHG Protocol and are based on the energy used and the corresponding production site-specific emissions factors. If no specific factors are available, the International Energy Agency's (IEA) country-specific emissions factor is used among others for the calculation. The factors are taken from the IEA's "Emissions Factors" (2018 edition) ©2019 IEA Online Data Services. Additionally, Scope 2 emissions are reported using the location-based method and the market-based method in accordance with the requirements of the GHG Protocol (dual reporting). With effect from September 30, 2017, the Bayer Group permanently relinquished control over Covestro. We took the opportunity of this new legal situation to update the way we present our greenhouse gas statistics. From this reporting year (2018), only the current GHG Protocol guidelines will be used to calculate greenhouse gas volumes. For reasons of comparability, up to 2017 these were additionally calculated according to the old GHG guidelines that were in effect up to 2014. The new form of presentation does not affect comparability with prior-year figures with regard to the two long-term corporate goals "specific energy consumption" and "specific greenhouse gas emissions".



data.iea.org/payment/products/122-emissions-factors-2017-edition.aspx



ghgprotocol.org/scope_2_guidance

Total greenhouse gas (GHG) emissions rose by 5.9% over the previous year, with direct greenhouse gas emissions up by 1.6% and indirect greenhouse gas emissions up by 7.0%. At our major production sites, which account for over 95% of our energy consumption, the production volume fell by 0.7% in 2018. Specific emissions consequently increased by 6.8% compared with the previous year. This was mainly attributable to an unfavorable energy mix for steam and electricity generation at several of our major sites in Germany and the USA. As a consequence, over the next few years we will need to step up our efforts to reach our greenhouse gas target of halving our specific emissions by 2025, based on 2005 levels. In 2018, these specific emissions totaled 0.4342 metric tons of CO₂ equivalents per metric ton of product (previous year: 0.4064). Starting from the 2005 baseline, this amounts to a cumulative

reduction of 40.0%. In 2018, we switched our calculation methodology to the market-based method in accordance with current requirements and pursuant to the GHG Protocol. The corresponding prior-year figure was recalculated to make possible a comparison that conforms to the new method. The cumulative change for 2017 and previous years is calculated using the method pursuant to the GHG Protocol valid through 2014. For the year 2018, the market-based method updated per the GHG Protocol is used to calculate the cumulative change.

Greenhouse Gas Emissions¹ (million metric tons of CO₂ equivalents)

	2017	2018
Direct greenhouse gas emissions ²	1.24	1.26
Indirect greenhouse gas emissions calculated using the location-based method (GHG Protocol 2015) ³	5.03	5.27
Indirect greenhouse gas emissions calculated using the market-based method (GHG Protocol 2015) ³	4.98	5.32
Total greenhouse gas emissions (Scope 1 and 2 in accordance with the market-based method, GHG Protocol)	6.22	6.58
Specific greenhouse gas emissions (metric tons of CO ₂ equivalents per metric ton of product) ⁴	0.4064 ⁵	0.4342

¹ Portfolio-adjusted based on the GHG Protocol; financial control approach; global warming potential (GWP) factors correspond to the IPCC Second Assessment Report

² In 2018, 58.2% of emissions were CO₂ emissions, 40.5% were N₂O emissions, 1.2% consisted of partly fluorinated hydrocarbons, and 0.1% was methane.

³ In combustion processes, CO₂ typically makes up more than 99% of all greenhouse gas emissions; this is why we restrict ourselves to CO₂ when calculating indirect emissions.

⁴ Total greenhouse gas emissions (Scopes 1 and 2 according to the GHG Protocol, market-based method) at our main production sites (which are responsible for over 95% of our energy consumption – total of 6.5 million metric tons of CO₂ equivalents in 2018), divided by the in-spec production volumes of the main products at these sites. Regarding the determination of specific Scope 2 emissions, market-based emission factors were used in a majority of instances. If they were not available, country-specific emission factors from a generally accepted source were used for calculation purposes.

⁵ Prior year figures adjusted due to the conversion to market-based emissions method in accordance with the current GHG Protocol. The indirect emissions were calculated partially on the basis of the IEA data from the IEA Emission factors 2018 © 2019 IEA Online Data Services, www.iea.org/statistics. The greenhouse gas emissions calculated are based in part on estimates – which reflect the previous year's data, for instance.

Other direct emissions into the air

In addition to greenhouse gases, Covestro's business activities result in other emissions into the air, mainly from burning fossil fuels in order to generate electricity and steam. Emissions are also recorded and analyzed as part of determining the Group's environmental impact. The impacts are assessed annually in the environmental management process with the Chief Technology Officer (CTO). While carbon monoxide emissions (– 6.1%), nitrogen oxides (– 7.1%) and dust emissions (– 6.4%) all fell, sulfur dioxide emissions went up by 53.4%. The main reason for this sharp rise was a change to the reporting methodology used at our production plant in Baytown, USA. Starting in 2018, we also began to report emissions of volatile organic compounds (VOC), which by definition do not include methane (non-methane volatile organic compounds, or NMVOC).

Other Important Direct Air Emissions (1,000 metric tons p.a.)

	2017	2018
CO	0.34	0.32
NO _x	0.74	0.69
SO _x	0.04	0.06
Dust	0.10	0.09
NMVOC ¹	n. r.	0.14
ODS ²	0.0005	0.0004

¹ Non-methane volatile organic compounds, reported for the first time in 2018

² Ozone-depleting substances

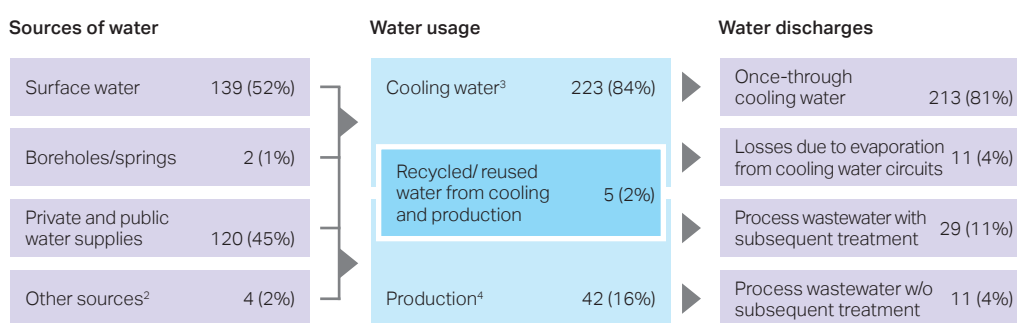
In some cases, the values for air emissions stated in the tables are estimates, e.g. based on the previous year.

Water consumption and usage

Covestro takes a holistic view of water as a resource: we account not only for our water consumption and the associated problems of water scarcity and quality, but also the wastewater we generate. This is underscored by our “Corporate Commitment on Water” issued in 2017.

For our production sites, the availability of and access to clean water is vital. In many regions of the world, however, this is increasingly at risk. As part of our voluntary commitments regarding water, in 2017 we therefore initiated a risk assessment of our production sites covering water availability, quality and accessibility. During the reporting year we updated our risk-based approach and implemented it at further sites. Based on their share of water consumption, a risk-based approach to water has already been introduced at 96% of sites that are currently exposed to a high risk of water stress. Water stress includes water scarcity as well as other factors such as water quality and access to water. By analyzing local water management at sites, risks can be spotted at an early stage and potential for improvement can be identified. 15% of our total water consumption is at sites located in current water stress regions.

Use of Water in 2018 (million cubic meters)¹



¹ Differences between the volumes of water drawn and discharged can be explained in part through unquantified evaporation, leaks, water used as a raw material in products, and condensate from the use of steam as a source of energy.

² E.g. rainwater

³ Also includes water for irrigation purposes

⁴ Total from production processes, sanitary wastewater, and rinsing and purification in production

At 265 million metric tons, total water consumption in the Group is slightly higher than in the previous year. 80.2% of water is once-through cooling water, and consequently accounts for most of the water used by Covestro in 2018. This water is only heated and does not come into contact with products. It can be returned to the water cycle without further treatment in line with the relevant official permits. The total volume of once-through cooling water was 213 million cubic meters in the reporting year.

Some of the water used can be recycled in various ways. For instance, recycled water can be used again in the same process multiple times, e.g. for cleaning or cooling purposes. It is also possible to reuse water from upstream processes in subsequent steps. As a result, corresponding amounts of fresh water are saved every year. In the reporting year, the percentage of reused water rose by 37.1% to a total of 5.1 million cubic meters, due in part to the use of a reverse osmosis process in Cuddalore, India.

Wastewater

Our goal is to minimize emissions into wastewater. These emissions are largely dependent on our production volumes and the current product portfolio.

The volume of process wastewater increased year-on-year by 3.3%. The proportion of process wastewater purified at a wastewater treatment plant operated by Covestro or a third party amounted to 71.5% worldwide. Following careful analysis, another 28.3% was categorized as environmentally safe and returned to the water cycle. The remainder (around 0.3%) was disposed of mainly through incineration.

In the reporting year, the percentage of evaporation losses rose by 62.8% to a total of 11 million cubic meters. Among other things, this is due to higher production volumes at Antwerp, Belgium.

Total organic carbon (TOC) emissions into wastewater decreased by 6.0% compared with the previous year. The volume of phosphates discharged into wastewater was also down, by 21.6%. The main reason for this is normalization of wastewater treatment at the Kaohsiung site in Taiwan. By contrast, the amount of nitrogen compounds discharged rose by 12.9%. This was due to a lengthy maintenance and cleaning-related standstill at a denitrification plant at our site in Baytown, USA. Such maintenance operations fall within the scope of the existing operating license. The volume of inorganic salts introduced into wastewater fell by 4.9%. Likewise, the volume of heavy metals emitted fell by 8.3% during the reporting year.

Emissions into Water (1,000 metric tons p.a.)

	2017	2018
Phosphor	0.04	0.03
Nitrogen	0.22	0.25
TOC ¹	0.57	0.54
Heavy metals	0.0038	0.0035
Inorganic salts	800	761
COD ²	1.71	1.62

¹ Total organic carbon

² Chemical oxygen demand, calculated value based on TOC values (TOC x 3 = COD)

Work on the "Re-Salt" joint project aimed at recycling salt-laden industrial process water, which was outlined in the 2017 GRI Supplementary Report, continued in 2018. The project is scheduled to run for three years and is sponsored by the German Ministry for Education and Research (BMBF).

Waste and recycling

In nearly all countries the law requires exhaustive reporting on waste volumes and waste streams. Covestro's sites comply with all such requirements. In Germany, for example, there are waste-tracking procedures between the source of the waste and disposal of the waste that enable end-to-end traceability of the waste flows. Classification in the individual waste categories and the corresponding methods of disposal is according to the locally applicable definitions. Based on this documentation, we prepare and evaluate the Covestro Group's waste footprint, which is published annually.

A pilot project was launched at our production facility in Dormagen for the purpose of testing a new process for manufacturing our major product TDI. This will enable us to boost the yield of the already highly efficient TDI gas-phase process. As a result, this will lead to a further significant decline in the amount of waste volume generated in the production process, which would otherwise be incinerated. The process tested in Dormagen can then be replicated for further production processes at other Covestro sites. The next proposed step is to equip our large-scale TDI production facility in Shanghai (China) with this technology.

The total volume of waste generated remained on a par with the year before. The increase in non-hazardous waste by 5.0% is primarily due to a larger quantity of construction waste resulting from the construction of a new campus near our Group headquarters in Leverkusen, Germany. On the other hand, the volume of hazardous waste produced fell by 2.4% in the reporting year. One of the main reasons for this is the reduction in TDI waste, among other things as a result of the above-mentioned project in Dormagen. Following the carve-out of Covestro from Bayer AG, there was no further need to internally landfill waste in 2018.

Waste Generated

	2017	2018
Total waste generated (1,000 metric tons p.a.)	193	194
of which non-hazardous waste generated	67	71
of which hazardous waste generated ¹	126	123
of which hazardous waste from production	121	116

¹ Definition of hazardous waste in accordance with the local laws in each instance

Waste by Means of Disposal

	2017	2018
Total volume of waste disposed of¹ (1,000 metric tons p.a.)	204	192
of which incinerated (in %)	58	57
of which recycled (in %)	27	29
Hazardous waste, of which removed to landfill (in %)	2	3
Non-hazardous waste, of which removed to landfill (in %)	10	7
Other ² (in %)	3	4
Internally landfilled hazardous waste (1,000 metric tons p.a.)	1	0
Internally landfilled non-hazardous waste (1,000 metric tons p.a.)	7	0

¹ A variance between the volume of waste generated and waste disposed of may arise due to the different times the waste is generated/disposed of and any resulting internal temporary storage.

² E.g. passed on to third parties (providers/waste disposal companies)

Once again in 2018, Covestro's Global Sideline Business unit sold legacy plant and equipment on the market or transferred these within the Group, thereby returning them to the resource cycle. This supports the circular economy, while conserving resources on a global scale. All Covestro sites worldwide operate according to the same standards and workflows, and return metal scrap as well as used packaging to the resource cycle.

10. Product Stewardship

Covestro has adopted a systematic approach, including a reporting system and global regulations, for verifying the regulatory compliance of our activities and for incident notification and reporting. Product stewardship aspects are also covered. Incidents are tracked in a global information system and are regularly evaluated in order to take corrective action and continuously improve our stewardship performance. For example, we have been able to improve the information on the safe handling of our products and provide customers with specific training. Furthermore, computer-based training for our employees along with workshops help embed the understanding and importance of product stewardship in the company.

Our product portfolio does not contain any products that are banned by UN banned lists or prohibited by international conventions. In 2018, we know of no material incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services, nor of any significant non-compliance with regulations and voluntary codes relating to product information and labeling.

Our own system for creating safety information covers mandatory information on content, safe use of the product, as well as relevant disposal information. We systematically evaluate new products and applications using process-specific IT tools.

Animal studies are essential to assess the safety of our products, especially for human health, but also for the environment. This applies to registration processes within the European Union, the United States and China, which require results from toxicological and ecotoxicological studies. Covestro does not conduct such required studies itself. Instead we work with research institutions and facilities. Internal guidelines require that these adhere to our animal welfare policies. We reserve the right to verify the information provided in supplier self-descriptions in on-site visits.



For more information, see our Annual Report, Group Management Report, section 10



For more information, see our Annual Report, Group Management Report, section 24

11. TCFD and GRI Indexes

Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)



www.fsb-tcfd.org

The TCFD was established by the Financial Stability Board to develop a uniform framework for reporting on climate-related risks and opportunities. The focus is on disclosing financial risks that companies could face due to climate change.

We view the recommendations of the TCFD as a logical extension to our current reporting, particularly due to the forward-looking elements included.

References to the TCFD’s recommendations have been provided for the first time in this GRI Supplement. In providing this information, we aim to transparently disclose the way Covestro AG handles climate-related risks and opportunities.

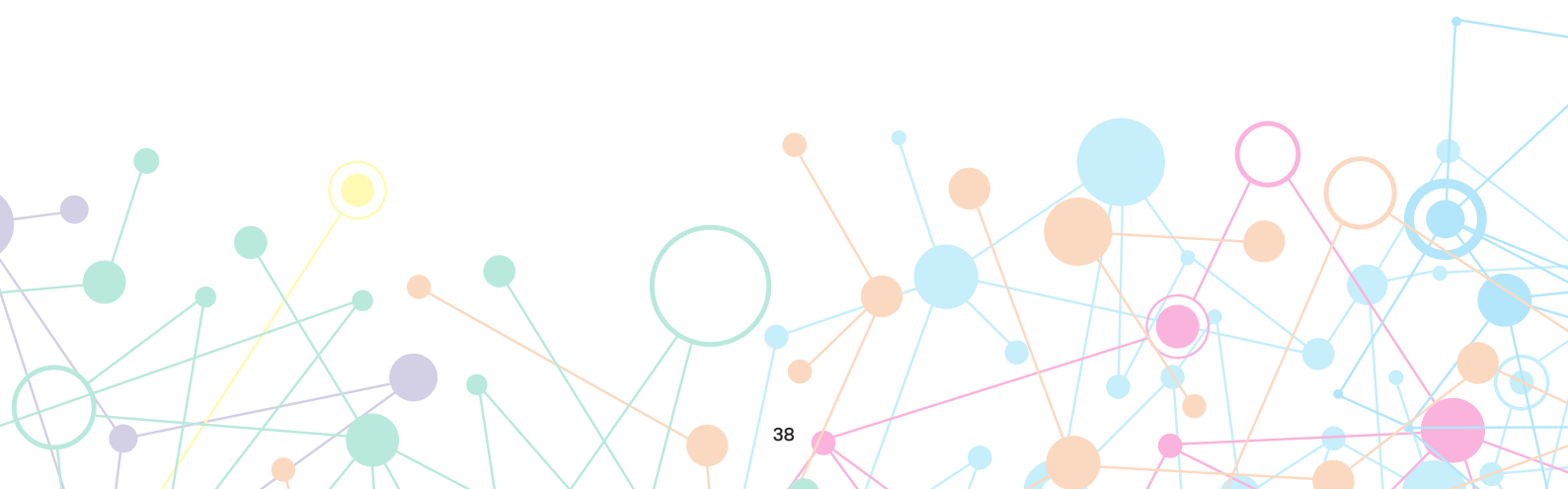
An overview of content relating to the topic is provided in the following index referring to the TCFD recommendations. The index includes references to thematically relevant parts of the text. This year’s reporting contains information pertaining to the following TCFD-recommended core areas: Governance, Strategy, Risk Management, Metrics and Targets. Given the growing importance of the effects of climate change, in the coming years we will strive to implement further aspects of the TCFD recommendations.

TCFD Index¹

	Governance	Strategy	Risk Management	Metrics and Targets
TCFD requirements	The organization’s governance around climate-related risks and opportunities	The actual and potential impacts of climate-related risks and opportunities on the businesses, strategy, and financial planning	The processes used to identify, assess, and manage climate-related risks	The metrics and targets used to assess and manage relevant climate-related risks and opportunities
Section in Covestro Annual Report 2018	<ul style="list-style-type: none"> • 2. Strategy and Management • 5. Company-wide Sustainability Management • 21. Opportunities and Risks Report² 	<ul style="list-style-type: none"> • 1. Group Structure and Business Model • 2. Strategy and Management • 3. Innovation • 5. Company-wide Sustainability Management • 21. Opportunities and Risks Report² 	<ul style="list-style-type: none"> • 21. Opportunities and Risks Report² 	<ul style="list-style-type: none"> • 5. Company-wide Sustainability Management • 9. Environmental Protection
Section in Covestro GRI Supplement 2018	–	<ul style="list-style-type: none"> • 5. Company-wide Sustainability Management • 9. Environmental Protection 	–	<ul style="list-style-type: none"> • 2. Company-wide Sustainability Management • 9. Environmental Protection

¹ References to thematically relevant parts of the text

² The identification and assessment of climate-related opportunities and risks are integrated in Group-wide risk management.



GRI Index

Our reporting is prepared in accordance with the “core” option of the 2016 GRI Sustainability Reporting Standards (SRS) drawn up by the Global Reporting Initiative (GRI). The following table includes all sustainability indicators to be listed according to the GRI SRS “core” option as well as further sustainability indicators that we report on, and shows where they are presented within the Covestro Annual Report and the present GRI Supplement.



See Limited Assurance Report of the Independent Auditor regarding the GRI Supplement 2018

The report was audited by KPMG AG.

General Standard Disclosures

GRI 102 – General Disclosures

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
102-1	Name of the organization	• 1. Group Structure and Business Model – Organization	–	–
102-2	Activities, brands, products, and services	• 1. Group Structure and Business Model – Organization; Business model	–	–
102-3	Location of headquarters	• 1. Group Structure and Business Model – Organization; Production sites	–	–
102-4	Location of operations	• 1. Group Structure and Business Model – Organization; Production sites	–	–
102-5	Ownership and legal form	• 1. Group Structure and Business Model – Organization	–	The Covestro Group has been legally and financially independent since 9/1/2015. Covestro AG, the parent company of the Covestro Group, is headquartered in Leverkusen (Germany), and has been listed on the German stock exchange since October 6, 2015. In 2018, Bayer AG further reduced its interest in Covestro, directly holding only around 7% of Covestro’s shares as of December 31, 2018, the amount required to service an exchangeable bond maturing in 2020. The free float was approximately 93%.
102-6	Markets served	• 1. Group Structure and Business Model – Business model	–	–
102-7	Scale of the organization	• 1. Group Structure and Business Model – Organization; Production sites • 4. Employees – Employees by function	• 4. Employees – Employee metrics	–
102-8	Information on employees and other workers	• 4. Employees – Employees by function	• 4. Employees – Employee metrics	–
102-9	Supply chain	• 1. Group Structure and Business Model – Procurement market; • 6. Sustainability in Supplier Management	• 6. Supplier Management	–

GRI 102 – General Disclosures

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
102-10	Significant changes to the organization and its supply chain	<ul style="list-style-type: none"> • 1. Group Structure and Business Model – Organization; Production sites • 22. Corporate Governance Statement • 6. Sustainability in Supplier Management 	• 6. Supplier Management	In recent years, Covestro has invested heavily in state-of-the-art production facilities, increasingly expanding capacity in its Polyurethanes, Polycarbonates and Coatings, Adhesives, Specialties segments. Its strategically relevant capital expenditures for property, plant, and equipment in the operational reporting segments are investments in MDI capacities in Brunsbüttel (Germany) and Tarragona (Spain) in the PUR segment, capacity expansion in Shanghai (China) in the PCS segment, and in global production capacities for specialty films in the CAS segment.
102-11	Precautionary principle or approach	• 10. Product Stewardship – Management of product stewardship	–	–
102-12	External initiatives	• 2. Strategy and Management – Sustainability	–	–
102-13	Membership of associations	–	• 5. Company-wide Sustainability Management – Stakeholder dialog	–
102-14	Statement from senior decision-maker	• Stockholder Address	–	–
102-16	Values, principles, standards, and norms of behavior	<ul style="list-style-type: none"> • 2. Strategy and Management – Principles guiding our actions; Sustainability • 5. Company-wide Sustainability Management • 22. Corporate Governance Statement • 24. Compliance – Compliance culture and goals 	• 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments; Covestro and the UN Sustainable Development Goals	–
102-17	Mechanisms for advice and concerns about ethics	• 24. Compliance – Compliance organization; Compliance program; Monitoring and improvement	–	–
102-18	Governance structure	<ul style="list-style-type: none"> • 2. Strategy and Management – Management • 22. Corporate Governance Statement 	–	–
102-19	Delegating authority	<ul style="list-style-type: none"> • 2. Strategy and Management – Management • 5. Company-wide Sustainability Management – Operational management • 22. Corporate Governance Statement 	–	–
102-20	Executive-level responsibility for economic, environmental, and social topics	<ul style="list-style-type: none"> • 1. Group Structure and Business Model – Organization • 5. Company-wide Sustainability Management – Operational management • 22. Corporate Governance Statement 	–	–
102-22	Composition of the highest governance body and its committees	<ul style="list-style-type: none"> • 1. Group Structure and Business Model – Organization • 22. Corporate Governance Statement 	–	–
102-23	Chair of highest governance body	• 22. Corporate Governance Statement	–	–

GRI 102 – General Disclosures

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
102-24	Nominating and selecting the highest governance body	• 22. Corporate Governance Statement	–	–
102-25	Conflicts of interest	• 22. Corporate Governance Statement • 24. Compliance – Compliance culture and goals; Communication	–	–
102-26	Role of highest governance body in setting purpose, values, and strategy	• 2. Strategy and Management – Management • 5. Company-wide Sustainability Management – Operational management • 22. Corporate Governance Statement	–	–
102-32	Highest governance body's role in sustainability reporting	–	–	The Covestro GRI Supplement 2018 was approved by Chief Executive Officer Dr. Markus Steilemann.
102-35	Remuneration policies	• 4. Employees – Compensating employees transparently and competitively • 25. Compensation Report	• 4. Employees – Employee metrics	–
102-40	List of stakeholder groups	• 5. Company-wide Sustainability Management – Stakeholder dialog	• 5. Company-wide Sustainability Management – Stakeholder dialog	–
102-41	Collective bargaining agreements	–	• 4. Employees – Employee metrics	–
102-42	Identifying and selecting stakeholders	–	• 5. Company-wide Sustainability Management – Stakeholder dialog	–
102-43	Approach to stakeholder engagement	–	• 5. Company-wide Sustainability Management – Stakeholder dialog	–
102-44	Key topics and concerns raised	• 5. Company-wide Sustainability Management – Materiality matrix; Stakeholder dialog	• 5. Company-wide Sustainability Management – Material sustainability issues	–
102-45	Entities included in the consolidated financial statements	• Governance Bodies	–	–
102-46	Defining report content and topic boundaries	–	• 5. Company-wide Sustainability Management – Material sustainability issues	–
102-47	List of material topics	• 5. Company-wide Sustainability Management – Materiality matrix	• 5. Company-wide Sustainability Management – Material sustainability issues	–
102-48	Restatements of information	• 5. Company-wide Sustainability Management – Sustainability reporting	• 1. About this Report • 5. Company-wide Sustainability Management – Material sustainability issues	–
102-49	Changes in reporting	• 5. Company-wide Sustainability Management – Sustainability reporting	• 1. About this Report	–

GRI 102 – General Disclosures

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
102-50	Reporting period	–	• 1. About this Report	–
102-51	Date of most recent report	–	• 1. About this Report	–
102-52	Reporting cycle	–	• 1. About this Report	–
102-53	Contact point for questions regarding the report	–	• Publishing Information	–
102-54	Statement on reporting in accordance with the GRI Standards	–	• 1. About this Report	–
102-56	External assurance	• Independent Auditor's Report	• 1. About this Report – External assurance	–

Specific Standard Disclosures

Material topics

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
GRI 200 – ECONOMIC				
GRI 201 – ECONOMIC PERFORMANCE				
103-1	Explanation of the material topic and its boundary	• 2. Strategy and Management – Strategic goals and activities	• 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments	–
103-2	The management approach and its components	• 2. Strategy and Management – Strategic goals and activities	–	–
103-3	Evaluation of the management approach	• 2. Strategy and Management – Management	–	–
201-1	Direct economic value generated and distributed	• Consolidated Financial Statements and Notes to the Consolidated Financial Statements	–	–
GRI 204 – PROCUREMENT PRACTICES				
103-1	Explanation of the material topic and its boundary	• 1. Group Structure and Business Model – Procurement market • 21. Opportunities and Risks Report – Opportunities and risks (procurement)	• 5. Company-wide Sustainability Management – Material sustainability issues	–
103-2	The management approach and its components	• 1. Group Structure and Business Model – Procurement market • 5. Company-wide Sustainability Management • 24. Compliance	• 6. Supplier Management	–
103-3	Evaluation of the management approach	• 6. Sustainability in Supplier Management	• 6. Supplier Management	–

Material topics

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
204-1	Proportion of spending on local suppliers	–	• 6. Supplier Management – Procurement of key products	Since our locations in Germany, the United States and China cover the majority of our procurement volume, the sites located in these countries are referred to as main sites within the meaning of the GRI terminology. Local procurement is regarded as purchasing from suppliers headquartered in the same country as the legal entity they supply.
GRI 205 – ANTI-CORRUPTION				
103-1	Explanation of the material topic and its boundary	–	• 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments • 5. Company-wide Sustainability Management – Material sustainability issues	–
103-2	The management approach and its components	• 24. Compliance – Compliance organization; Compliance risks; Compliance program; Monitoring and improvement	–	–
103-3	Evaluation of the management approach	• 24. Compliance – Compliance organization; Compliance risks; Compliance program; Monitoring and improvement	–	–
205-1	Operations assessed for risks related to corruption	• 24. Compliance – Compliance organization; Compliance risks; Compliance program; Monitoring and improvement	–	–
GRI 206 – ANTI-COMPETITIVE BEHAVIOR				
103-1	Explanation of the material topic and its boundary	• 21. Opportunities and Risks Report • 24. Compliance	• 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments	–
103-2	The management approach and its components	• 24. Compliance – Compliance organization; Compliance risks; Compliance program; Monitoring and improvement	–	–
103-3	Evaluation of the management approach	• 24. Compliance – Compliance organization; Compliance risks; Compliance program; Monitoring and improvement	–	–
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	–	–	No actions were reported through internal reporting in 2018.

Material topics

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
GRI 300 – ENVIRONMENTAL				
GRI 302 – ENERGY				
103-1	Explanation of the material topic and its boundary	<ul style="list-style-type: none"> • 9. Environmental Protection - Energy consumption • 21. Opportunities and Risks Report – Opportunities and risks 	<ul style="list-style-type: none"> • 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments; Nonfinancial goals • 5. Company-wide Sustainability Management – Material sustainability issues 	–
103-2	The management approach and its components	<ul style="list-style-type: none"> • 9. Environmental Protection - Energy consumption • 21. Opportunities and Risks Report – Opportunities and risks 	<ul style="list-style-type: none"> • 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments; Nonfinancial goals • 9. Environmental Protection - Energy consumption 	–
103-3	Evaluation of the management approach	<ul style="list-style-type: none"> • 9. Environmental Protection - Energy consumption 	<ul style="list-style-type: none"> • 9. Environmental Protection - Energy consumption 	–
302-1	Energy consumption within the organization	–	<ul style="list-style-type: none"> • 9. Environmental Protection - Energy consumption 	Information pertaining to the share of renewable energy was not included in this Report.
302-3	Energy intensity	<ul style="list-style-type: none"> • 9. Environmental Protection - Energy consumption 	<ul style="list-style-type: none"> • 9. Environmental Protection - Energy consumption 	–
302-4	Energy reduction	–	<ul style="list-style-type: none"> • 9. Environmental Protection - Energy consumption 	–
GRI 303 – WATER				
103-1	Explanation of the material topic and its boundary	<ul style="list-style-type: none"> • 9. Environmental Protection – Water, effluents and waste • 21. Opportunities and Risks Report – Opportunities and risks 	<ul style="list-style-type: none"> • 5. Company-wide Sustainability Management – Material sustainability issues • 9. Environmental Protection – Water consumption and usage 	–
103-2	The management approach and its components	<ul style="list-style-type: none"> • 9. Environmental Protection – Water, effluents and waste 	<ul style="list-style-type: none"> • 9. Environmental Protection – Water consumption and usage 	–
103-3	Evaluation of the management approach	<ul style="list-style-type: none"> • 9. Environmental Protection – Water, effluents and waste 	<ul style="list-style-type: none"> • 9. Environmental Protection – Water consumption and usage 	–
303-1	Water withdrawal by source	–	<ul style="list-style-type: none"> • 9. Environmental Protection – Water consumption and usage 	–
303-3	Water recycling and reuse	–	<ul style="list-style-type: none"> • 9. Environmental Protection – Water consumption and usage 	The quantity of recycled water is calculated virtually: the amount of water actually used every year for primary cooling cycles is multiplied by the number of cycles for which the water is used. This figure is equal to the amount of water that was not removed from the environment.
GRI 305 – EMISSIONS				
103-1	Explanation of the material topic and its boundary	<ul style="list-style-type: none"> • 2. Strategy and Management – Sustainability • 21. Opportunities and Risks Report – Opportunities and risks 	<ul style="list-style-type: none"> • 2. Embedding and Management of Sustainability Aspects – Nonfinancial goals; Covestro and the UN Sustainable Development Goals • 5. Company-wide Sustainability Management – Material sustainability issues 	–

Material topics

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
103-2	The management approach and its components	<ul style="list-style-type: none"> • 2. Strategy and Management – Sustainability • 3. Innovation • 9. Environmental Protection – Greenhouse gas emissions 	<ul style="list-style-type: none"> • 2. Embedding and Management of Sustainability Aspects – Nonfinancial goals; Covestro and the UN Sustainable Development Goals • 3. Innovation • 9. Environmental Protection – Air emissions 	–
103-3	Evaluation of the management approach	<ul style="list-style-type: none"> • 9. Environmental Protection – Greenhouse gas emissions 	<ul style="list-style-type: none"> • 9. Environmental Protection – Air emissions 	–
305-1	Direct (Scope 1) GHG emissions	–	<ul style="list-style-type: none"> • 9. Environmental Protection – Air emissions 	Biogenic CO ₂ emissions are not reported because they have been irrelevant since the carve-out of Covestro from Bayer AG.
305-2	Energy indirect (Scope 2) GHG emissions	–	<ul style="list-style-type: none"> • 9. Environmental Protection – Air emissions 	–
305-4	GHG emissions intensity	<ul style="list-style-type: none"> • 9. Environmental Protection – Greenhouse gas emissions 	<ul style="list-style-type: none"> • 9. Environmental Protection – Air emissions 	Disclosure as CO ₂ -equivalent of specific GHG. Emissions of sulfur hexafluoride (SF ₆) have been recorded. Because our chemical production processes do not currently cause any SF ₆ emissions and because Covestro does not use SF ₆ , such emissions do not appear in our reporting.
305-5	Reduction of GHG emissions	<ul style="list-style-type: none"> • 9. Environmental Protection – Greenhouse gas emissions 	<ul style="list-style-type: none"> • 9. Environmental Protection – Air emissions 	Greenhouse gas emissions are reported separately for Scopes 1 and 2. When considering GHG reductions, the specific greenhouse gas emissions are calculated using the total emissions for Scopes 1 and 2 because otherwise any shifts between the categories would lessen the informative value of the results.
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	–	<ul style="list-style-type: none"> • 9. Environmental Protection – Air emissions 	Reporting focuses on significant air emissions. POPs and HAPs were not reported. NMVOCs were included in reporting for the first time in 2018.
GRI 306 – EFFLUENTS AND WASTE				
103-1	Explanation of the material topic and its boundary	<ul style="list-style-type: none"> • 9. Environmental Protection – Water, effluents and waste • 21. Opportunities and Risks Report – Opportunities and risks 	<ul style="list-style-type: none"> • 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments • 5. Company-wide Sustainability Management – Material sustainability issues 	–
103-2	The management approach and its components	<ul style="list-style-type: none"> • 3. Innovation • 9. Environmental Protection – Water, effluents and waste 	<ul style="list-style-type: none"> • 9. Environmental Protection – Water consumption and usage; Waste and recycling 	–
103-3	Evaluation of the management approach	<ul style="list-style-type: none"> • 9. Environmental Protection – Water, effluents and waste 	<ul style="list-style-type: none"> • 9. Environmental Protection – Water consumption and usage; Waste and recycling 	–

Material topics

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
306-2	Waste by type and disposal method	–	• 9. Environmental Protection – Waste and recycling	Covestro measures the quantity of waste that is reused or recycled. However, no distinction is drawn between reuse and recycling for reporting purposes because the specific form of processing is the responsibility of the waste processing company. Covestro does not generally differentiate between hazardous and non-hazardous waste either. The composting of non-hazardous waste plays a minimal or no role in the chemical industry. As a rule, energy is recovered from waste incineration. However, due to the large number of sites, it may be the case that no energy is recovered at some locations. According to the information currently available, deep well injection is not used.
GRI 307 – ENVIRONMENTAL COMPLIANCE				
103-1	Explanation of the material topic and its boundary	• 21. Opportunities and Risks Report	• 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments	–
103-2	The management approach and its components	• 9. Environmental Protection • 21. Opportunities and Risks Report • 24. Compliance	• 9. Environmental Protection – Water consumption and usage; Waste and recycling	–
103-3	Evaluation of the management approach	–	• 9. Environmental Protection – Water consumption and usage; Waste and recycling	–
307-1	Noncompliance with environmental laws and regulations	–	–	In 2018, no significant administrative or court-ordered sanctions (fines, nonmonetary sanctions) for noncompliance with environmental laws and regulations were reported through internal reporting.
GRI 308 – SUPPLIER ENVIRONMENTAL ASSESSMENT				
103-1	Explanation of the material topic and its boundary	• 1. Group Structure and Business Model – Procurement market • 6. Sustainability in Supplier Management • 21. Opportunities and Risks Report – Opportunities and risks	• 2. Embedding and Management of Sustainability Aspects – Non-financial goals • 5. Company-wide Sustainability Management – Material sustainability issues	–
103-2	The management approach and its components	• 6. Sustainability in Supplier Management – Assessment methods and processes used by the TfS initiative; Sustainability training and dialog	• 5. Company-wide Sustainability Management – Stakeholder dialog • 6. Supplier Management – Supplier audits and online assessments; Sustainability training and dialog	–
103-3	Evaluation of the management approach	• 6. Sustainability in Supplier Management – Results of audits and online assessments	• 6. Supplier Management – Results of audits and online assessments	–
308-2	Negative environmental impacts in the supply chain and actions taken	• 6. Sustainability in Supplier Management – Results of audits and online assessments	• 6. Supplier Management – Results of audits and online assessments	–

Material topics

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
GRI 400 – SOCIAL				
GRI 401 – EMPLOYMENT				
103-1	Explanation of the material topic and its boundary	<ul style="list-style-type: none"> • 2. Strategy and Management – Principles guiding our actions • 21. Opportunities and Risks Report – Opportunities and risks 	<ul style="list-style-type: none"> • 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments • 5. Company-wide Sustainability Management – Material sustainability issues 	–
103-2	The management approach and its components	<ul style="list-style-type: none"> • 4. Employees – Guiding principles and focus of HR work; Attracting and retaining qualified employees • 21. Opportunities and Risks Report – Opportunities and risks 	<ul style="list-style-type: none"> • 4. Employees – Human resources strategy and processes • 5. Company-wide Sustainability Management – Stakeholder dialog 	–
103-3	Evaluation of the management approach	<ul style="list-style-type: none"> • 4. Employees 	<ul style="list-style-type: none"> • 4. Employees – Employee metrics 	–
401-1	New employee hires and employee turnover	–	<ul style="list-style-type: none"> • 4. Employees – Employee metrics 	In 2018 new hires and turnover rate were broken down according to male and female genders, as no other-gendered employees were known of. If this should change, the tables will be adjusted accordingly in future.
GRI 403 – OCCUPATIONAL HEALTH AND SAFETY				
103-1	Explanation of the material topic and its boundary	<ul style="list-style-type: none"> • 8. Safety 	<ul style="list-style-type: none"> • 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments • 5. Company-wide Sustainability Management – Material sustainability issues 	–
103-2	The management approach and its components	<ul style="list-style-type: none"> • 4. Employees – Creating the best working conditions and work models • 7. Integrated Management System for Occupational Health, Safety, Environmental Protection and Quality • 8. Safety – Occupational health and safety • 21. Opportunities and Risks Report – Opportunities and risks 	<ul style="list-style-type: none"> • 8. Safety – Occupational health and safety 	–
103-3	Evaluation of the management approach	<ul style="list-style-type: none"> • 8. Safety – Occupational health and safety 	<ul style="list-style-type: none"> • 8. Safety – Occupational health and safety 	–

Material topics

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	• 8. Safety – Occupational health and safety	–	Covestro does not report details by specific category of employee – a breakdown by gender, for example – in order to avoid potential discrimination and since doing so would not help us reach our target of ultimately preventing all accidents. The occupational disease rate (ODR), lost day rate (LDR) and absenteeism rate (AR) are not key figures that help management assess our occupational safety performance, as Covestro is not able to gather such data consistently at all sites – for example due to local legislation.
GRI 404 – TRAINING AND EDUCATION				
103-1	Explanation of the material topic and its boundary	• 4. Employees	• 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments	–
103-2	The management approach and its components	• 4. Employees – Promoting employees and their development • 21. Opportunities and Risks Report – Opportunities and risks	• 4. Employees – Human resources strategy and processes; Employee metrics	–
103-3	Evaluation of the management approach	• 4. Employees – Promoting employees and their development	• 4. Employees – Human resources strategy and processes; Employee metrics	–
404-2	Programs for upgrading employee skills and transition assistance programs	• 4. Employees – Promoting employees and their development	• 4. Employees – Human resources strategy and processes	–
GRI 405 – DIVERSITY AND EQUAL OPPORTUNITY				
103-1	Explanation of the material topic and its boundary	• 4. Employees – Promoting diversity and inclusion • 21. Opportunities and Risks Report – Opportunities and risks	• 5. Company-wide Sustainability Management – Material sustainability issues	–
103-2	The management approach and its components	• 4. Employees – Promoting diversity and inclusion	• 4. Employees – Employee metrics	–
103-3	Evaluation of the management approach	• 4. Employees – Promoting diversity and inclusion	• 4. Employees – Employee metrics	–
405-1	Diversity of governance bodies and employees	• 22. Corporate Governance Statement	• 4. Employees – Employee metrics	Membership of a minority is not recorded for legal reasons. In 2018 the figures were broken down according to male and female genders, as no employees with any other gender were known of. If this should change, the tables will be adjusted accordingly in future.

Material topics

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
GRI 406 – NON-DISCRIMINATION				
103-1	Explanation of the material topic and its boundary	• 4. Employees – Promoting diversity and inclusion	• 5. Company-wide Sustainability Management – Material sustainability issues	–
103-2	The management approach and its components	• 4. Employees – Promoting diversity and inclusion • 24. Compliance	• 4. Employees – Employee metrics	–
103-3	Evaluation of the management approach	–	• 4. Employees – Employee metrics	–
406-1	Incidents of discrimination and corrective actions taken	–	–	For reasons of confidentiality, we do not disclose the type and scope of the incidents reported.
GRI 407 – FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING				
103-1	Explanation of the material topic and its boundary	–	• 4. Employees – Conditions of employment and social responsibility • 5. Company-wide Sustainability Management – Material sustainability issues	–
103-2	The management approach and its components	• 6. Sustainability in Supplier Management – Assessment methods and processes used by the TFS initiative • 24. Compliance	• 4. Employees – Conditions of employment and social responsibility • 6. Supplier Management – Supplier audits and online assessments; Sustainability training and dialog	–
103-3	Evaluation of the management approach	–	• 4. Employees – Conditions of employment and social responsibility • 6. Supplier Management – Results of audits and online assessments	–
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	• 6. Sustainability in Supplier Management – Results of audits and online assessments	• 4. Employees – Conditions of employment and social responsibility • 6. Supplier Management – Results of audits and online assessments	In 2018, no significant cases were reported using formal grievance mechanisms. There was no high risk for the sites in 2018, as the local heads of HR and the local managing directors are required by internal rules to maintain a regular exchange of information with unions and employee representatives.
GRI 414 – SUPPLIER SOCIAL ASSESSMENT				
103-1	Explanation of the material topic and its boundary	• 6. Sustainability in Supplier Management • 21. Opportunities and Risks Report – Opportunities and risks	• 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments • 5. Company-wide Sustainability Management – Material sustainability issues	–
103-2	The management approach and its components	• 6. Sustainability in Supplier Management – Assessment methods and processes used by the TFS initiative; Sustainability training and dialog	• 6. Supplier Management – Supplier audits and online assessments; Sustainability training and dialog	–

Material topics

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
103-3	Evaluation of the management approach	• 6. Sustainability in Supplier Management – Results of audits and online assessments	• 6. Supplier Management – Results of audits and online assessments	–
414-2	Negative social impacts in the supply chain and actions taken	• 6. Sustainability in Supplier Management – Results of audits and online assessments	• 6. Supplier Management – Results of audits and online assessments	–
GRI 416 – CUSTOMER HEALTH AND SAFETY				
103-1	Explanation of the material topic and its boundary	• 10. Product Stewardship • 21. Opportunities and Risks Report – Opportunities and risks	• 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments • 5. Company-wide Sustainability Management – Material sustainability issues • 10. Product Stewardship	–
103-2	The management approach and its components	• 7. Integrated Management System for Occupational Health, Safety, Environmental Protection and Quality • 10. Product Stewardship • 24. Compliance	• 5. Company-wide Sustainability Management – Stakeholder dialog • 7. Integrated Management System for Occupational Health, Safety, Environmental Protection and Quality • 10. Product Stewardship	–
103-3	Evaluation of the management approach	• 10. Product Stewardship	• 7. Integrated Management System for Occupational Health, Safety, Environmental Protection and Quality	–
416-2	Incidents of noncompliance concerning the health and safety impacts of products and services	–	• 10. Product Stewardship	In 2018, no significant incidents were reported through internal reporting.
GRI 417 – MARKETING AND LABELING				
103-1	Explanation of the material topic and its boundary	• 10. Product Stewardship • 21. Opportunities and Risks Report – Opportunities and risks	• 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments • 5. Company-wide Sustainability Management – Material sustainability issues • 10. Product Stewardship	–
103-2	The management approach and its components	• 7. Integrated Management System for Occupational Health, Safety, Environmental Protection and Quality • 10. Product Stewardship	• 7. Integrated Management System for Occupational Health, Safety, Environmental Protection and Quality • 10. Product Stewardship	–
103-3	Evaluation of the management approach	–	• 10. Product Stewardship	–
417-1	Requirements for product and service information and labeling	–	• 10. Product Stewardship	–

Material topics

Disclosure number	Disclosure title	Section in Covestro Annual Report 2018	Section in Covestro GRI Supplement 2018	Explanation / omission
417-2	Incidents of noncompliance concerning product and service information and labeling	• 10. Product Stewardship	• 10. Product Stewardship	In 2018, no significant incidents were reported through internal reporting.
GRI 419 – SOCIOECONOMIC COMPLIANCE				
103-1	Explanation of the material topic and its boundary	<ul style="list-style-type: none"> • 21. Opportunities and Risks Report – Opportunities and risks • 24. Compliance 	• 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments	–
103-2	The management approach and its components	<ul style="list-style-type: none"> • 5. Company-wide Sustainability Management – Operational management • 24. Compliance 	• 2. Embedding and Management of Sustainability Aspects – Company policies and voluntary commitments	–
103-3	Evaluation of the management approach	• 24. Compliance	–	–
419-1	Noncompliance with laws and regulations in the social and economic area	–	–	In 2018, no significant administrative or court-ordered sanctions (fines, nonmonetary sanctions) for noncompliance with laws and regulations with respect to the provision and use of products and services were reported through internal reporting.

Limited Assurance Report of the Independent Auditor regarding the GRI Supplement 2018¹

To the Management Board of Covestro AG, Leverkusen,

We have performed an independent limited assurance engagement on the disclosures in the GRI Supplement of Covestro AG, Leverkusen, (further „Covestro“) for the business year from January 1 to December 31, 2018.

Management's Responsibility

The legal representatives of Covestro are responsible for the preparation of the disclosures in the GRI Supplement in accordance with the reporting criteria. Covestro applies the principles and standard disclosures of the Sustainability Reporting Standards of the Global Reporting Initiative, the Corporate Accounting and Reporting Standard (Scope 1 and 2) of the Greenhouse Gas Protocol Initiative of the World Resources Institute and the World Business Council for Sustainable Development (WBCSD) (further: Reporting Criteria).

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

Independence and quality assurance on the part of the auditing firm

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

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

Practitioner's Responsibility

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

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information" published by IAASB. This Standard requires that we plan and perform the assurance engagement to obtain limited assurance whether any matters have come to our attention that cause us to believe that the disclosures in the GRI Supplement for the business year January 1 to December 31, 2018 has not been prepared, in all material respects, in accordance with in accordance of the aforementioned Reporting Criteria. We do not, however, provide a separate conclusion for each disclosure. In a limited assurance engagement the evidence gathering procedures are more limited than in a reasonable assurance engagement and therefore significantly less assurance is obtained than in a reasonable assurance engagement. The choice of audit procedures is subject to the auditor's own judgement.

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

¹ Our engagement applied to the German version of the GRI Supplement 2018.
This text is a translation of the Independent Assurance Report issued in German language, whereas the German text is authoritative.

- Inquiries of personnel on corporate level, who are responsible for the materiality analysis, in order to gain an understanding of the processes for determining material sustainability topics and respective reporting boundaries of Covestro
- A risk analysis, including a media search, to identify relevant information on Covestro sustainability performance in the reporting period
- Evaluation of the design and implementation of the systems and processes for determining, processing and monitoring of the disclosures included in the scope of this engagement, including the consolidation of the data
- Inquiries of personnel on corporate level who are responsible for determining disclosures on concepts, due diligence processes, results and risks, for conducting internal controls and consolidation of the disclosures
- Analytical evaluation of data and trends of quantitative information which are reported by all sites for consolidation on corporate level
- Evaluation of selected internal and external documentation
- Evaluation of local data collection, validation and reporting processes as well as the reliability of reported data based on a sample of the sites in Baytown, Caojing, Dormagen, Map ta Phut, Maasvlakte, Filago and Barcelona
- Assessment of the overall presentation of the disclosures

Conclusion

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the disclosures in the GRI Supplement for the business year from January 1 to December 31, 2018 is not prepared, in all material respects, in accordance with the Reporting Criteria.

Restriction of Use / Clause on General Engagement Terms

This report is issued for purposes of the Management Board of Covestro AG, Leverkusen, only. We assume no responsibility with regard to any third parties.

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Munich, February 20, 2019
KPMG AG
Wirtschaftsprüfungsgesellschaft

Hell

ppa. Dietrich

Publishing Information

Publisher

Covestro AG
Kaiser-Wilhelm-Allee 60
51373 Leverkusen
Germany
Email: info@covestro.com

covestro.com

Entry in the Commercial Register
of the Cologne District Court
Amtsgericht Köln: HRB 85281
Turnover tax ID no.: DE815579850

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FutureCamp Climate GmbH
Munich, Germany

Editorial support

Edelman GmbH
Cologne, Germany

Translation

Leinhäuser Language Services GmbH
Unterhaching, Germany

Design and layout

TERRITORY CTR GmbH
Germany

Photo credits

Photo collage by TERRITORY
(with elements of Getty Images)

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