

COVESTRO GROUP AT A GLANCE

Company Profile

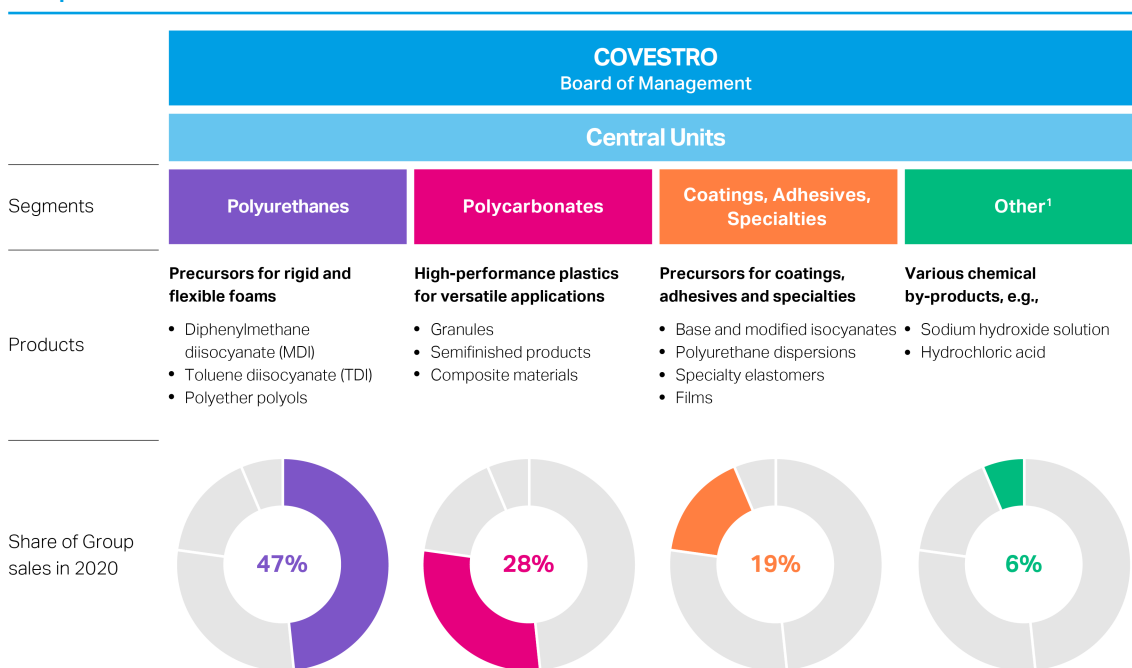
Organization and Business Model

Organization

Covestro is one of the leading global suppliers of high-tech polymer materials and application solutions developed for these materials. Covestro AG, the parent company of the Covestro Group, is headquartered in Leverkusen (Germany). It is listed on the stock exchange in Germany and is included in the DAX, Germany's leading index. In line with the product portfolio, Covestro is divided into three reportable segments: Polyurethanes (PUR), Polycarbonates (PCS), and Coatings, Adhesives, Specialties (CAS). The administrative functions are consolidated centrally. As of December 31, 2020, the Covestro Group comprised 47 consolidated companies in 22 countries in addition to Covestro AG, and employed 16,501 people*.

 See note 7.1 "Scope of consolidation and investments" in the Notes to the Consolidated Financial Statements.

Group structure



¹ Business activities that cannot be assigned to the Polyurethanes, Polycarbonates, or Coatings, Adhesives, Specialties segments. These include, for instance, the marketing of by-products of chlorine production and use.

The Board of Management of Covestro AG manages operations, and defines and tracks corporate goals. Dr. Markus Steilemann is the company's Chief Executive Officer (CEO). Sucheta Govil is Covestro's Chief Commercial Officer and is responsible for the three segments, Polyurethanes, Polycarbonates, and Coatings, Adhesives, Specialties. In addition, she heads the Innovation, and Marketing and Sales corporate functions. The Board of Management member responsible for Production and Technology as well as all production sites is Dr. Klaus Schäfer. Dr. Thomas Toepfer is its Chief Financial Officer (CFO) and additionally holds the position of Labor Director.

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

The 12-member Supervisory Board advises and oversees the Board of Management. In accordance with the German Codetermination Act, half of the members of the Supervisory Board are elected by the shareholders and the other half by the company's employees. Dr. Richard Pott is the Supervisory Board Chair.

 See "Declaration on Corporate Governance."

Business model

Covestro produces precursors for polyurethane foams and the high-performance plastic polycarbonate as well as precursors for coatings, adhesives, sealants, and specialty products, including films. Other precursors such as chlorine and by-products like styrene are also part of Covestro's product portfolio.

The company's materials are used in many areas of modern life – the array of products ranges from insulation for refrigerators and entire buildings through laptop and mobile phone cases, and medical devices to scratch-resistant and fast-drying vehicle coatings and film coverings for personal identification cards. Covestro therefore covers a wide variety of sectors: The company's main customers are from the automotive and transportation; construction; furniture and wood processing; and electrical, electronics, and household appliances industries. The products are also used in sectors such as sports and leisure, cosmetics and health, as well as in the chemical industry itself. In addition, materials by Covestro are used to manufacture medical equipment, safety barriers, and sneeze and splash guards used to combat and control the spread of the coronavirus pandemic.

Covestro aims to leverage this broad positioning to further reduce the product range's exposure to cyclical fluctuations. The focus here is on sustainability and innovation. To this end, Covestro closely monitors developments in its sales and consumer markets and orients its activities to support customers' growth. Together with customers as well as with business and scientific partners, the company works continuously to further advance products, technologies, and application solutions.

 Additional information is available at <http://www.covestro.com/en/products>

Global megatrends play a considerable role in this process: Advancing climate change, the growing global population, increasing urbanization, and new forms of transportation are changing the lives of billions of people. Consequently, the polymer industry will have to develop as well. Companies like Covestro are facing new challenges and playing a part in developing innovative solutions as a result. For this reason, Covestro intends to reorient its entire production process and product portfolio – and ultimately the entire company – to a circular approach in the long term, the focus is on alternative raw materials, innovative recycling, joined solutions, and renewable energies.

Covestro's aim is to pave the way and support these trends with its materials. By replacing traditional materials with durable, light, more environmentally-compatible and cost-effective materials, Covestro makes significant contributions in areas such as lightweight construction in the automotive industry, increasing the energy efficiency of living spaces through the use of new insulating materials, promoting sustainable energy with specialty raw materials, and improving the shelf-life of food through better insulation along the entire refrigeration chain.

 Additional information is available at: solutions.covestro.com/en/industries

Reportable segments

Polyurethanes

In the PUR segment, Covestro primarily develops, produces, and markets chemical precursors for the manufacture of polyurethane foams. These precursors are diphenylmethane diisocyanate (MDI), toluene diisocyanate (TDI), and polyether polyol, which are used primarily in the furniture, construction, and automotive industries. MDI-based rigid polyurethane foam serves mainly to efficiently insulate buildings and refrigeration appliances, therefore contributing to lowering energy usage. TDI-based flexible polyurethane foam is used in products such as mattresses, upholstered furniture, and car seats, thus making day-to-day life more comfortable. Covestro was among the top suppliers in the global polyurethane industry in fiscal 2020. Our main competitors are BASF, Dow Chemical, Huntsman, and Wanhua Chemical.

Polycarbonates

In fiscal 2020, Covestro was also one of the world's leading suppliers of polycarbonates. In the PCS segment, Covestro not only produces and distributes this high-performance plastic but also works to continually improve it. Polycarbonates are particularly light, transparent, shatter resistant, and moldable. Available as granules, composite materials, and semifinished products, manufacturers use this versatile material in a wide variety of products such as vehicles (e.g., passenger compartment and vehicle lighting), buildings (e.g., roof structures), and electrical and electronic devices (e.g., cords and laptop cases). Our main competitors include Lotte Chemical, Luxi Chemical, Mitsubishi Chemical, Saudi Basic Industries Corporation (SABIC), Teijin, and Wanhua Chemical.

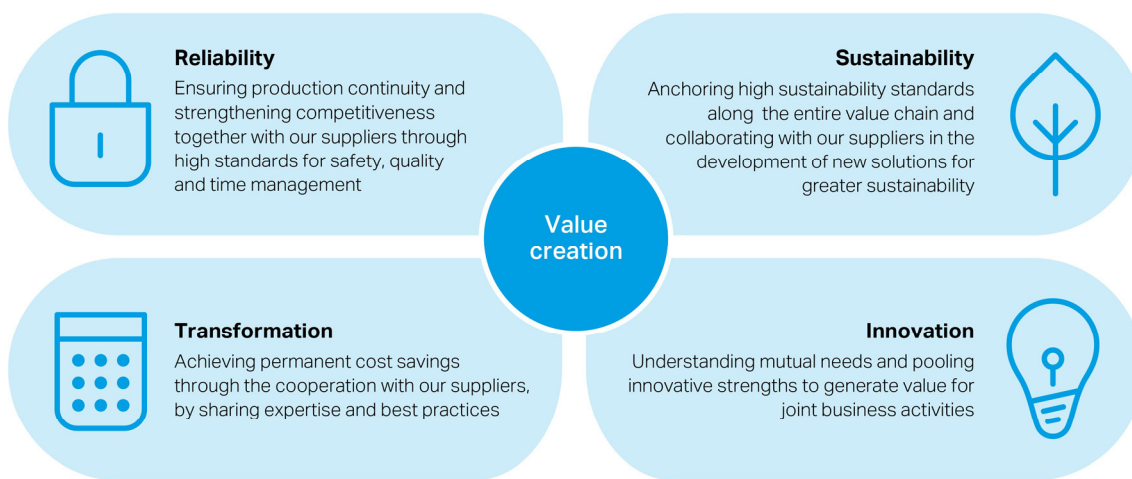
Coatings, Adhesives, Specialties

The CAS segment develops and produces substances that make finished products more aesthetically appealing and durable, and therefore increase their value. The focus is on aliphatic and aromatic isocyanates and their derivatives as well as polyurethane dispersions. These are required for the production of coatings, adhesives, sealants, and specialty products. The latter comprise specialty elastomers, high-quality films and precursors for cosmetics, textiles and medical products. These materials serve to protect, bond, seal, or functionalize a wide variety of surfaces. The main areas of application are automotive and transportation, infrastructure and construction, wood processing and furniture. With more than 2,700 products and some 3,700 customers across the globe in the CAS segment, Covestro was among the world's top suppliers in the reporting period in this area as well. Our main competitors are BASF, Evonik Industries, Vencorex Chemicals, and Wanhua Chemical.

Procurement

Procurement at Covestro is centrally steered and managed by the Procurement corporate function, which is responsible for the timely global supply of goods and services to all divisions of the company under the best possible conditions. This ensures that our Group's high quality standards are met. Furthermore, Procurement is responsible for ensuring that Covestro's ethical and environmental principles are upheld throughout the entire procurement process. The basic tenets of our procurement policy are set forth in a directive that is binding on all employees throughout the Covestro Group.

Strategic principles in Procurement



The objective is to generate a competitive advantage for Covestro and make a decisive contribution to the overall value. In doing so, Covestro is guided by four strategic principles: reliability, sustainability, cost transformation, and innovation. By purchasing renewable energy or biobased raw materials, Procurement contributes to realizing Covestro's vision of a closed-loop circular economy. In addition, Procurement promotes the digitalization of purchasing processes and systems in the interest of improving the efficiency and effectiveness of the procurement process for Covestro and its suppliers.

 See "Sustainability in the supply chain."

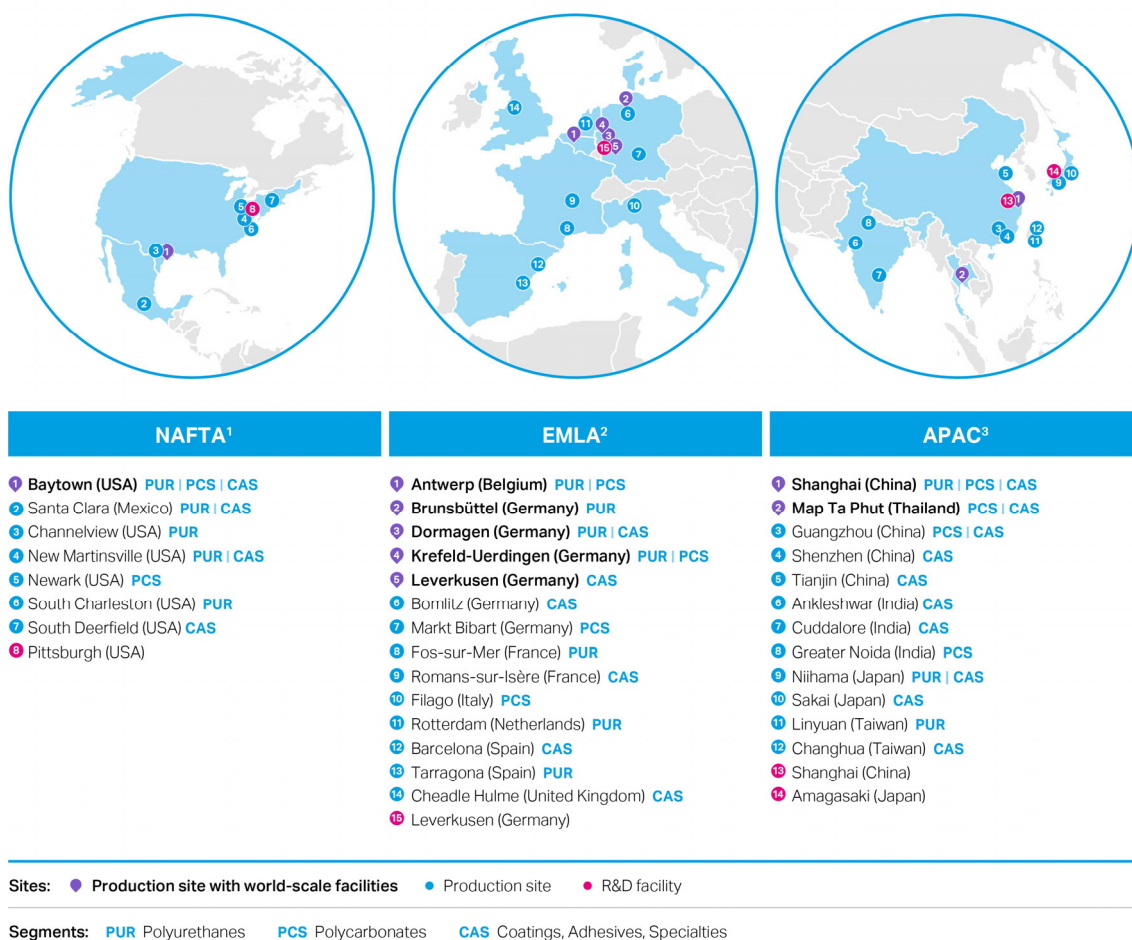
In fiscal 2020, goods and services were procured from some 13,000 suppliers (previous year: some 15,000) in 67 countries (previous year: 72) for approximately €7.9 billion (previous year: €9.4 billion). Distribution of purchasing volumes was balanced across the regions.

The most important raw materials for our products are petrochemical substances such as phenol, benzene, propylene/propylene oxide, toluene, and acetone – which collectively account for approximately 33% of our purchasing value. Moreover, the operation of our production facilities requires large amounts of energy, which we primarily procure from external sources and in the form of electricity and steam. We endeavor to procure raw materials essential for operations from within the Group or through joint ventures in order to reduce our dependence on external supply sources. To name just two examples: Covestro produces part of its chlorine in-house and procures propylene oxide through a joint venture. Operations, logistics, and investment projects require technical goods and services in addition to raw materials and energy. These activities are also centralized by Procurement to add value to Covestro. We regularly monitor the sustainability and quality of our suppliers and ensure that they comply with internal and external standards.

Production Sites and R&D Facilities

Covestro operates production sites and research and development (R&D) facilities for various product groups throughout the world. The following chart shows the geographical distribution of Covestro's 33 production sites and four R&D facilities.

Covestro's production sites and R&D facilities



¹ NAFTA: United States, Canada, and Mexico region.

² EMLA: Europe, Middle East, Africa, and Latin America (excluding Mexico) region.

³ APAC: Asia and Pacific region.

Covestro has 33 production sites located in Europe, North America, and Asia, eight of which have world-scale facilities. The latter are large-capacity production facilities that serve in particular to ensure that customers in the respective regions are supplied reliably and efficiently. We operate additional plants in selected countries to manufacture polyurethane precursors and products for the Coatings, Adhesives, Specialties segment. Moreover, we operate production plants in selected countries for customer-specific compounding of polycarbonate resins.

Thanks to the integration of upstream production stages (backward integration), e.g., in its own production of chlorine, Covestro has continually optimized the value chain. In addition, Covestro has put in place wide-ranging programs and initiatives to secure and steadily improve performance in the areas of safety, costs and plant availability.

We invest continuously in our global production network in order to maintain our production facilities and their infrastructure, to optimize manufacturing processes, and to expand capacities in line with market developments. To do so, Covestro relies on advanced and environmentally friendly production processes and continually optimizes its technologies. Key growth projects in fiscal 2020 included commissioning the MDI plant in Brunsbüttel (Germany), boosting polycarbonate production capacity in Shanghai (China), and expanding specialty films production in Map Ta Phut (Thailand) and Dormagen (Germany).

 See "Cash flows from investing activities."

Covestro conducts research and development at three major centers in Germany, North America, and China. Customer-facing applications are generally developed in the relevant regions, while global, fundamental research and technology development are mainly conducted in Germany. We also operate an R&D facility in Japan that concentrates on the Japanese market. Our global presence allows us to respond to regional trends and customer requirements.

 See "Innovation."

Marketing and Sales

Industry-specific marketing and sales teams are responsible for developing potential business with prospective and existing customers and continually analyzing markets and trends. Each reportable segment markets and distributes its own products through its own sales organization as well as through trading houses and local distributors. Major customers with global operations are an exception to this, as these are serviced directly by our key account managers. Marketing is conducted in close cooperation between marketing, sales, and application development teams.

At Covestro, we have consolidated the management of marketing activities in the Central Marketing function, which is also responsible for our digital sales channel Covestro Direct Store. Selected business units transferred their sales activities to the Covestro Direct Store either in whole or in part in the 2020 fiscal year. During that time, this digital trading platform handled more than 8,000 transactions with a total value in the mid-triple-digit millions, corresponding to approximately four times the business volume compared with the prior-year period. Meanwhile, we are working hard to meet our goal of tailoring our products and services more consistently to our customers' needs as well as providing a completely digital customer experience. To this end, we developed a Group-wide initiative called Customer Centricity in fiscal 2020 to put customers at the forefront of every employee's day-to-day responsibilities. This effort relies greatly on digitalization. Especially against the background of the coronavirus pandemic, we were thus able to flexibly react to our customers' needs early on and to meet these optimally thanks to innovative applications such as webinars and digital showrooms. Our new digital customer relationship management (CRM) application supports us with this effort, as it helps us to understand our customers even better and provide them with more customized and tailored solutions.

The three Supply Chain Centers in the EMLA, NAFTA, and APAC regions are responsible for key customer service activities and the efficient fulfillment of customer orders. They cover the entire process – from receiving orders through shipping to invoicing and handling complaints. Customer-oriented support in the individual regions allows us to process orders especially quickly and seamlessly. Covestro makes use of channels such as e-commerce platforms for receiving and processing orders. Our customers can place orders and check the status of their orders at any time in the Order@Covestro self-service portal. However, Order@Covestro is not used to initiate new business: Instead, the portal complements the services we provide our existing customers and helps us handle routine inquiries during times outside our customer service and sales staff's business hours.

The transportation of our products to customers is handled by logistics service providers who are selected and evaluated according to stringent safety, environmental, and quality criteria. Alongside the protection of people and the environment, delivery reliability is particularly important to us. The preferred mode of transportation is rail or intermodal – a combination of different modes of transportation. When selecting the mode of transportation, we also consider resource efficiency and seek to reduce associated CO₂ emissions in particular. Whenever permitted by transportation times and delivery reliability, we supply customers from close-to-production warehouses. In the case of longer distances and depending on the reliability of the mode of transportation, our products are temporarily stored in regional distribution centers and then dispatched from there in order to shorten delivery times. We also participate in the RH2INE industry initiative as part of our corporate commitment to reducing our carbon emissions. This initiative aims to deploy fuel-cell-powered vessels on the Rhine River starting in the year 2024. Building on RH2INE, Covestro is a key player in initiating another fuel cell project whose goal is to accelerate the development and use of fuel cells in cargo trucks.

 See "Sustainability in the supply chain."

In the future, we plan to measure customer satisfaction using the Net Promoter Score (NPS) to ensure that customer feedback is incorporated to a greater degree in our internal decision-making processes. The NPS is obtained by sending customers short surveys on an ad hoc basis to determine the extent to which they would recommend Covestro to others. In addition, our foremost quality goal is to eliminate error in all our processes to guarantee a high level of customer satisfaction. This information is regularly collected throughout the world and analyzed in a global management system, taking into account customer satisfaction analyses and supplier assessments. We use this data to derive corrective and preventive measures for the purpose of further increasing quality and customer satisfaction and further lowering the error rate and the incidence of complaints. In the reporting period, we received only 3.99 customer complaints per 1,000 deliveries, a reduction of 26% from the previous year.

Strategy

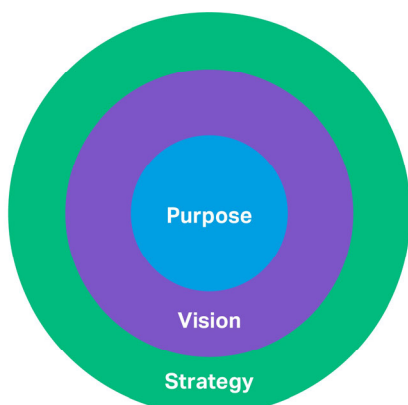
Purpose and Vision

Advancing climate change, the growing global population, rising urbanization, and new forms of mobility are enormous global challenges the world is facing. Covestro is meeting these challenges, thus bringing together economic success and sustainability. The goal is to realize Covestro's purpose: "To make the world a brighter place."

Our aim is to provide solutions to global challenges with our high-performance polymer materials. In pursuing it, we rely on technologies that reduce energy usage and emissions in our production processes. The products and solutions we develop are replacing traditional materials such as glass and metal, which are manufactured less sustainably or have a less sustainable life cycle. We are convinced that our long-term strategy of pursuing a circular economy will bring us closer to achieving our purpose.

Based on this purpose, we formulated a new vision during the reporting year and made it an integral element of our Group strategy: "We will be fully circular." Our vision provides us with a clear direction in which we want to develop as a company. With our products, which aim at circularity, we intend to contribute to solutions to global challenges along the entire value chain. We intend to achieve that, for example, by developing non-fossil-based polymer production, converting to renewable energy, and establishing recycling systems. To this end, we are increasing our participation in collaborative partnerships and networks.

Purpose, vision, and strategy



To make the world a brighter place

The reason why Covestro exists



We will be fully circular

What Covestro will look like in the future



Paving the way to tomorrow

How Covestro aims to implement the vision

Our corporate values and corporate culture as embodied by our employees are major factors in putting our purpose, vision, and strategy into action.

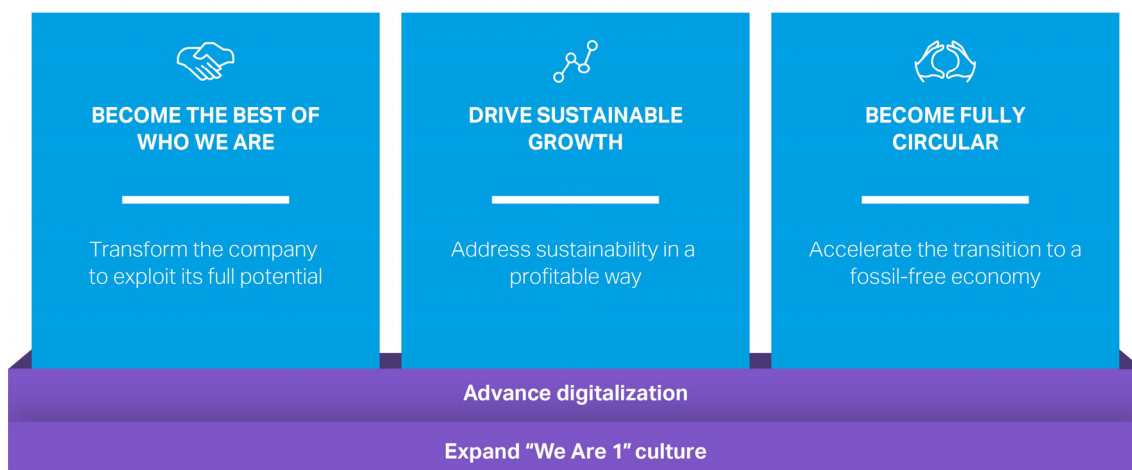
[See "Corporate values and corporate culture."](#)

Group Strategy

Strategic goals and activities

Our overarching goals derived from our purpose and our vision are directional of our Group strategy. This incorporates the changing world inside and outside the company, and reflects the new influence of our vision. Three strategic chapters are particularly important to Covestro. We want to “Become the best of who we are,” while we “Drive sustainable growth,” and “Become fully circular.” Our strategy is based on a solid foundation; its implementation is being enabled by the acceleration of Covestro’s digital transformation and expansion of our “We Are 1” culture.

Group strategy



“Become the best of who we are”

“Becoming the best of who we are” is the first strategic chapter to transform our company in the best possible way to exploit its full potential, thus creating the basis for sustainable and profitable growth. The first strategic chapter is driven by a clear understanding of our business: We deliver a broad portfolio of standard and specialty products and, at the same time, stand out with our strong innovation, research, and development capability. We want to focus even more on the factors that make our core business a success.

Our customers are our top priority in this process. We will optimize the processes that make our customers successful, improve workflows within our organization, and concentrate entirely on the needs of our customers. Depending on each customer’s focus, we will deliver high-quality standard products fast and at competitive prices, or assist our customers with our technical expertise in improving or developing (specialty) products. It is also our aim to considerably simplify, optimize, and digitalize our internal processes.

During the reporting year, we launched the “LEAP” global transformation program to implement the first strategic chapter. This program is intended to realign structures, processes, and control mechanisms to position our company to the best extent possible. To implement this, we aim to restructure our organization, workflows, and responsibilities. Our plans include structuring our business into standard products on the one hand and specialty products on the other. Furthermore, the program aims to bundle certain areas of competence across the company with the primary objective of improving our business, especially with a view to sustainability and the circular economy. The measures under the transformation program are scheduled to start in mid-2021 and be completed by the end of the year 2023.

Another important core element of the first strategic chapter is the “Customer Centricity” concept, with which we intend to focus even more on the needs of our customers. At Covestro, “Customer Centricity” is based on three pillars:

- Knowing the Customer: we need to know our customers so well that we understand exactly what added value we can provide for their business activities.
- Thinking Customer-first: every single function in our organization must be focused on what our customers need.
- Co-Creating Customer Value: we must join forces with our customers to create added-value in the marketplace.

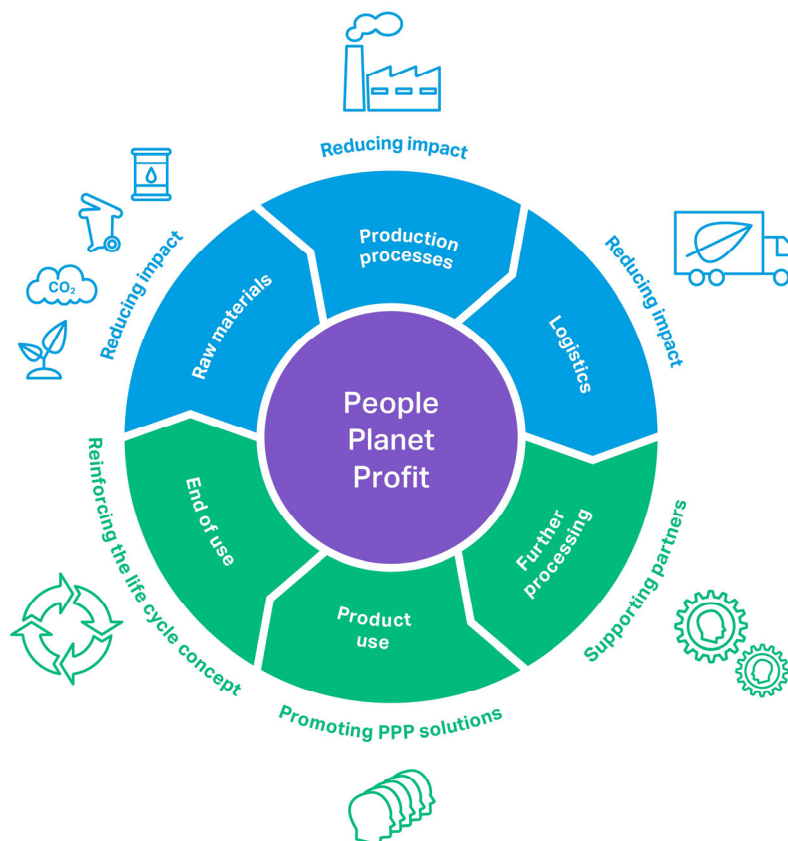
“Drive sustainable growth”

“Driving sustainable growth” – and therefore bringing together sustainability and economic success – is part of the second strategic chapter of our Group strategy. To ensure that our portfolio is fit for the future, we intend to invest in market segments that are attractive and sustainable for the long term. For this reason, we not only aim to make our investment portfolio sustainable, but also analyze and manage it based on profitability criteria to generate value with the capital we invest. We support investment projects with a return on capital employed (ROCE) above certain thresholds to sharpen our focus on value-oriented growth.

 See “Key management indicators.”

In the future, we will orient all activities that promote organic and inorganic growth, i.e., investments, acquisitions, research and development (R&D) activities, and our strategic venture capital initiative (Covestro Venture Capital, COVeC), even more strongly toward sustainability. The majority of our new, innovative products already contribute to meeting the United Nations Sustainable Development Goals (SDGs), and we pursue the clear goal of expanding our portfolio of circular products.

Sustainability formula



In addition to our responsibility for the environment, we also want to fulfill our social responsibility within society in accordance with our purpose “to make the world a brighter place.” This is why our strategy is focused on adding value equally at the social, environmental, and economic levels. Our decisions and our actions always take into account the three Ps of sustainability: people, planet, and profit (PPP). We are oriented toward a positive impact on at least two of the three Ps, while at the same time ensuring none of them is negatively impacted. Every decision, every action we take, and the resulting consequences are considered holistically at Covestro, that is, throughout the entire value cycle.

We plan to build plants faster and cheaper to increase the efficient use of our investment capital without sacrificing the reliability or safety of our facilities. For this reason, we will expand our global network of partners specializing in plant construction, equipment, and services; optimize in-house processes and the use of resources; accelerate internal approval processes; and increasingly apply a blueprint approach – i.e., we want to use completed construction projects as a template for future projects.

With the recently announced acquisition of the Resins & Functional Materials (RFM) business of Koninklijke DSM N.V., Heerlen (Netherlands), Covestro is expanding its sustainable business units to implement its long-term strategy. The planned completion of the acquisition and integration of RFM into the CAS segment will make Covestro one of the world’s leading suppliers of sustainable coating resins. Closing is planned for the first quarter of 2021.

 See note 7.2 “Acquisitions and divestitures” in the Notes to the Consolidated Financial Statements.

In the interest of accelerating the development of our circular product portfolio, we decided in the reporting year to allocate a significant portion of our investment budget for circular economy projects in the coming years.

Greenhouse gas emissions are considered to be the main driver of progressive climate change, which is why – in line with our goal of operating sustainably – we are working to continuously reduce our greenhouse gas emissions. In light of this, it was resolved during the reporting year to review the compensation system to create long-term performance incentives to hone the company’s focus on sustainability. In particular, starting in the year 2021, the existing long-term variable compensation system for the Board of Management and eligible employees will be expanded to include a sustainability component that covers Covestro’s direct greenhouse gas emissions. This will link long-term variable compensation to an absolute reduction in greenhouse gas emissions. There are also plans to include indirect greenhouse gas emissions in the future.

 See “Greenhouse gas emissions.”

“Become fully circular”

The third strategic chapter comprises our vision to “become fully circular.” It describes our efforts to contribute to accelerating the transition to a climate-neutral and resource-efficient economy. We see this orientation as an opportunity for Covestro to add solutions to global challenges – our circular products – along the entire value chain.

Limited natural resources and advancing climate change are two key drivers of the circular economy. Our activities aim to close material and carbon loops, and thus achieve climate neutrality and reduce the use of resources in the company itself, and in upstream and downstream stages of the value chain. To this end, we are aiming for non-fossil-based polymer production, i.e., in the long run we want to replace fossil-based raw materials such as crude oil entirely with alternative raw materials. By realigning our production processes, we will be able to use raw materials derived from sustainable biomass, CO₂ or recycled materials, or obtained using electrochemical processes. Our goal is clear: In the future, we want to produce 100% of our products from alternative raw materials.

Completely climate-neutral production processes also require a rigorous stepwise transition of the electricity supply to renewable energies at competitive prices while maintaining a secure supply. In the future, we aim to obtain 100% of the electricity required by all of our sites from renewable sources of energy.

We also want to drive the circular economy by developing and using innovative recycling options. In this context, we consider chemical recycling particularly promising.

We are aware that shifting our production activities and our product portfolio to circular economy is a major, long-term undertaking that we cannot accomplish alone. For this reason, we will increasingly work on establishing collaborative partnerships and networks with our customers, suppliers, research institutes, and other solution providers throughout the value cycle.

Implementation of the third strategic chapter, and thus our vision, is driven by our global strategy program "Circular Economy."

 [For more information on our activities, see "Circular economy."](#)

Digitalization and corporate culture

Our strategy consists of three strategic chapters resting on a solid foundation. Digitalization and our corporate culture are key elements of our company and our new strategy.

We plan to use an extensive program to take better advantage of the opportunities arising from digitalization. To achieve this goal, Covestro encourages the use of digital technologies and ways of working along the value chain, in corporate functions, and at all points of contact with the customer. The digital transformation of our core business aims to generate competitive advantages for Covestro. We intend to use digital business models to discover strategic options and new business areas. These include the expansion of our digital R&D activities and collaborations with major corporations such as Google.

 [See "Use of digital technologies."](#)

We want to embed our culture firmly in the company in order to fully exploit our internal potential and achieve our business goals. The key to this is our employees, who live the "We Are 1" culture. We work consistently on promoting our culture, developing it, and making implementation easier by defining specific conduct based on the four cultural dimensions.

 [See "Employees."](#)

Strategy of the Reportable Segments

Polyurethanes

In the years to come, demand for polyurethanes is expected to grow at an above-average rate compared to the global economy. In the Polyurethanes (PUR) segment, we aim to provide the precursors needed to tap into this development.

The construction industry is one of the strategic industries where we are already strongly represented, and we intend to further expand this position. At the same time, we plan to take into account the growing need for sustainable solutions. In the future, our range of products should satisfy the demand for energy-efficient and affordable living space, mainly in the emerging economies. Considering the SDGs, there are some not yet fully addressed market segments that also warrant our attention – such as wind energy, where we provide materials for generation.

The PUR segment manufactures largely standardized products; the focus is thus on increasing efficiency through cost management as well as product and process innovations. To achieve this, we are continually evaluating the potential for optimizing facilities and sites. In addition, we plan to develop new business models and improve existing ones.

Polycarbonates

Increasing digitalization in various industries requires innovative solutions and unlocks new opportunities for the Polycarbonates (PCS) segment. We meet these new requirements by continuously enhancing our product portfolio and developing solutions to fulfill demand in application areas with potential for the future. These application areas include smart homes, sensor integration in cars, casings for high-performance battery cells in electric vehicles, as well as signal-penetrable distribution stations and functional housings such as those used in 5G infrastructures.

We intend to further increase the share of resilient business by focusing on application areas where stringent requirements are imposed by complex application technology and technical applications, particularly in the automotive, health, and electronics/LED areas. Furthermore, through innovations such as fiber-reinforced composite materials, we plan to expand the technological position of the PCS segment and generate even more growth in a variety of areas. In addition, new forms of mobility continue to provide opportunities for PCS since materials with low weight, high-quality optics, and transparency are particularly in demand in the automotive industry, such as in the promising electromobility market. With its distinct application expertise and global presence, the segment should grow at a higher rate than that of the global economy.

Coatings, Adhesives, Specialties

The Coatings, Adhesives, Specialties (CAS) segment specializes in manufacturing precursors for coatings and adhesives that are used in sectors such as the automotive, construction, and furniture industries. We aim to secure and further build on our strong position. Of particular importance in achieving this are consistent cooperation along the entire value chain, the efficient expansion of our capacities, and customer-oriented product development. Furthermore, we are working on products that are as environmentally friendly as possible, do not require the use of solvents, and utilize alternative raw materials such as plant biomass.

Our specialties business produces high-quality films, specialty elastomers, and precursors for cosmetics, textiles, and medical products. Covestro plans to grow at an above-average rate in this area as well, thanks to our strong technological expertise and our knowledge of chemical formulation. In this way, we aim to achieve new and profitable application areas for our products.

The completion of the acquisition, which is planned for the first quarter of fiscal year 2021, and integration of the Resins & Functional Materials business (RFM) of Koninklijke DSM N.V. into the CAS segment will make Covestro one of the world's leading suppliers of sustainable coating resins. RFM features a strong, sustainable product portfolio that will reinforce the position of CAS in the value chain. This will enable us to offer our customers more effective and comprehensive solutions.

Management

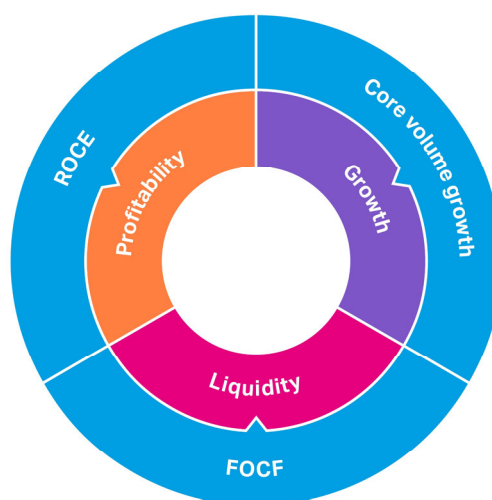
Covestro's management system is oriented toward long-term, profitable growth and continuous value creation. The Board of Management is the main decision-maker responsible for our global business and approving the planning derived from our corporate strategy. In order to plan, manage, and monitor the development of our business, we use key management indicators which enable the Group's business performance to be evaluated in a comprehensive and holistic manner. In addition, the Board of Management uses defined sustainability goals and selected nonfinancial performance indicators to govern the Group's sustainable orientation.

Business Performance

Key management indicators

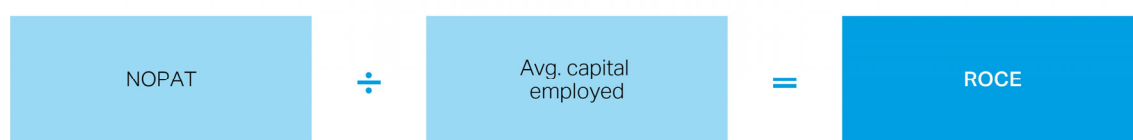
The Covestro Group assesses its business performance using indicators in the areas of profitability, liquidity, and growth.

Key management indicators



Return on capital employed (ROCE) is the key management indicator used to assess the profitability of the Covestro Group, measuring the return the company achieves on the capital it uses. This KPI is calculated as the ratio of net operating profit after taxes* (NOPAT) to average capital employed. If ROCE exceeds the weighted average cost of capital (WACC), i.e., the minimum return expected by equity and debt capital providers, the company has created value. ROCE is calculated annually at the end of each fiscal year.

Calculation of the return on capital employed



* The imputed income taxes are determined by multiplying the effective tax rate by the operating result (earnings before interest and taxes, EBIT).

The ability to generate a cash surplus is measured by the free operating cash flow (FOCF). FOCF is an indicator of the company's liquidity and ability to finance its activities. It corresponds to cash flows from operating activities less cash outflows for additions to property, plant and equipment and intangible assets. A positive FOCF serves to pay dividends and interest and to repay debt.

The growth of the Covestro Group is measured in terms of the development of core volume growth*. Unlike sales, this core volume growth key management indicator is influenced only indirectly by changes in raw material prices or currency effects.

The key management indicators are also used in Covestro's Group-wide bonus system, which is applicable uniformly to all staff – from the Board of Management members to employees under collective bargaining agreements. The three areas of profitability, liquidity, and growth each account for one-third of the final assessment and bonus calculation formula. As a result, all employees whose personal efforts contribute to Covestro's overall positive performance can share in the company's success.

 See "Overall assessment of business performance and target attainment" and "Short-term variable compensation."

Other performance indicators

Throughout its financial reporting, Covestro uses performance indicators such as EBITDA (earnings before interests, taxes, depreciation, and amortization), capital employed, and the absolute value contribution in addition to the key management indicators to assess the business performance of the Group.

EBIT and EBITDA

EBIT, which corresponds to income after income taxes plus financial result and income taxes, allows us to assess income without the influence of variable tax rates and/or various financing activities. EBITDA is used to assess the operating profitability of Covestro and its reportable segments during the year. EBITDA is EBIT plus amortization and impairment losses on intangible assets, and depreciation and impairment losses on property, plant and equipment, less impairment loss reversals. As a result, EBITDA is adjusted for possible distortions arising from various depreciation/amortization methods and measurement options, and therefore represents earnings from operating business activities.

 See "EBIT" and "EBITDA."

Capital employed

Capital employed, which is relevant to the calculation of ROCE, is the interest-bearing capital required by the company for its operations. It is calculated from operating noncurrent and current assets less non-interest-bearing liabilities. Non-interest-bearing liabilities include, for example, trade accounts payable and current provisions. The average capital employed is determined using the capital employed at the beginning and end of the relevant period.

 See "Return on capital employed (ROCE) and Value Contribution."

Weighted average cost of capital (WACC)

The weighted average cost of capital (WACC) is relevant to the calculation of the absolute value contribution and reflects the expected return on the entire company's capital comprising both equity and debt. The cost of equity factors used in WACC is calculated by adding the risk-free interest rate to the risk premium for an equity investment. Covestro uses the returns on long-term German government bonds as the risk-free interest rate. We derive this risk premium from capital market information for comparable listed companies. The cost of debt factors is calculated by adding the risk-free interest rate to a risk premium on debt capital that Covestro calculates using the financing costs of comparable companies, and subtracting the tax benefit of interest incurred on borrowed capital. Calculation of the cost of capital generally has a long-term perspective; short-term fluctuations are evened out.

 See "Return on capital employed (ROCE) and Value Contribution."

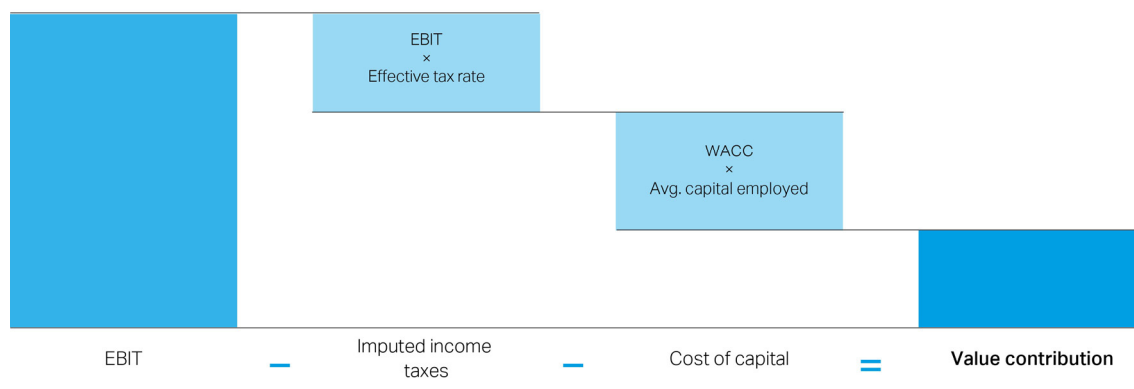
* Core volume growth refers to the core products in the Polyurethanes, Polycarbonates, and Coatings, Adhesives, Specialties segments. It is calculated as the percentage change in externally sold volumes compared with the prior year. Covestro also takes advantage of business opportunities outside its core business, for example the sale of precursors and by-products such as hydrochloric acid, sodium hydroxide solution, and styrene. These transactions are not included in core volume growth.

Value contribution

Covestro aims to steadily increase enterprise value. Value is generated if Group earnings exceed the cost of capital. The absolute value contribution is the difference between NOPAT and the cost of capital. The latter is calculated by multiplying the average capital employed by WACC. A positive value contribution means that value has been generated.

[See "Return on capital employed \(ROCE\) and Value Contribution."](#)

Calculation of the value contribution



Net financial debt

Net financial debt is used to assess the financial position and financing requirements. It equals the sum of all financial liabilities less cash and cash equivalents, current financial assets and receivables from financial derivatives.

[See "Net financial debt."](#)

Sustainability

Doing business sustainably is a major factor in Covestro's success. This requires us to integrate sustainability principles into all of our business activities, while at the same time ensuring adequate focus on the issues of greatest relevance to us and our stakeholders. Sustainability issues are therefore also integral to corporate governance.

Management and governance

The Sustainability function advises the other corporate functions by sharing its extensive technical expertise on topics such as life cycle assessment (LCA), human rights, and the United Nations Sustainable Development Goals (SDGs). A network of sustainability officers guarantees access to this expertise for all corporate functions and all regions in which we operate.

Occupational health and safety and environmental protection are monitored using a Group-wide management system. Support is provided by a centralized team of experts with global responsibility for these issues.

[See "Integrated management system for health, safety, environment, energy, and quality."](#)

A holistic review of the issues of sustainability as well as health, safety, environment, energy, and quality (HSEQ) is conducted by the Board of Management. The company's management sets quantitative targets, monitors success on the basis of performance indicators, sets priorities, and adjusts the allocation of resources when necessary.

Our principles are anchored in publicly available corporate policies. They provide concrete specifications on the important issues of value creation, sustainability, innovation, people, HSEQ, and compliance. The framework for our activities in these policies is described more specifically and in greater detail in directives. Directives are binding for employees throughout the Group and are available to all staff in an in-house database. Compliance with the directives is verified using annual internal audits. In addition, issues and action plans as well as target attainment are monitored in a management review. Global and local procedures for the relevant processes ensure that the content of corporate policies and directives is implemented in all operating units.

 See "Corporate policies."

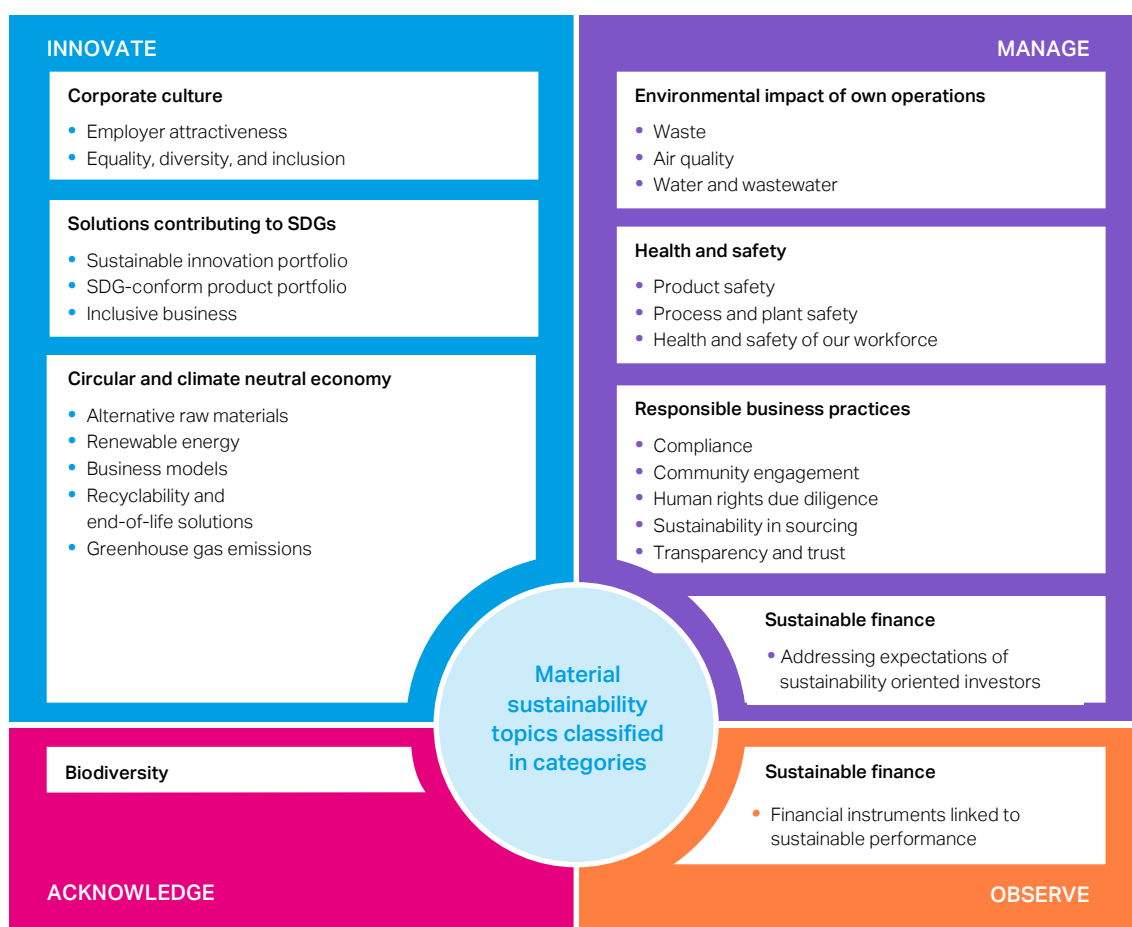
Binding ethical and legal principles are anchored in our compliance directive, which includes important guidelines on fair and respectful working conditions and on fighting corruption, among other topics. Covestro has implemented a reporting process so that employees can report potential compliance violations anonymously. Targeted communication measures and employee training sessions ensure that the contents of the compliance directive are understood throughout the organization.

 See "Compliance."

Material sustainability topics

Covestro coordinates its sustainability activities across the Group and focuses on topics of particular significance. We regularly conduct a materiality assessment to identify and prioritize the most important sustainability topics for the Group. This year, we established a new materiality assessment process to further strengthen the link between sustainability and our strategy and risk management activities. This closer connection with the existing processes of other corporate functions increases the relevance of the results and fosters their systematic use.

Results of the materiality assessment



The process of determining the material topics in the reporting year involved the compilation of a long list, including sustainability topics from external and internal sources, and an assessment of their relevance to Covestro. It also took feedback and opinions of external and internal stakeholder into account. To identify the material sustainability topics for Covestro, we applied the three dimensions of materiality: "business relevance," "stakeholder relevance," and "impact." The topics were combined into thematic areas for the first time in the reporting year and broken down into four categories (Innovate, Manage, Observe, Acknowledge) to reflect the activities appropriate to the topics to be derived for Covestro. The breakdown into categories helps combine familiar and new topics in the materiality assessment, since the action required differs depending on the management approaches in place. The material topics and their classification have been reviewed and approved by the Board of Management. They are reviewed annually and, if necessary, modified in line with the latest developments. The comprehensive materiality analysis described here is scheduled to take place every three to four years.

 [See "Nonfinancial Group statement."](#)

Material sustainability topics in the "Innovate" category

The material topics in the "Innovate" category are highly relevant to our business and for stakeholders, and provide opportunities for direct influence by Covestro. New management approaches must be defined and established for these topics of future relevance.

"Circular and Climate Neutral Economy" topics have become increasingly important in the public debate. Their growing relevance is also reflected in Covestro's vision: We will be fully circular. Specific action items in our Group-wide circular economy program were identified for implementation and approved by the Board of Management.

 [See "Circular economy."](#)

"Solutions Contributing to SDGs" is another cluster whose increase in relevance we have observed. We have been aligning our innovation activities more strongly with the UN SDGs since the year 2017. In the reporting year, we began systematically evaluating our research and development (R&D) projects for their contribution to the SDGs. A total of 96% of R&D project costs incurred have already been assessed, and 51% of them exceed the threshold we have defined. We consolidate our activities in the material topic of inclusive business in a program under which we aim to meet needs in what are known as underserved markets. Our collaborative approach ensures that we offer scalable solutions intended to reach as many people as possible.

 [See "Innovation" and "Inclusive business."](#)

Corporate culture continues to be a key factor in our company's focus on sustainability. Covestro targets innovative solutions to advance topics of relevance to employees now and in the future. Where necessary, we establish suitable indicators of progress for this purpose.

 [See "Employees."](#)

Material sustainability topics in the "Manage" category

The "Manage" category comprises the material topics that are highly relevant to our business and for stakeholders, and provide opportunities for direct influence by Covestro and where Covestro already has robust management approaches in place. The management approaches associated with these topics are continually reviewed and improved further as needed.

In the reporting year, we reviewed and restructured the organization of the HSEQ corporate function. The "Environmental Impact of Own Operations" cluster is a core element of our integrated HSEQ management system.

 [See "Integrated management system for health, safety, environment, energy, and quality" and "Environmental protection."](#)

As a company in the chemical industry, we have a special responsibility with respect to health and safety. We intend to manage this responsibility with our integrated HSEQ management system.

 [See "Safety" and "Product stewardship."](#)

Covestro combines the following topics under the umbrella of “Responsible Business Practices”: “Community engagement,” “Compliance,” “Human rights due diligence,” “Sustainability in sourcing,” and “Transparency and trust.”

 See “Social responsibility,” “Sustainability in the supply chain,” and “Compliance.”

 See “Stakeholder dialogue.”

To document our commitment to sustainable finance and advance this, and to enhance our attractiveness for sustainability-oriented investors, we focus on a number of different strategic sustainability rankings.

 See “Public recognition.”

Material sustainability topics in the “Observe” and “Acknowledge” categories

In addition to the key topics in the “Innovate” and “Manage” categories, additional topics were identified that could become more important for Covestro in the future.

Financial instruments linked to sustainable performance provide interesting opportunities for Covestro. The use of these instruments allows the company’s sustainable development to have a direct impact on financing and its costs. In the reporting year, Covestro already entered into two financing agreements that link changes in its sustainability rating to financing costs. Covestro continually observes whether other financial instruments can be linked meaningfully to sustainability aspects.

 See “Financial position.”

“Biodiversity” is a significant topic for our stakeholders, and we expressly acknowledge the societal importance of this issue. Our commitment to a circular economy and the associated increase in the use of biobased raw materials will make the topic of biodiversity more and more important for Covestro in the future.

Optimizing business practices

Continually maintaining and enhancing our sophisticated management systems is a key priority in ensuring societal acceptance of our ongoing business activity (license to operate). Based on our continual improvement process, we reviewed and redesigned our existing HSEQ management systems during the reporting year. A particular focal point in fiscal 2020 continued to be the topic of “Human rights due diligence.” We also updated our methodology for systematically assessing our water risks in the reporting year and now consider not only physical but also regulatory risks at our production sites.

 See “Integrated management system for health, safety, environment, energy, and quality,” “Environmental protection,” and “Human rights due diligence.”

Public recognition

Our sustainability activities relating to environment, social, and governance (ESG) are regularly evaluated by third-party organizations such as rating agencies. Sustainability ratings are not only a decision-making basis for institutional investors and customers, but also help us to continually review our sustainability activities and supplement them as needed. We have identified four strategic ratings and actively engage with the agencies. In the year 2020, Covestro received special recognition from the rating agency ISS ESG, which again awarded us Prime status with an overall score of B–. This puts Covestro among the best 10% of rated companies in the chemical industry. Additionally, Covestro was ranked above average once more by another rating agency, Sustainalytics, placing third out of 120 specialty chemical companies assessed. In the year 2019, the international rating agency EcoVadis gave us its top Gold rating, we also retained the previous year’s A rating from MSCI ESG Research, one of the world’s largest provider of sustainability analyses and ESG ratings. In addition to the above-named ratings, we also qualified to remain listed in the important FTSE4Good Series.

Assessments by rating agencies

Rating	Rating scale	Covestro's score					Distinction
		2016	2017	2018	2019	2020	
	0–100 points (the higher the better)	73			80		
	A+ to D– (top score: A+)	B–		B–		B–	„Prime“ Status (since 2016)
MSCI	AAA to CCC (top score: AAA)	BBB	BBB	A	A	A	
	Until 2019: 0–100 points (the higher the better) After 2019: 0–100 points (the lower the better)	74	75		80 23.3	20.0	

We consider the results in these ratings and the inclusion in sustainability indices as an indication of our environmental, social, and governance performance. The details of these ratings also show us how we can continue to improve.

+ Additional information is available at: www.covestro.com/en/sustainability/what-drives-us/rating-and-indices

Sustainability targets

In the year 2016, we set targets for key nonfinancial topics. We report in detail on our progress in the relevant sections:

- Our project portfolio for research and development should be aligned with the SDGs. By the year 2025, 80% of project expenditures for research and development are to be used in areas that contribute to reaching these goals. In the year 2020, 51% of R&D project costs met this target.
 See "Innovation."
- All of our suppliers with regular purchasing volumes of more than €100,000 per year are expected to comply with our sustainability requirements by the year 2025. During the year 2020, 79% of relevant suppliers met our sustainability requirements (previous year: 81%).
 See "Sustainability in the supply chain."
- Specific greenhouse gas emissions per metric ton of product manufactured are to be reduced by 50% from the 2005 benchmark by the year 2025. By the end of the year 2020, we achieved a reduction of 46.2% (previous year: 46.1%).
 See "Environmental protection."
- We want 10 million people in underserved markets to benefit from our solutions by the year 2025. The goal is to improve their standard of living primarily through affordable housing, sanitation, and food security. By the end of the year 2020, our solutions had already reached 1.1 million people (previous year: 0.7 million people).
 See "Inclusive business."
- We intend to create more value and increase our carbon productivity by using fewer carbon-based fossil resources. Except for our efforts toward improving energy efficiency in our production processes, we also consider our circular economy activities to be a key factor in this regard.
 See "Circular economy."

[Supplementary information >](#)

Stakeholder dialogue

We have a close and collaborative relationship with our stakeholders. They assess our company not only from a legal standpoint, but also according to whether we do business in a sustainable and ethical manner. In order to identify material sustainability topics, we continually analyze the interests, expectations, and needs of our major stakeholders and incorporate the results into our target plan and our opportunity and risk management activities.

 See "Material sustainability topics."

An open and continuous exchange with our regional, national, and global stakeholders is the foundation for mutual understanding and societal acceptance of Covestro's decisions. At the same time, these discussions provide new inspiration and important recommendations.

The following chart provides an overview of our key stakeholder groups and the relevant dialogue formats.

Covestro's transparent dialogue with important stakeholders

Stakeholder groups	Forms of dialogue
Customers	• Regular in-person exchanges via Sales and Marketing employees • Branding and market research, customer surveys • Attendance at international industry trade shows • Webinars and digital showrooms
Employees	• Town hall meetings with members of the Board of Management and senior executives • Ad-hoc mailings and presentations, company intranet, social media, internal campaigns • Dialogue between managers and employees, regular discussions between the Board of Management and Works Council
Suppliers	• Together for Sustainability initiative • Sustainability events and workshops with suppliers • Regular exchange via corporate function Procurement
Associations	• Active member in national and international associations, e.g., Plastics Europe, American Chemistry Council (ACC) and China Petroleum and Chemical Industry Federation (CPCIF)
Scientific community	• Long-standing, collaborative relationships with leading German and international universities and public research institutions
Investors, lenders and analysts	• Annual general meeting • Annual report, half-yearly and quarterly reporting • Various events for investors and analysts with different focuses • Online information offered on investor.covestro.com
Regulators	• Regular exchange with government agencies, ministries, politicians, and important opinion leaders
The public, neighbors and NGOs	• Ad-hoc dialogue, e.g., in the event of investment projects in the community • Chempark neighborhood offices (Germany), community advisory panels (CAPs) (United States)
Media	• Press releases, press conferences, background discussions, individual interviews • Communication through social media channels such as LinkedIn, Twitter, Facebook, and YouTube • Annual and quarterly reports, as well as presentations and speeches from conferences and meetings (also available on our website)

Depending on the topic and its relevance, Covestro's departments identify and prioritize major stakeholders and select the appropriate dialogue format and frequency of contact in each case. Covestro has been using various digital dialogue formats (for example, for the Annual General Meeting as well as employee and customer events) to ensure that we stay in touch with our stakeholders during the coronavirus pandemic.

Contribution to the United Nations Sustainable Development Goals (SDGs)

The SDGs are significant in their entirety for developing and improving living conditions worldwide. For this reason, it is important to us to maintain our focus on all SDGs and their relevant subgoals. In our opinion, all the SDGs are equally important, are closely interconnected, and influence each other. Our objective is to contribute to the attainment of all of these goals or to maximize our influence on them. The SDGs serve primarily as a source of inspiration for innovation and as indicators for the future direction of the company.

We have conducted a detailed analysis on the SDGs and our contributions, taking a close look at the top-level SDGs and their subgoals – under additional consideration of the UN's guidelines on interpreting the SDGs. We found that Covestro already makes substantial positive contributions to all 17 SDGs and many subgoals. The majority of these relate to products in our core business that, during their use phase, help conserve large amounts of energy. Additional contributions stem from our own production activities, our business practices, our community engagement, and solutions for underserved markets (the inclusive business segment).

 See "Inclusive business."

In order to increase our contributions in the future, we are aligning our R&D portfolio with the SDGs, and the further operationalization of this goal was again a focal point of this reporting year.

 See "Innovation."

In addition to evaluating the positive contributions to the SDGs that Covestro is already making, the analysis aimed to identify requirements that Covestro could face. By these types of requirements we mean topics that, from the perspective of stakeholders, could potentially be seen as having a negative impact on individual SDGs if there was any inactivity or neglect. For example, we are aware that our production is associated with high energy requirements. For this reason, we have set ourselves the target of reducing specific greenhouse gas emissions in our production by 50% until the year 2025 from the 2005 benchmark. To this end, we have initiated many activities that will reduce energy usage in our production and cut greenhouse gas emissions. Moreover, some of our products contribute to saving energy during the usage phase. In many cases, more energy is saved during usage than was used in their production – for example, in building insulation.

As a chemical industry player, Covestro has a particular responsibility – of which we are continually aware. For this reason, we ensure that the challenges we have identified are systematically addressed and continuously monitored. In this way, we want to ensure that we make positive contributions to the SDGs, including and especially in challenging areas – e.g., in areas where we currently have a low profile – or that our activities are at least neutral.

Current Covestro contribution to the SDGs (Covestro internal study 2017; R&D projects updated in the year under review)¹

	AREAS OF ACTIVITY				
	R&D projects ²	Core business products	Production, workflows, business ethics	Inclusive business	Social engagement
1 No Poverty	•	•	•	• •	•
2 Zero Hunger		•		• •	• •
3 Good Health and Well-Being	• • •	• •	• •	•	•
4 Quality Education			•	•	• • •
5 Gender Equality			•		• •
6 Clean Water and Sanitation	•	•	• • •	•	• •
7 Affordable and Clean Energy	• •	• • •	•		• •
8 Decent Work and Economic Growth	• • •	• •	• • •	•	• •
9 Industry, Innovation and Infrastructure	• •	• •	• •	• •	• •
10 Reduced Inequalities			•	•	•
11 Sustainable Cities and Communities	• •	• •	•	• •	•
12 Responsible Consumption and Production	• • •	• • •	• • •	• •	•
13 Climate Action	• • •	• • •	• •	•	•
14 Life Below Water	•		•		•
15 Life on Land	•		•		
16 Peace, Justice and Strong Institutions			•	•	
17 Partnerships for the Goals	•	• •	• •	• • •	• • •

• Low • • Medium • • • High

¹ The impact of the contributions is comparable only within individual areas of activity.

² Evaluation of R&D projects by project budget and estimated SDG contribution.

[< Supplementary information](#)

Corporate Policies

We have laid down important basic principles for our actions in six policies applicable throughout the Group. The text of these guidelines is publicly available. They provide our employees with guidance in the areas of value creation, sustainability, innovation, people, HSEQ, and compliance. The standards outlined in these policies are mandatory for all employees worldwide and form the framework for our activities. Where required, further detail is provided with more specific guidelines on particular topics.

+ Additional information is available at: www.covestro.com/en/sustainability/service-downloads/policies-commitments

Supplementary information >

Corporate policies

Value creation

Covestro's primary objective is to turn its development activities and products into solutions that create value for customers, society, the environment, employees, and investors. We do this, for instance, by manufacturing products with superior properties, environmental performance, usability and cost effectiveness. At the same time, Covestro aims make the life cycle of products as resource-efficient as possible to extract the greatest possible value from the resources used in them.

Sustainability

We want to bring economic success into alignment with environmental and societal goals. Doing business sustainably conforms to Covestro's purpose: "to make the world a brighter place". In making decisions and taking actions, we therefore consider the three dimensions of sustainability – people, planet, profit – equally, while adhering to the principle of avoiding a negative impact on any of them. Our Sustainability Policy underscores this intention. Special committees at Covestro are tasked with defining and managing important sustainability topics, including the development and implementation of goals and action plans.

☞ See "Sustainability."

The SDGs are of great significance for Covestro and are therefore also reflected in our corporate strategy. For instance, we have made it our aim to systematically accelerate the alignment of our R&D project portfolio with the SDGs. This conviction is also expressed in our voluntary commitment to attaining the SDGs on our website (Corporate Commitment on our Contribution to the United Nations Sustainable Development Goals).

+ Additional information is available at:
<https://www.covestro.com/en/sustainability/what-drives-us/un-sustainable-development-goals>

Innovation

Innovation is an essential factor in mastering the challenges of a changing world, remaining competitive, and creating value for the long term – inspired by and consistent with sustainability. Accordingly, we continually work on developing new products, processes, applications, and technologies that offer new perspectives. It is particularly important to us that innovation be an issue of personal concern to each and every Covestro employee.

☞ See "Innovation."

Employees

Covestro's success is based on the outstanding skills and strong commitment of its employees. We therefore offer our employees a good and safe working environment and promote their professional and personal development. Covestro values a corporate culture that is curious, courageous, and colorful, and enables employees to successfully contribute their talents to the company. The core competencies and management skills that guide our employees' further development are also oriented to these values.

☞ See "Employees."

Health, safety, environment, energy, and quality (HSEQ)

Health, safety, environment, energy, and quality are vitally important for achieving our goals. We set high standards and continually work toward improving our performance. This is the main objective of our integrated HSEQ management system, which ensures the implementation of the specifications in our HSEQ Group Regulation in orientation to or conformity with the internationally recognized standards ISO 45001, ISO 9001, ISO 14001, and ISO 50001.

 See "Integrated management system for health, safety, environment, energy, and quality."

Compliance

Covestro's corporate governance is characterized by a strong sense of responsibility as well as adherence to ethical principles. This includes strict compliance with all statutory requirements and Covestro's voluntary commitments, which are anchored in our internal regulations and are applicable to all employees worldwide.

 See "Compliance."

Corporate commitments

As a company committed to operating sustainably, we take a clear stand on relevant issues. Like our guidelines, the text of these corporate commitments is publicly available. The minimum standards applicable to such efforts are stipulated in our voluntary corporate commitments. Compliance with them is governed by the corresponding directives, which are valid throughout the Group. At present, Covestro has entered into voluntary commitments on the following: the UN Sustainable Development Goals, the Ten Principles of the UN Global Compact, Responsible Care™, human rights, slavery and human trafficking (UK Modern Slavery Act Statement), water, product responsibility, corporate compliance, responsible lobbying, responsible marketing and sales, and tax transparency. In terms of lobbying in particular, we have laid down clear and binding rules for our engagement in the political arena. The voluntary commitment and a more comprehensive directive are applicable Group-wide and build on transparency and openness in the interaction with representatives of political institutions. In addition, Covestro has voluntarily joined the European transparency register in addition to publicly publishing its voluntary commitment. Covestro does not make any donations as a company to political parties, politicians, or candidates for a political office. The associations in which Covestro is a member make donations under their own responsibility and according to the respective relevant legislation, in particular taking account of laws related to donations to political parties.

 Additional information is available at: www.covestro.com/en/sustainability/service-downloads/policies-commitments

[< Supplementary information](#)

Circular Economy

Covestro wants to use the circular economy in the future primarily to provide efficient solutions so that products and materials are returned to the value creation cycle at the end of their life cycle – as a whole, in the form of polymers, or in molecular or other chemical forms. The use of other renewable carbon sources and the increased deployment of renewable energies in production are complementary measures at Covestro for establishing a closed loop system in the company. Under the Circular Economy global strategy program Covestro took further steps to establish circularity throughout the entire company and to drive efforts toward “becoming fully circular” – our corporate vision. We identified areas of focus in the strategy program ranging from product design to procurement, energy and raw material generation and use, to the development of new business models and innovative production methods in order to achieve this goal. All our activities aim to close carbon and material loops, and thus achieve climate neutrality and reduce the use of resources in the company itself, and in upstream and downstream stages of the value chain.

 See “Become fully circular.”

Our target for increasing carbon productivity



We intend to create more value and increase our carbon productivity by using fewer carbon-based fossil resources.

Status

Our circular economy activities are making a critical contribution. We investigated and evaluated various indicators and measurement methods for circularity during the reporting year and will build on this to develop a system for Covestro.

Management and implementation

Both the internal transformation and the promotion of external transformation into a closed-loop system are driven by the Circular Economy global strategy program. In the course of announcing the new corporate vision, Covestro added a steering committee to the program. The committee is made up of the heads of the Strategy and Portfolio Development, Procurement, Sustainability, and Central Marketing corporate functions, Polyurethanes, Polycarbonates, and Coatings, Adhesives, Specialties, and the management of the Finance, Production, and Technology corporate functions. By making decisions and providing direction for the program, the steering committee is intended to ensure the implementation and development of steps toward a closed loop system in all corporate functions. Corresponding recommendations for action are developed in global teams that cover technologies for alternative raw materials, raw material markets, procurement, customer segments, site development, CO₂ impacts, and positioning in the context of a circular economy. This Group-wide program is sponsored by Covestro's CEO.

During the reporting period, we made progress on initiatives within the strategy program, including measuring and reporting circularity in the company, criteria for a circular and sustainable product portfolio, Covestro's climate stewardship, and identification of greenhouse gas reduction paths.

Measuring and reporting circularity in the company

In order to make our achievements in implementing a closed loop system measurable in line with our corporate vision, suitable indicators and criteria are required. We investigated and evaluated various indicators and measurement methods for circularity at Covestro during the reporting year and will build on this to develop a suitable system for Covestro. To this end, we are also studying existing models, e.g., the ones developed by the Ellen MacArthur Foundation or the World Business Council for Sustainable Development (WBCSD), and building on our experience to date with approaches to carbon productivity.

Criteria for a circular and sustainable product portfolio

We have begun defining criteria and circularity requirements for our products and services so that we can align our product portfolio more closely with circular solutions for our customers and offer these in a targeted manner in the future. Examples include minimum recycled or renewable raw material content and the combined use of renewable energy in the production of our materials. A top priority in this regard is to improve our carbon footprint compared with a conventional product portfolio so that we can make a tangible contribution to future climate-neutral value creation in our industry.

Covestro's climate stewardship and the identification of greenhouse gas reduction paths

The move towards a circular economy is key to substantially reducing Scope 1, Scope 2, and Scope 3 greenhouse gas emissions – i.e., direct and indirect emissions sources pursuant to the Greenhouse Gas Protocol (GHG) – along the entire value chain. In the reporting year, development of a global carbon roadmap was initiated with an initial focus on the year 2030 in order to align Covestro's existing targets for reducing greenhouse gas emissions in accordance with the new corporate vision. The roadmap serves as a pillar of our Covestro Climate Stewardship, which is aimed at ensuring compliance with the greenhouse gas emissions targets and continual short-, medium-, and long-term reductions in emissions. The roadmap will be the foundation for prioritizing specific greenhouse gas reduction projects and for adapting the company's climate-related targets to the new corporate vision. It will generally address and evaluate all direct and indirect sources of emissions pursuant to the GHG Protocol. Covestro already has a regular reporting system in place for Scope 1 and Scope 2 emissions. A reporting system for Scope 3 greenhouse gas emissions is under development.

Recycling and production processes

Our core technical competence is the development and application of complex chemical processes. In particular, we want to use this expertise to establish innovative chemical and biochemical recycling and production processes for a circular economy. We want to create processes that enable us to reclaim from used materials the chemical precursors required for their production. These can in turn be used as raw materials in our own production activities. In addition, we also want to use recycled raw materials in upstream stages of the value chain in production at Covestro. On the whole, chemical recycling processes are an important tool for Covestro in gradually replacing the use of fossil-based materials and in contributing to closing carbon loops as a pillar in a climate-neutral method of production. The benefits of the new processes will be verified by means of a life cycle assessment (LCA), in other words, taking the entire life cycle into account.

When we engage in dialogue with politicians and the public, we advocate for structuring the required regulatory environment for establishing a comprehensive circular economy with room for innovation and, in addition to established recycling methods such as mechanical recycling, also recognizing chemical recycling processes as complementary methods.

Covestro is currently researching recycling processes for its own products and materials in more than 20 projects. Of particular importance for Covestro are processes with which materials can be chemically or enzymatically transformed back into their molecules. The secondary raw materials obtained in this manner are of a comparable quality and have properties similar to conventionally manufactured raw materials, and can therefore be reused to manufacture products and materials.

When it comes to implementing circularity, we have made important progress in polyurethane recycling. The first pilot plant for recycling flexible polyurethane foam was commissioned during the reporting year, building on our participation in the PUReSmart research partnership project. This foam is used, among other things, for the manufacturing of mattresses and car seats. In contrast to other processes under development, both polyether polyol and toluene diamine (TDA) are reclaimed here, not just polyether polyol. TDA is used at Covestro in toluene diisocyanate (TDI) production. By recovering it, we aim to develop a fully closed loop for our flexible polyurethane foams.

Further development of the circular and sustainable product portfolio

A key element in the circular economy is applying the principle of design for circularity. This means that various aspects of circularity, such as alternative raw materials, avoiding waste, durability of the application, and recycling options, are considered when developing products. Depending on the intended use, design for recycling may also play an important role here, along with the use of as few as possible different and pure materials in a product.

In this context, Covestro has set standards and, for instance, launched a unique headlight concept based on the use of monomaterials. This LED headlight system is composed of just four materials: Makrolon® polycarbonate; Bayblend® polycarbonate/ABS blend, a scratch-resistant coating (outer lens cover), and metallization (reflectors). This simplifies recycling considerably as it reduces separation, sorting, and storage effort in the recycling streams at the end of the headlight's useful life.

Another aspect of circularity at Covestro is CO₂ recycling. The materials we produce are based on carbon, which can be converted to CO₂ in various ways. In the future, all possibilities for CO₂ use must be exploited to meet the ambitious government and non-government climate protection goals under the Paris Agreement. We have already established an innovative platform technology for this purpose – cardyon® – that allows us to use CO₂ in our production process directly, and we continually strive to expand the existing application options for this technology. In addition to current uses, such as mattresses, sports flooring, and textile fibers, Covestro developed another application in the reporting year and offers the technology for the manufacture of foams used in the automotive industry. In the year 2019, Covestro was nominated along with RWTH Aachen University and the Max Planck Institute for Chemical Energy Conversion, Mülheim an der Ruhr (Germany), for the German Future Prize – the Federal President's Prize for technology and innovation – and selected for inclusion in the "Circle of the Best" for this prize.

Moreover, in addition to the integration of renewable raw materials into production processes already underway, business activities involving mechanically recycled polycarbonate were expanded further in the reporting period. Polycarbonate products with mechanically recycled content are now marketed not only in the Asia-Pacific region but also in Europe. All told, 13 types of polycarbonate have been developed to date containing up to 75% recycled content. This enables us to reduce our carbon footprint by up to 50%.

In China, Covestro also entered into a strategic partnership in the area of drinking water container recycling. An agreement was signed with partners Nongfu Spring, Hangzhou (China), and Ausell, Shanghai (China), to introduce a recycling model for 19-liter reusable drinking water containers that can be recycled after several uses and reused as recycled polycarbonate, particularly in electronics applications. The partnership expects to collect and recycle one million of these drinking water containers annually.

Raw material and energy procurement

In addition to Covestro's own production of secondary and biogenic raw materials, the strategic alignment of our raw material and energy procurement activities with our corporate vision is vitally important. During the reporting period, Covestro therefore further expanded its strategic partnerships to promote the circular economy.

As part of a strategic raw material partnership with Neste, Espoo (Finland), and Borealis, Vienna (Austria), Covestro has started to use renewable hydrocarbons in the production of the phenol, which is required to manufacture polycarbonate. To date, the hydrocarbons on which this chemical is based were obtained from petroleum. At Neste, however, they are produced from resources such as waste and residual oils and fats. In a further step, Borealis uses the hydrocarbons certified by Neste to produce phenol, which Covestro uses to produce polycarbonate. On this basis, petroleum can be replaced with certified renewable raw materials in the value chain for producing polycarbonate.

We have begun to have our production facilities audited and certified to the ISCC+ process to reflect the certification of this material for its further use along the entire value chain. International Sustainability and Carbon Certification (ISCC) is a recognized system for certifying the sustainability of biomass and bioenergy. The standard, which covers all stages of the value chain, is widely used worldwide. In the reporting period, Covestro initially had the Krefeld-Uerdingen (Germany) and Antwerp (Belgium) sites in Europe certified to the ISCC+ process for the integration of renewable raw materials in production. Other sites for the integration of renewable raw materials are to be certified in the future in order to provide these solutions to a broad market and to move successively from the raw materials used in production to alternative raw materials.

Covestro also made progress in supplying production sites with renewable energy and signed what was then the world's largest industry supply contract for offshore wind energy with energy supplier Ørsted, Fredericia (Denmark). From the year 2025 onward, Covestro will be supplied with electricity for a period of at least 10 years from wind energy generated by a newly constructed wind farm off the island of Borkum. A capacity of 100 megawatts was agreed. This deal bolsters Covestro's comprehensive sustainability strategy and provides impetus for climate-friendly electricity generation. Likewise, it contributes to shrinking the carbon footprint of production, our products, and our customers' applications.

In the context of expanding the generation of electricity from renewable sources, Covestro advocates for subsidizing wind energy generation using a differentiated pricing model in which all cost components for the industrial electricity price are included to keep the price competitive in an international context and consequently drive the continued expansion of renewable energy in accordance with long-term climate goals at the European and global levels.

Digitalization and transparency in the value creation cycle

It is critically important for the transformation to a comprehensive circular economy that at the end of the life cycle of a material, the necessary information is available so that a suitable method of recycling can be chosen. Covestro is involved in the Circularise Plastics project along with Circularise, The Hague (Netherlands), and DOMO Chemicals, Leuna (Germany). The objective of the project is to develop an open blockchain standard for establishing a data exchange protocol. This will identify materials and their composition along the entire value chain so that the best possible recycling option at the end of the product's life cycle can be determined. The unique thing about this protocol is that the stored information is only accessible to those with a justified interest, enabling sensitive product information to remain protected.

Moreover, Covestro started a pilot project with Circularise and DOMO Chemicals as well as Porsche, Stuttgart (Germany), and Borealis, Vienna (Austria), in the reporting period. In this project, the traceability, carbon footprint, and other sustainability indicators are to be digitalized using the blockchain method along the entire supply chain for materials and products that Porsche uses in vehicle manufacturing.

Covestro also implements digital processes to support technology development as part of the circular project portfolio. "In silico" catalyst development, in which the sequence of chemical reactions and the effect of different catalyst structures are calculated with computer-chemical methods, and simulation of reactions are common methods in digital chemistry that are applied in this context. We use our expertise in digitalization for the development of important polymer feedstocks based on alternative raw materials. Moreover, modern data science methods support adaptation to future value chains.

Community and regional engagement

Covestro pursues the circular economy globally. Additional activities to promote a circular economy were initiated in the various regions in which we do business.

Our global commitment

As a company that does business across the globe and whose products are found in a wide variety of applications, Covestro is aware of its responsibility. This is why we advance the circular economy and climate protection in global initiatives. For example, as a founding member of the Alliance to End Plastic Waste, Covestro actively campaigns against the disposal of plastic waste in the environment.

 See "Alliance to End Plastic Waste."

Within the framework of the World Economic Forum's "Collaborative Innovation for Low-Carbon Emitting Technologies" (LCET) initiative, Covestro advocates for the accelerated development of climate-friendly technologies in the chemical industry and downstream value creation stages. Covestro assumed co-leadership of the waste processing project within the LCET initiative. This project aims primarily to investigate the role of the circular economy in achieving greenhouse gas reduction targets and to advance this through collaborative approaches.

Our commitment in Europe

In addition to various R&D projects on the circular economy, Covestro participated in other circular economy projects at the sociopolitical level in Europe.

Of note is our participation in the Circular Economy Initiative Deutschland (CEID) organized by the German Academy of Science and Engineering (Acatech). This initiative financed by the Federal Ministry of Education and Research (BMBF) and partners such as Covestro published three final reports with our participation in fiscal 2020. The subjects of these reports are circular business models, closed-loop requirements for mobile electricity storage, and closed-loop requirements for plastic packaging. Together they form the starting point for the road map to be developed by CEID for a circular economy in Germany.

At the European level, Covestro is a founding member of the Circular Plastics Alliance, whose goal is for European industry to use at least 10 million metric tons of recycled plastics annually from the year 2025 onward. Recommendations for value-chain-specific action items are developed here in specific working groups. Covestro is an active member in the automotive, packaging, construction, electronics, and monitoring groups.

At the Leverkusen (Germany) site, Covestro participates in IN4climate.NRW, which was launched by the Ministry of Economics, Innovation, Digitalization, and Energy of North Rhine-Westphalia and serves as a platform for industry, the sciences, and the political sphere to establish climate-neutral industry. Covestro is represented in the economic advisory board by Board of Management member Dr. Klaus Schäfer, among others. In the reporting year, IN4climate.NRW concentrated on the circular economy, hydrogen, and the CO₂ economy, which are also core elements of Covestro's circular economy strategy. Among other things, Covestro participated in the drafting of discussion papers by IN4climate.NRW on CO₂ use, the potential of chemical plastic recycling, and the role of hydrogen.

The role of hydrogen in a greenhouse-gas-neutral chemical industry and Covestro's commitment

In the future, hydrogen is expected to contribute substantially to the energy transition – for example, by being used as part of CO₂ conversion for the generation of climate-neutral sources of energy, for use as energy and as a material, especially in the chemical industry.

Covestro campaigns for the development of a national and European hydrogen strategy. In this context, our Board of Management member Dr. Klaus Schäfer was appointed by the German government in September 2020 to the National Hydrogen Council, which began its work in October 2020.

Our commitment in the United States

In North America, we advocated at our site in Pittsburgh, Pennsylvania (United States), to include the option of chemical recycling in the state's waste regulations. Through our involvement in the American Chemistry Council (ACC), we are also promoting recognition of this option and a uniform regulatory environment in the United States in other American regions. Moreover, we have launched projects to accelerate the development of chemical processes to recycle polyurethane foams, e.g., as part of our partnership with the Mattress Recycling Council, which advocates for the use and recycling of used polyurethane foams for mattresses.

Our commitment in China

In addition to developing our portfolio of recycled polycarbonate, we pushed forward with the development of other applications by combining them with other recycled raw materials such as carbon fiber and PET (polyethylene terephthalate).

New waste management approaches and the development of creative closed loop approaches together with students were the focus of our longstanding partnership with Tongji University and the Covestro-Tongji Innovation Academy in Shanghai (China) in the reporting year.

In China, we were also involved in circular economy topics through various associations such as the China Petroleum and Chemical Industry Federation (CPCIF), the China Plastics Reuse and Recycling Association (CPRRA), and the China Circular Economy Association (CCEA). Of particular note during the year under review was the fact that we joined the CPCIF-CPRRA Green Recycled Plastic Group as a founding member. By participating in these associations, Covestro plans to contribute to advancing the closed loop principle for plastics in China and to raising awareness among politicians and citizens of circular options along the entire value chain, particularly in respect of plastics.

Moreover, we continued to take part in the Upgrading New Energy Vehicles recycling project under the auspices of the Sino-German partnership established by the governments of China and Germany. This project aims to investigate the basic conditions for closed loop recycling for cars and deliver results with a view to developing possible standards.

Innovation

For Covestro, innovation as a driver for greater sustainability in line with the United Nations Sustainable Development Goals (SDGs) is a core element of our strategy and an integral part of our identity. Our understanding of innovation is broadly defined: We do not rely on traditional research and development alone, but rather also on the great potential for creativity throughout the company. We encourage all employees to promote innovation at Covestro.

In order to maintain and reinforce our position in the global arena, we continually work at all levels in close partnership with the Board of Management member responsible for Innovation, Sales, and Marketing to develop new products, improve established ones, and optimize manufacturing and processing procedures. Application areas, business models, and business processes are also subject to ongoing review. We draw on decades of experience and demonstrable success in these endeavors.

Innovation management

By managing innovation systematically throughout the Group, we ensure that our ongoing and planned activities and our project pipeline always satisfy the needs of our customers as well as user and consumer industries. Covestro uses a wide variety of tools to achieve this: For example, we use a standardized method to assess every research and development project and incorporate the resulting findings into ongoing and future projects. The global, digital platform *idea.lounge* is available for discussing and working on new, creative ideas from all parts of the company. Apart from that platform, we made an additional digital platform called "Covestro Ideenmanagement" (Idea Management) available to our employees in Germany in the year 2019. All suggestions for improvement are managed in our company system for submitting suggestions.

At Innovation Celebrations, we recognize employee projects from around the world that reflect our broad understanding of innovation. The awards serve to recognize innovative ideas for products and applications, production and production processes, business models and commercialization, internal business processes, and patents and intellectual property.

Sustainable R&D portfolio

Covestro's product pipeline already puts many different sustainable solutions on the market. Going forward, however, we intend to develop and market products even more closely aligned with the SDGs. Attaining this goal means continually changing over our product range to more sustainable solutions. For instance, in research and development (R&D) we have already begun our pursuit of a much more sustainable project portfolio. This R&D strategy enables us to identify and research unconventional and unique approaches early on, and therefore to contribute to the SDGs with our R&D products and technologies.

 See "Innovation in the reportable segments" and "Inclusive business."

Our innovation goal



We want our R&D project portfolio to be aligned with the SDGs. By the year 2025, 80% of project expenditures for research and development will take place in areas that contribute to reaching these goals.

Status

2020: 51% of project expenditure

We set ambitious thresholds for the standards we use to assess projects to see if they meet this goal, and we have decided to only consider projects that additionally contribute to reaching the SDGs in measuring our progress toward this target. To this end, we implemented a Group-wide assessment process as part of the existing innovation process we use to review how projects are progressing. All R&D projects are subjected to an assessment based on expert interviews. A total of 22 questions are asked to semi-quantitatively or qualitatively assess the impact of each project's results on all 17 SDGs based on certain rules. Only solutions that exceed a defined threshold for contributions compared with current market solutions will be included in this calculation. This assessment and the process, including all subsequent steps, are expected to be applied to all existing and

new projects in the R&D pipeline by 2021. In the reporting year, we assessed projects using this process that already account for 96% of the R&D project costs incurred in fiscal 2020. Within this 96%, 51% of the R&D project costs exceed our defined threshold.

In fiscal 2020, our R&D expenditure amounted to €262 million (previous year: €266 million). This mainly went toward developing new application solutions for our products and refining products and process technologies. As of December 31, 2020, 1,205 employees* worldwide (previous year: 1,217) worked in R&D, most of them at the three major R&D centers in Leverkusen (Germany), Pittsburgh, Pennsylvania (United States), and Shanghai (China).

In addition, we raised awareness of the SDGs and their potential for Covestro among employees by holding information sessions and by way of a Group-wide campaign in the reporting year. The objective here is to further fill the R&D project pipeline with sustainable solutions.

Use of digital technologies

Covestro is committed to further pursuing digitalization along with the associated new opportunities for the entire chemical and plastic value chain. In the year under review, the outbreak of the global coronavirus pandemic and the associated safety measures instituted in the production facilities and administrative buildings greatly accelerated the implementation and use of digital tools throughout the entire company, which was already underway. This included the rapid proliferation throughout the Group of digital workplace initiatives featuring new digital platforms for work and communication.

Covestro utilizes the opportunities arising from digitalization with a comprehensive strategic program and especially the intelligent use of data, thus setting new standards in cooperation with customers. We increasingly anchor digital technologies and work methods in production, along the supply chain, in research and development, in administrative corporate functions, and at all points of contact with customers as well as in the development of new business models. In order to implement our strategic program directly and with focus, we set up a senior-level decision-making body under the leadership of the Chair of the Board of Management to manage the Covestro-wide portfolio of digitalization projects. A key decision-making criterion is the concrete benefit for our customers. During the reporting year, we set up a team focused on digital solutions (Digital Solutions Lab) at the Leverkusen (Germany) site, which provides technical support for developing and implementing digital products and business models. In production and technology, Covestro conducts a program called OSI2020 for the digitalization of technical, operational, and maintenance-related activities.

Covestro recognizes digitalization as a comprehensive ongoing development that includes various priorities and advances at different speeds. We have used data analysis for a number of years now for production processes, and continually invest in employees and infrastructure to systematically promote digitalization – thereby improving the efficiency of work and production processes using modern data processing and the intelligent interconnection of systems.

In this connection, Covestro is also continuing to ramp up the continuing digitalization of research and development. Key initiatives here are the further expansion of a high-performance computing cluster at the Leverkusen site and a partnership agreement with Google Ireland Ltd., Dublin (Ireland), aimed at researching quantum computing and making this novel technology usable for the development of innovative processes and products. During the reporting year, we also continued work on building a company-wide platform for the work of our data scientists in all corporate functions. In fiscal 2020, we laid the foundation for this project by launching a new Covestro-wide method for delivering data, computing capacity, and predefined services in the cloud.

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

Strategic partnerships and collaborations

To remain innovative, Covestro not only closely cooperates with its customers around the world, it also collaborates with partners from academia and industry under the banner of open innovation, which is of great strategic importance for the company. Bilateral cooperations and collaboration in large, publicly funded consortia characterize our partnerships with research facilities and universities as well as with companies along the value chain.

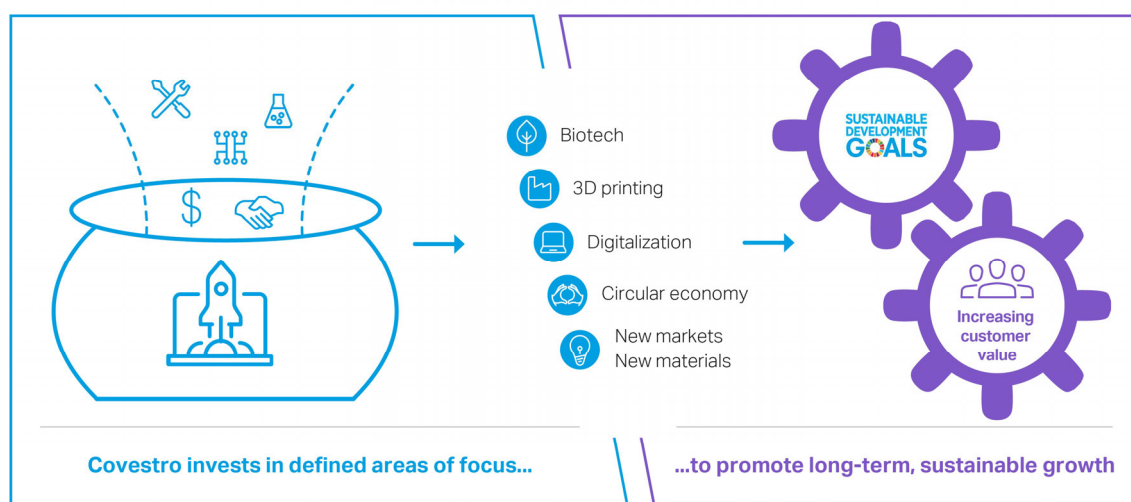
Covestro maintains long-standing and strategic partnerships with various universities. This includes cooperating with renowned partners throughout the world, such as RWTH Aachen University (Germany), Tongji University in Shanghai (China), and Carnegie Mellon University in Pittsburgh, Pennsylvania (United States).

Overview of the top three partnerships with universities

Partnerships with universities Important tool for talent recruiting and implementation of innovation strategy	EMLA  RWTH Aachen University	Focus: • Process development • Basic research	Examples: • Chemical catalysis in various projects (CAT Catalytic Center, QuinCAT) • Electrochemistry (endowed professorship)
	NAFTA  Carnegie Mellon University	Focus: • Digital technologies and machine learning • Application development	Examples: • Collaboration with start-ups in the university environment • Open innovation competitions (Pittsburgh Penguins Make-a-thon, Hackathon)
	APAC  Tongji University	Focus: • R&D projects on electric-vehicle batteries, 3D printing and sustainability • Incubator for start-ups and promotion of talent	Examples: • Commercialization of products developed and events with industrial and education partners • Open innovation competitions (Make-a-thon, Hackathon)

We work with and invest in start-ups under the auspices of the Covestro Venture Capital (COVeC) approach, Covestro's venture capital arm, which was newly developed during the reporting year. This work involves connecting the need of start-ups for financing, customer networks, and market access with our strategic goal of securing long-term, sustainable business performance. In fiscal 2020, Covestro invested in the French start-up Crime Science Technology (C.S.T.). This investment enables Covestro to strengthen the specialty films business for identification documents and to secure access to the Optical Variable Material (O.V.M) technology for polycarbonates and polyurethanes.

Commitment to start-ups with the COVeC approach



In addition to working with start-ups, Covestro also collaborates with established partners. An example of a collaboration in a consortium project is the Kopernikus project Power-to-X (P2X), which is subsidized by the Federal Ministry of Education and Research. The transportation, industrial, and heating supply sectors need low-emissions solutions if Germany is to achieve climate neutrality by the year 2050. P2X researches one of the most promising approaches: technologies that convert green electricity into other forms of energy or materials, e.g., fuels, heat, and gases, or chemical raw materials and plastics. Along with partners, Covestro is investigating how hydrogen and CO₂ can be converted into polymer building blocks that are urgently needed in the chemical industry.

We participate in initiatives to further drive the development of the CO₂ technology platform such as the Carbon4PUR research project sponsored by the European Union (EU) in which we have been a member since the year 2017. This entails researching the use of industrial waste gases like carbon monoxide as new sources of raw materials for the production of insulation materials and coatings in conjunction with 13 other industrial and scientific partners.

In the interest of closing carbon loops, electrochemical processes offer a good starting point for forward-looking, circular solutions for the energy-efficient manufacture of basic chemicals. In pursuit of this goal, Covestro collaborated with RWTH Aachen University (Germany) and the Jülich Research Center (Germany) to establish the Competence Center for Industrial Electrochemistry ELECTRA in Aachen (Germany).

Alliance Management, a corporate function at Covestro, provides support throughout the Group in planning and implementing partnerships and networks and for raising the issues of innovation and sustainability at the state, federal and European policy levels.

Innovation in the reportable segments

Polyurethanes

In the Polyurethanes (PUR) segment, we are continually working on innovating polyurethane industry products with newly developed materials and process improvements throughout their entire life cycle, particularly core applications comprising rigid and flexible polyurethane foam, and composite materials. Our customers in the insulation, refrigeration appliance, furniture, and automotive industries along with many other industries can rely on our modern technologies and the highly motivated experts in our global network for developing their applications. The large number of new patent applications for our innovative technologies underscores Covestro's leadership role in the collaboration with other companies in the polyurethane industry.

Furthermore, we develop sustainable, circular approaches to flexible foam applications by working with industrial and scientific partners to steadily improve the recycling of flexible polyurethane foam. This represents an important step toward turning polyurethane-based products into potential sources of raw materials for future production. An example of putting this into practice is our participation in the pan-European PReSmart research project, which involves nine companies and academic institutions from six countries.

Covestro is also systematically conducting research in the PUR segment to determine how CO₂ and renewable carbon compounds from carbohydrates can be used intelligently as an alternative raw material to crude oil. Covestro has developed a new type of polyol for use as a component in flexible polyurethane foam that is manufactured on an industrial scale and contains as much as 20% CO₂. Sold under the brand name cardyon®, this product is already on the market in various applications such as mattresses, materials for sports flooring, and vehicle interiors.

Another new area of focus for the PUR segment is innovative research into chemolysis. In combination with use of the high-performance computing cluster, we want to use chemolysis to recapture raw materials for our production activities from polyurethane applications.

In fiscal 2020, we also continued to develop and refine flame-retardant insulation materials for the construction industry and further optimize insulation for the refrigeration appliance sector. By continually improving the insulating properties of refrigerators and refrigerated containers and boosting productivity, our materials contribute to sustainably optimizing the refrigeration chain in the global food supply.

Moreover, we were able to use new digital technologies to increase the productivity of rigid foam products for the household appliance and construction industries in the past fiscal year. These are initial successes we achieved by using digital tools to develop new Covestro products and enable them to be processed into large industrial goods at existing plants.

An exemplary use of state-of-the-art composite elements in the automotive industry is our improved solution for filling hollow spaces to help cut noise in the passenger compartment of vehicles.

Our development of novel polyurethane products for infusion technologies is another example of our innovation performance in fiscal 2020. For the first time, Covestro delivered polyurethane raw materials for the construction of wind turbines. The polyurethane resin developed and produced by Covestro was used to manufacture rotor blades for wind turbines, which were installed in a wind farm in eastern China. Fiscal 2020 also saw the subsequent commercialization of this technology, with initial customers in China converting their production to the new polyurethane technology.

Polycarbonates

In the Polycarbonates (PCS) segment, we are developing new polycarbonate-based materials and new technological solutions tailored to meet increasingly complex customer requirements in the areas of mobility, health, and electronics/LEDs. The key here is optimizing the performance of optical systems, improving safety, integrating functions, improving energy efficiency and sustainability, reducing the weight of components, and developing new design options.

Sustainable products and technologies taking into account the SDGs are being developed or are already available for all areas of application. Numerous products contain some percentage of recycled materials from various recycling paths. In addition, we are now also introducing new products for the first time that are made of chemically recycled base chemicals. The composite materials of the future are being optimized for recyclability of all of their components and additives. In addition to monolithic polycarbonate solutions for the automotive, electronics, and health care industries which are easier to recycle, our application development team is also working on ways to optimize processes and develop products that reduce the energy required at the end of a product's life cycle.

The trend toward modern and integrated light elements – made possible by LED technology – is a theme that can be traced through all industries, but particularly in the field of mobility. Due to their excellent optical performance and thermal stability, transparent polycarbonates are the ideal material for innovative solutions.

We focus consistently on the growing interest in LED technologies in the lighting market. Our newly developed products combine outstanding optical properties with exceptional longevity. In this way, Covestro supports the trend toward maintenance-free, sustainable, and efficient LED lighting.

In the automotive sector, the growing number of driving assistance systems, sensors, and camera systems can be seamlessly integrated with the sensor-transparent materials we market under the Makrolon® brand. We also fulfill the new requirements for sustainable electric drives by developing new functional and flame-retardant products, e.g., for the manufacture of ultra-light, impact-resistant honeycomb structures to protect batteries, vehicles, passengers, and battery case components.

We showcased a comprehensive vehicle passenger compartment concept featuring innovative and functional materials solutions that address current mobility trends such as autonomous driving, electric drives, and car sharing at K 2019, the world's leading plastics trade fair held in Düsseldorf (Germany). We also presented new applications for polycarbonates and polycarbonate blends for use in the global expansion of the 5G technology. Plans call for the seamless integration of an expanded network of antennae and base stations into the cityscapes of the future to increase public acceptance of these systems. Covestro is working with university students at the Umeå Institute of Design in Umeå (Sweden) and with Deutsche Telekom AG, Bonn (Germany), on draft concepts. In a pilot project, the partners tested creative design concepts for small 5G antennae and base stations, including adaptation of their color and surface texture. Covestro has also developed a multi-layer film solution made of polycarbonate and polymethyl methacrylate (PMMA) for use in manufacturing 5G-ready smartphones. Thanks to

the innovation and a new manufacturing process, the back of the smartphone appears glass-like without being fragile.

For the electronics industry, our new product portfolio meets customers' sophisticated demands as regards optical and high-gloss display properties. With the new materials, it is now possible to realize larger displays with three-dimensional design.

We have also made consistent advancements in the field of high-performance materials. At our Markt Bibart (Germany) site, we commercially produce our continuous fiber-reinforced thermoplastics (CFRTP), which are sold under the Maezio® brand name. These composites combine the rigidity and strength of carbon fiber or fiberglass with the mechanical properties and efficient processability of polycarbonate resins. This makes applications more rigid and lighter, increasingly stable, and even more aesthetically pleasing. These materials thus open up new design possibilities for important industries such as IT, mobility, and consumer goods.

Coatings, Adhesives, Specialties

The Coatings, Adhesives, Specialties segment (CAS) serves a large number of specialized industries. In the reporting year, we worked with our customers and partners to introduce significant innovations, focusing on efficiency, sustainability, and promoting our specialties.

We again updated our product portfolio of innovative high-performance crosslinkers in the Ultra line. These products stand out due to their very low residual monomer content, thereby improving industrial hygiene. In addition, we participated in the Terminus research project sponsored by the EU's Horizon 2020 program, which aims to make multi-material packaging available to the circular economy and therefore to enable higher-quality recycling of individual materials.

Moreover, the CAS segment launched a new precursor for low-emissions, aqueous polyurethane furniture coatings that significantly accelerates the drying process. An extensive life cycle analysis was conducted in cooperation with Hesse Lignal, Hamm (Germany). The carbon footprint of finishes using the water-based coatings was improved compared with previously available coatings. In fiscal 2020, we also continued to promote the use of biobased raw materials in our products to help conserve additional resources and improve the carbon footprint. For example, we developed a new crosslinking agent for coil coatings whose content is approximately 30% renewable.

Together with a partner, we launched a textile coating based on purely aqueous and solvent-free formula components for breathable and yet water-resistant synthetic leather using polyurethane dispersions. The production technology developed by Covestro enables coated textiles to be produced using up to 95% less water and 50% less energy than processes involving organic solvents. For this reason, the technology received the Solar Impulse Efficient Solutions label, a distinction reserved for sustainable and environmentally friendly, but also profitable, solutions.

In terms of thermoplastic specialty elastomers, Covestro collaborated with RWTH Aachen University to develop an industrial process for manufacturing CO₂-based elastic textile fibers to partially replace crude oil as a raw material. The fibers can be used for applications such as stockings and medical textiles and are made of our precursor cardyon®, which contains CO₂. We additionally worked with Air Fom, Taichung (Taiwan), to develop a patented solution for airless tires that is based on expanded thermoplastic polyurethane (eTPU) by Covestro. It avoids the disadvantages of airless products available to date. Air Fom recently received a gold medal from the renowned Edison Award in the category of transportation/personal mobility for the innovation.

Covestro has also developed new elastomer solutions to meet the need for sustainable products in the mining industry. Currently, the screens used in this industry contain a steel insert. At the end of their life cycle, they are difficult to separate from the cast polyurethane elastomer, meaning they can be recycled only with substantial effort. The new composite material developed by Covestro replaces the steel structure in the screens, enabling them to be recycled more easily. This allows the materials to be returned to and help close the raw material loop from manufacture to use to recycling of a plastic product.

In addition, we developed a specialty polycarbonate film containing more than 50% carbon from plant biomass. Compared with a film made from petrochemicals, this material's carbon footprint is much smaller. Sony Corporation, Tokyo (Japan), used Covestro materials to achieve a breakthrough in the development of augmented reality displays. The company used a photopolymer film to produce an innovative display prototype that can project floating images within a 360-degree field of view while at the same time being highly transparent.

Employees

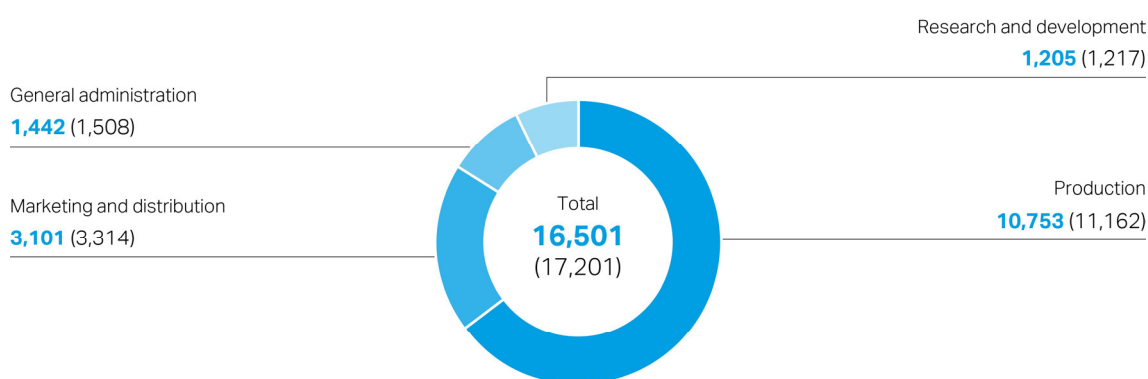
The multifaceted abilities and personal efforts of all employees contribute materially to Covestro's success. Every employee has both the freedom and the mandate to act and contribute in line with the company's goals, values, and culture. Covestro thus promotes a working environment that is shaped by unconventional thinking, the effective exchange of knowledge, creative problem-solving, constructive feedback, and collegial cooperation. We aim to empower each of our employees to work to their full potential. Our managers are responsible for facilitating and supporting these objectives in close collaboration with our employees. In this way, we can work together to make an ongoing contribution to the company's success.

As of December 31, 2020, Covestro had 16,501 employees worldwide (previous year: 17,201). At the reporting date, the Group also had 551 employees in vocational training worldwide (previous year: 550), 543 of whom were based in Germany (previous year: 531).

 See note 11 "Personnel expenses and employee numbers" in the Notes to the Consolidated Financial Statements.

Employees by division¹

in FTE (prior-year figure in parentheses)



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

In the year 2020, the global coronavirus pandemic required us to take decisive and sustained steps to protect our employees, customers, and suppliers, as well as other related groups. Physical distancing proved to be a successful measure to curb the coronavirus pandemic. In the reporting period, Covestro requested that employees in many different countries work from home to the extent permitted by their particular jobs. To enable digital cooperation the company put in place the framework required, including the appropriate technical, data protection, and organizational measures. This effort was completed successfully, and many employees made use of this option. Covestro had already launched the Coronavirus Info Hub on the intranet in January 2020 for purposes of providing transparent and timely information, and a channel for communication with the workforce across the globe. In addition to official notices and (travel) warnings, the Hub also offers opportunities for direct dialogue. Moreover, the Board of Management reaches out to employees through ongoing series of videos and several virtual global staff meetings (town halls) in which it answers their questions.

Corporate values and corporate culture

Covestro is proud of its corporate values, summarized as C³: curious, courageous, and colorful. Curiosity triggers deeper thinking and allows us to create innovative and unexpected solutions for our customers. Courage helps us identify opportunities where others see limitations. Diversity promotes employee engagement and creativity; multiple viewpoints make us successful. These values guide all of the Group's employees and are reflected in their daily thoughts and actions.

The corporate culture is based on Covestro's values and behaviors, and is an integral part of Covestro's strategy. Our employees, especially our management staff, influence and shape our corporate culture. It is their responsibility to set a good example with their conduct and live out our culture. In our company, employees and managers work jointly to "make the world a brighter place" and implement our vision of a circular economy. Achieving these goals means working constantly on both structural changes and on shaping our "We Are 1" culture.

"We Are 1" describes the corporate culture Covestro is striving to build, which is made up of four cultural dimensions: "acting responsibly," "wanting better," "winning together," and "leading others." We want to continually improve the ways in which we collaborate by aligning our behavior with these concepts. This reporting year, we defined 12 key behaviors for these cultural dimensions to support our transition toward a circular economy. We want all our employees to embody these qualities in the future, help strengthen our "We Are 1" culture, and familiarize our customers – the center of our activities – with our corporate culture as well.

Our cultural dimensions and key behaviors

Acting responsibly	Wanting better	Winning together	Leading others
We think and act with a responsible and entrepreneurial mindset!	We drive innovation and change!	We are passionate about customer service!	We help each other grow!
We solve problems and do the right thing!	We are always curious and never stop learning!	We network and collaborate!	We motivate and empower our teams!
We look out for ourselves and others!	We are open and value diversity!	We are courageous!	We set the stage for the future!

Human resources profile and focus

Digital transformation, demographic change, and the trend toward individualization are changing our work and the ways we do it. Our human resources activities focus on the development and implementation of initiatives that sustainably support our business success in view of these changes, while at the same time encouraging the professional development and engagement of individual employees. In this context, Covestro's human resources strategy is derived from our overarching corporate strategy, and is also aligned with our corporate values and our corporate culture.

The top-level goals of the people strategy are set by the head of Human Resources (HR) in conjunction with Covestro's Board of Management. Promoting performance and opportunities for individual contributions are priorities, as are building and developing the individual skills and expertise of our workforce for the long term. These activities are based on leadership and management responsibility in line with Covestro's corporate culture and values. Together they set standards for working toward success, developing future-oriented skills, and conducting personal interactions based on mutual respect. Health and safety in the workplace are our highest priority. In addition, we focus in particular on further reinforcing diversity and inclusion.

Within the four strategic action areas of employee engagement, skills development, leadership, and work environment, the people strategy creates the conditions for professional development and support for our employees. Based on this strategy, all corporate functions and operating segments 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.

In terms of its structure and its content, the HR organization is positioned in line with the goals named above, and uses a global personnel management system to map the necessary processes.

Winning qualified employees and promoting Covestro's employer brand

It is a strategic challenge for Covestro to be an attractive employer worldwide. We aim to retain qualified employees for the long term, ensure their professional and personal development, and hire additional new talents.

For this reason, we pursue the goal of strengthening Covestro's employer brand and continually improving the company's name recognition. During the reporting year, we more strongly aligned our employer brand with Covestro's overall image, and consolidated our brand strategy under a single approach. Our employer brand is strictly used through the whole candidate journey, from applying for a job to employment at Covestro. We therefore address candidates from outside the company with the slogan "Become 1 of Us," inviting them to become part of our team, and reinforce unity among our employees with the umbrella brand "We Are 1."

We maintain close contacts with leading universities around the world, are involved in international student organizations, and took part in – largely virtual – career fairs during the reporting year. Covestro participates in selected initiatives and networks such as the global student association Enactus and the UNITECH International European engineering network. During the coronavirus pandemic, Covestro continued to maintain the company's visibility among up-and-coming talent by holding digital career events in cooperation with universities. One example is digital interview training for potential candidates organized in conjunction with the University of Pittsburgh, Pennsylvania (United States). Covestro also held digital career advising for students interested in vocational training in Germany.

In fiscal 2020, we also further refined our company's social media presence. We reach out to various target groups worldwide via social media and digital platforms such as LinkedIn, Instagram, Facebook, Stack Overflow, and Glassdoor to showcase Covestro as an employer. Covestro posts target group-specific content on local platforms such as XING (Germany, Switzerland) and WeChat (China) to reach professionals and university students. In addition, Covestro actively and effectively manages its reputation on regional and global rating platforms such as kununu and Glassdoor.

Our global recruiting strategy continues to focus on improving the candidate experience for potential new employees. In our recruiting process, we are increasingly concentrating on actively seeking out qualified candidates as well as stepping up our social media activities.

With regard to the coronavirus pandemic, we took steps early on in the reporting period to protect the health of our employees and job candidates in the application process. Even before that, we increasingly shifted HR marketing activities to reach and recruit future employees to online platforms. This transition was accelerated once the coronavirus pandemic started. For instance, we conducted recruiting interviews with candidates worldwide exclusively online.

We take responsibility for the future careers of young people, and during the 2020 fiscal year we gave 188 of them in Germany a start on their career paths. Covestro offers vocational training in a number of scientific, technical, and business-related jobs. If the vocational training is completed successfully, trainees are guaranteed a position with the company. The desire for more diversity and inclusion in the workforce is a driving force for Covestro. In the year 2020, the share of women among total vocational trainees was increased significantly year over year, for example. In addition to the vocational training options we offer in Germany, we bring in high-school and college students to take part in numerous professional internships worldwide each year. This gives them insight into our company's operations as well as personal experience with Covestro as an employer. During the year 2020, these opportunities were provided mostly online due to the coronavirus pandemic. For instance, six female engineering students from Saudi Arabia took part in a virtual internship as part of the Young Scientist Initiative. Furthermore, Covestro offers varied trainee programs for university graduates in a wide variety of corporate functions.

As an employer, Covestro received major awards again in the reporting period. In Universum's current ranking of the best employers for young professionals in the sciences, we placed among the top 50 companies in Germany and the top 100 in China for university students of natural sciences. Furthermore, Covestro was named a "Top Employer" in China for the third consecutive time, and ranked second in a list of top companies in Mexico by the business magazine Expansión.

Promoting and developing employees

Well educated and trained staff is crucial for ensuring that the company can develop further, and is essential to the company's success. We believe in the concept of lifelong learning, so we support our employees in continuing their professional and personal education throughout all phases of their careers.

To this end, we offer a wide range of customized continuing education options for all employees through our in-house learning concept. Numerous in-person classes are available worldwide along with virtual training sessions, each of which focuses on a different target group.

Early in the year 2020, we reorganized our educational activities and strategy. This reorganization was accelerated by the outbreak of the coronavirus pandemic, and the restructured training and education portfolio is now available to employees during the pandemic and beyond in preparation for the future. Our first step was to help employees adapt their work activities to the new conditions brought about by the rise of virtual work. The new training strategy aims to promote on-the-job learning and motivate knowledge holders in the company to share their knowledge more actively. In addition, an online platform called "My Passport to Learn" was made available to staff. This contains Covestro's most important training content, provided online to promote continual learning and development. The more than 40 learning paths on the platform comprise Covestro's key educational content and are divided into seven thematic modules, e.g., leadership and digital transformation. They are available free to employees across the globe, who can put together the educational content they want and create an individual continuing education program for themselves.

In the area of personnel development, Covestro used a model with clearly defined core and leadership skills that serves as a reference for all employees during most of the year 2020. In the future, this will be replaced by our new cultural dimensions and the key behaviors newly defined in the reporting year. This is intended to ensure that managers and employees use the same vocabulary and uniform criteria when assessing performance. The model is used to conduct sound career planning, performance assessment, and potential assessment for employees. Moreover, it is also used to refine the requirement profile for top management at Covestro to emphasize the main aspects of leadership behavior in line with our corporate culture. We have also converted our performance assessment approach into an ongoing dialogue between staff and supervisors held during the year, thus ensuring the timely adjustment of goals and priorities. In addition, performance meetings are held between staff and supervisors in which individual strengths and improvement opportunities as well as professional perspectives within the Group are discussed. Managers and employees alike can take the initiative at any time and hold a development dialogue on an ad hoc basis. The contents of these discussions are integrated into the ongoing personnel planning conferences to optimally develop employees in their own best interests and those of the company.

Maintaining a constant dialogue between the employees and management is a key concern for us. To this end, employees can use an application in the human resources system to provide or actively request feedback across hierarchical levels, a feature intended to further reinforce the feedback culture within the company.

The ENGAGE global initiative launched in the fourth quarter of 2019 to measure and improve employee engagement continued successfully in the year 2020. All employees worldwide can provide feedback several times a year by filling out a voluntary, anonymous online survey with standardized questions. This survey is currently carried out every four months to help us understand what is important to our employees in terms of work environment and day-to-day operations. The results are then shared transparently with the employees. Team discussions are held so that employees and supervisors can collaboratively decide on measures to continually improve the working situation.

Participation rates among employees averaging more than 70% in the surveys in the reporting year indicate that employees and supervisors viewed the tool positively. At the same time, improvement in the overall engagement score was observed over the course of the surveys. The engagement score measures company loyalty and is calculated for each category of questions. The July 2020 survey provided insight into the impact of the coronavirus pandemic on key drivers of employee engagement. For example, an analysis of the results regarding work environment as an engagement driver showed that employees in Germany in particular are very interested in flexibility in their choice of workplace and deciding for themselves whether and to what extent they will work from home. This and other insights from dealing with the coronavirus pandemic are currently being systematically analyzed by an interdisciplinary team of representatives from HR and other corporate functions. The objective is to define what remote work will look like at Covestro now and after the pandemic is over. After we completed the introductory phase of the first three survey rounds, Covestro's Board of Management decided to continue to use ENGAGE as a standardized measure of employee engagement at Covestro.

Compensating employees transparently and competitively

Offering fair compensation in line with the market independent of gender and other diversity criteria is an essential prerequisite for recruiting, retaining, and motivating qualified employees. Covestro therefore combines a base salary reflecting the duties of a position with performance-related compensation components and extensive additional benefits to create an internationally competitive pay package, about which employees are informed transparently.

Tasks and responsibilities are classified on the basis of a job evaluation conducted without considering the individuals in the positions. In the area of managerial functions, an internationally recognized evaluation method is used if the job evaluation has not already been stipulated by a local collective agreement. Based on this classification, the amount of the base salary in all countries is aligned with standard compensation levels in the respective region. Regular compensation benchmarking is conducted to ensure this is maintained for the long term.

Through a bonus program, the Group-wide Covestro Profit Sharing Plan (Covestro PSP), we have made it possible for our employees to participate in the success of the company each year with a uniformly calculated bonus payment. In addition, employees in managerial functions participate in the Prisma global compensation program, which bases payments on the Covestro share price, including comparisons with our competitors, and in this way rewards the long-term changes in the company's share price. Furthermore, a global budget is available from which supervisors can promptly grant Individual Performance Awards to recognize outstanding conduct, commitment, and the performance of their employees in regard to our corporate values.

 See note 23 "Other provisions" in the Notes to the Consolidated Financial Statements.

In the interest of mitigating the impact of the coronavirus pandemic and safeguarding the liquidity of the company, we introduced various measures in the course of the reporting year to limit personnel costs. Country-specific pay cuts were implemented worldwide between June 1 and November 30, 2020. As a rule, we follow the guiding principle of fair and equitable distribution – across all regions and hierarchies. Board of Management and Supervisory Board members therefore made the largest contribution by taking a 15% pay cut in this period. In Germany, for example, employers and employee representatives agreed on a model stipulating reduced working hours along with reduced wages of up to 10% of their pay for all employee groups, depending on employee category, from June to November 2020. Employees in managerial functions were called upon to voluntarily participate in the program. The gratifyingly high participation rate of around 94% of this employee group indicates the great social cohesion of our workforce. Large numbers of employees also participated in such programs in other countries where they were offered on a voluntary basis. Because the economic situation improved greatly during the second half of fiscal 2020, employees worldwide received a one-time gross payment at year-end to compensate for their participation in the solidarity initiative.

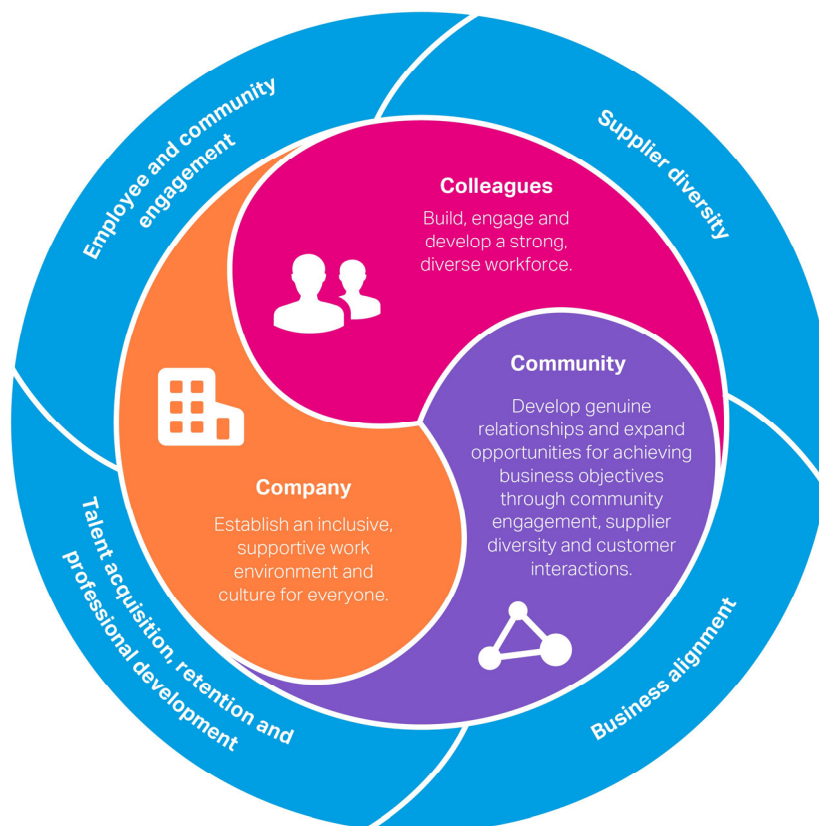
As in previous years, the stock participation program Covestment was offered once again in fiscal 2020 and provided employees with the opportunity to purchase Covestro stocks at a discount. However, in fiscal 2020 the terms were modified from those of the prior year as part of the aforementioned measures to limit personnel costs. A total of 98% of Covestro's global workforce in 17 countries is thus able to purchase Covestro stock at discounted prices. Around 30% of all eligible employees worldwide took advantage of this offer. The participation rate was 46% in Germany, 24% in the United States, and 21% in China.

Promoting diversity and inclusion

We work to make the world a brighter place. We value differences and advocate for an integrated working environment in which various skills, talents, experiences, and points of view are welcome, and everyone is treated with dignity and respect, both within and outside of our company. It is our conviction that a diverse staff and integrated workplace are key business drivers of innovation, sustainability, and employee engagement, because diverse teams are more creative and make better decisions. Diversity and inclusion therefore contribute directly to the continued success of the company. Covestro is advancing the topics of diversity and inclusion as a core element of its corporate culture. Particular priorities are that people at Covestro can be themselves and unfold their full potential. The inclusion of different perspectives results in more balanced decisions and thus contributes substantially to Covestro's success.

Our diversity and inclusion strategy is derived from our values and includes the following areas of activity: colleagues, company, and community. These three factors are essential at Covestro for establishing a strong, diverse, inclusive, and innovative work culture at our sites and therefore making a significant contribution to Covestro's business performance. These three factors help Covestro promote engagement among our employees and external partners; support our efforts to recruit, retain, and ensure the professional development of our employees; expand our supplier diversity; and contribute to directing Covestro's business strategy.

Our diversity and inclusion strategy



Colleagues – build, engage and develop a strong, diverse workforce

Employee networks are a key factor in involving our staff even more in driving diversity. We want to bring people with similar interests or concerns together in these networks, and promote an exchange of inspiration and ideas to continually strengthen our inclusive work culture. Covestro has many different themed employee networks worldwide. The globally active UNITE network focuses on all issues of concern to our LGBTIQ (lesbian, gay, bi, trans, intersex, queer) community. Employees work on topics of gender equality in the Compass network. During fiscal 2020, we also introduced a framework for all network activities applicable across the globe. It provides all employees worldwide with the same conditions for taking action. We promote these initiatives because they are an important engine for driving inclusion at Covestro.

Company – establish an inclusive, supportive work environment and culture for everyone

Our goal is a diverse workforce, and one of the issues we focus on is gender equality. This is why we would like to hire more women at Covestro. In addition, we want to promote diversity and enable equal opportunity at all levels.

 See "Promotion of equal participation of women and men in leadership positions."

An integral part of inclusion is creating a supportive work environment. Due to the coronavirus pandemic, we have stepped up our efforts to enable employees to work remotely. In the future, we would like to continue to offer this work opportunity to interested employees and are currently evaluating the options and conditions to do so.

Community – achieving business objectives through community engagement, supplier diversity, and customer interaction

Promoting diversity is the mission of society as a whole in which each of us shares part of the responsibility. Covestro takes this responsibility seriously and thus proactively promotes diversity. We are also aware that we need to join forces with a variety of players beyond our own activities, because this is the only way that diversity can be sustainably anchored in the company and in society. For this reason, we are further expanding our cooperation with various partners. In Germany, we began working with the PROUT-AT-WORK foundation in the year 2020. This organization actively combats homophobia, transphobia, and biphobia. During the 2020 reporting year, Covestro also became a supporter of the "Komm, mach MINT" initiative, which aims to attract more women to STEM careers (MINT in German). As early as the year 2019, we entered into partnerships in Asia with the sHero Women & Diversity Council, the International WELL Building Institute (IWBI) and IWBI MIND Advisory, and the China Human Resources Management Research Institute, which advocate in favor of a number of different diversity, inclusion, and employee health issues.

Targets and an enhanced understanding of diversity and inclusion (D&I) are being further solidified in global action plans and regional implementation teams in all three areas of activity. The Board of Management member responsible for Production and Technology at Covestro is a sponsor and a member of the global D&I committee. Global decisions such as those on diversity targets are additionally made by Covestro's full Board of Management.

Designing the best possible working conditions and work models

The health, safety, and engagement of our employees are extremely important to us. Our basic principles include the constant monitoring and improvement of occupational safety and the identification of working and organizational conditions that either promote or are detrimental to health. In this context, we offer our employees an extensive selection of preventive health measures featuring programs and initiatives that promote good health. Our focus here is not only the health of individual employees but also current environmental influences, which we actively address. This was true particularly in the first half of the year 2020. In the course of the coronavirus pandemic, we worked with our occupational health agents to deliver online initiatives and plans to support employees in this largely new situation, both when working from home and under changed conditions in the workplace.

The Human Resources corporate function receives assistance in these issues from the Health, Safety, Environment and Quality (HSEQ) and Law, Compliance, and Internal Audit corporate functions, which ensure that all internal guidelines and all relevant labor laws and standards are met.

 See "Integrated management system for health, safety, environment, energy, and quality."

We also offer modern working conditions to our employees, so that they can be successful in a changing working environment and balance their professional and personal interests. In many countries, we exceed our legal obligations, e.g., by offering solutions such as flexible working hours, part-time work, working from home, and remote work, if this is compatible with operational requirements. A direct dialogue with our employees is also particularly important to us. In this regard, we take into account national and international notification duties.

Our social responsibility as a company and an employer is based on our corporate values and our unreserved commitment to supporting and fostering human rights in our sphere of influence. At Covestro, social responsibility also includes creating working conditions that are based on mutual respect and appreciation among employees and particularly ensure safety, health, and wellbeing in the workplace. Our sustainable personnel policy also features a strong social safety net for our employees.

 See "Social responsibility" and "Human rights due diligence."

Moreover, Covestro actively raises awareness of healthy lifestyles with a stable committee structure for workplace health management and a range of initiatives and projects tailored to the individual needs of our employees. This is particularly true in regard to the challenges facing us as a result of digital transformation, demographic change, and the trend toward individualization, or freedom of choice and self-determination for individuals, which are all changing our work and the ways we do it.

We offer comprehensive workplace health management whose focal points are continually developed further in response to health surveys. Our intention is to ensure that all employees have access to suitable and affordable health services such as sports programs, regular medical check-ups, help in overcoming illness and on-site medical care, particularly with regard to psychosocial counseling. The nature and scope of the health promotion programs differ around the world with regard to the respective country-specific level of development and access to national health systems. We offer our employees comprehensive measures aimed at preventing illness or maintaining good health, in many cases exceeding statutory requirements. In order to help employees maintain their physical and mental health during the coronavirus pandemic, these offerings were expanded in the year 2020 to include new programs such as virtual ergonomics consulting, exercise breaks, and health and mindfulness training.

New, flexible working environments for improved contact and communication

Work environments, work content, and working methods are undergoing constant changes due to digital transformation and the increasing speed of change and complexity at our workplace. In order to meet these ever-changing requirements, Covestro provides a modern working environment that promotes flexible ways of working. This applies particularly to cases such as moving into or creating new workspaces. We have already proven at many sites that this flexible working concept is successful, including in Brazil, Hong Kong, Switzerland, Taiwan, Thailand, and China. Another new office building that we are using as our new corporate headquarters opened for business in November 2020 at the Leverkusen (Germany) location. On account of the coronavirus pandemic, employees will move into the building gradually while adhering to health precautions and in coordination with the return of employees to other buildings in 2021. Covestro prioritizes a working environment that promotes learning and development while supporting agility and the exchange of knowledge. To achieve this, we provide not only the appropriate facilities, but also the IT infrastructure and media technology that works simply and intuitively.

We call this work environment, which promotes flexible collaboration, our C³ way of working based on our C³ values. At the heart of this philosophy is our conviction that all our employees, regardless of their status in the hierarchy, need working environments suitable to their duties to be able to work effectively. In this way, we want to enable changes in perspective and drive creativity in the company. Open-plan office environments combined with flexible work concepts encourage contact and the exchange of information across team and departmental boundaries and thus strengthen communication and interdisciplinary cooperation. Active change management prepares employees for and involves them in shaping new work environments.

Our managers play a special role in this system. In addition to implementing/modeling established leadership standards and modern work methods, they increasingly collaborate with their employees to develop flexible and customized solutions to support Covestro's efforts to extract maximum potential from this new work environment.

[Supplementary information >](#)

Employee metrics in detail

Diversity and internationality

As of December 31, 2020, Covestro had 16,501 employees worldwide comprising 81 different nationalities, 76.7% of whom were male and 23.3% were female. Eleven nationalities are represented at the executive management level.

The majority of Covestro's employees (56.6%) worked in the EMLA region. The APAC region accounted for 27.0% of our employees, while 16.4% of the workforce was based in the NAFTA region.

The company-wide Diversity and Inclusion program aims to make progress on and promote diversity in the Group.

Employees¹ by employment status, region and gender in fiscal 2020

	EMLA		NAFTA		APAC		Total
	Women	Men	Women	Men	Women	Men	
Employees with permanent contracts	1,906	7,280	601	2,091	1,255	3,158	16,292
Employees with temporary contracts	53	104	1	9	24	18	209
Total	1,960	7,384	602	2,100	1,279	3,176	16,501

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

Permanent employees¹ by type of employment and gender in fiscal 2020

	Women	Men	Total
Part-time	704	1,997	2,701
Full-time	3,239	10,749	13,988
Total	3,943	12,746	16,689

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

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

Percentage of employees¹ by employee group and gender in fiscal 2020

Employee group	Women	Men	Total
Upper management	2.6%	9.6%	12.2%
Junior management	6.8%	16.8%	23.6%
Skilled workers	13.9%	50.3%	64.2%
Total	23.3%	76.7%	100.0%
Employees in vocational training	17.8%	82.2%	100.0%

¹ The number of permanent or temporary employees is stated in 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 fiscal 2020

Employee group	< 30 years	30 to 49 years	≥ 50 years	Total
Upper management	0.0%	6.1%	6.1%	12.2%
Junior management	1.0%	15.3%	7.3%	23.6%
Skilled workers	11.2%	33.1%	19.9%	64.2%
Total	12.2%	54.5%	33.3%	100.0%

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

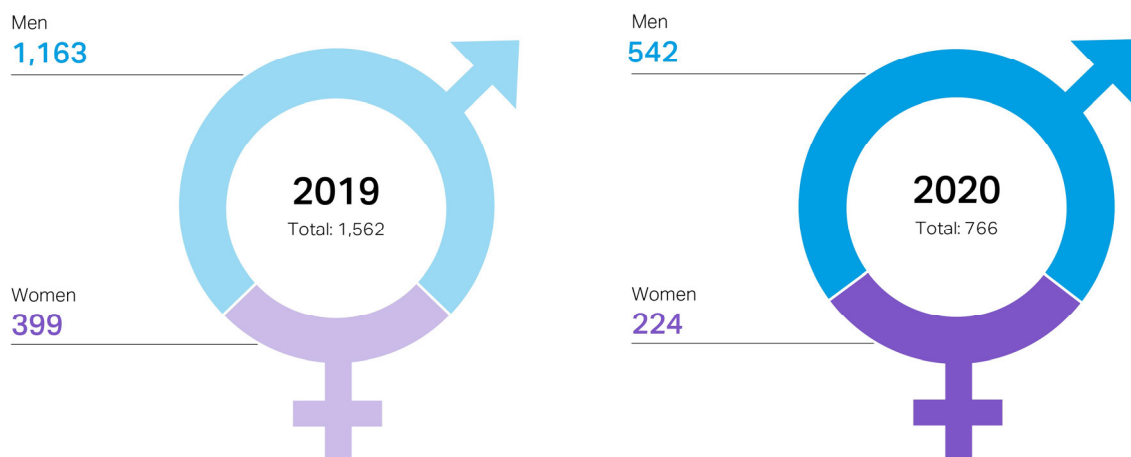
Work-life balance

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 make combining work with family responsibilities easier. 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.

Attracting and retaining qualified employees

New hires



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.

Covestro promotes young talent through internships, vocational training, and trainee programs. Worldwide, the company employed 224 interns in the year 2020, even under the difficult conditions of the coronavirus pandemic.

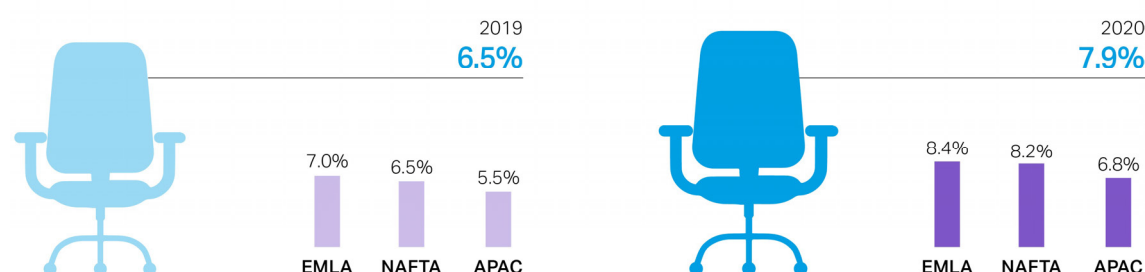
In the reporting year, 766 new employees were hired worldwide, the majority of whom are based in the EMLA region.

New hires¹ by age group, gender and region in fiscal 2020

	EMLA		NAFTA		APAC		Total	
	Absolute	%	Absolute	%	Absolute	%	Absolute	%
Women	134	17.5%	21	2.8%	69	9.0%	224	29.3%
< 30 years	82	10.7%	9	1.2%	35	4.6%	126	16.5%
30 to 49 years	50	6.6%	9	1.2%	31	4.0%	90	11.8%
≥ 50 years	2	0.2%	3	0.4%	3	0.4%	8	1.0%
Men	403	52.6%	52	6.7%	87	11.4%	542	70.7%
< 30 years	235	30.7%	19	2.5%	43	5.6%	297	38.8%
30 to 49 years	151	19.7%	30	3.9%	42	5.5%	223	29.1%
≥ 50 years	17	2.2%	3	0.3%	2	0.3%	22	2.8%
Total	537	70.1%	73	9.5%	156	20.4%	766	100.0%

¹ The number and percentage of permanent or temporary employees is stated in full-time equivalents (FTE). Part-time employees are included on a pro-rated basis in line with their contractual working hours. Percentages represent the distribution of new hires.

Attrition rate



Employee attritions in the different regions and age groups varied widely in some cases. Independent research indicates that younger employees are often more likely to change jobs. The increase in attritions was also a result of the sale of the PCS sheets business at the start of the reporting year and the demographically driven higher number of age-related departures.

Attritions¹ by age group, gender and region in fiscal 2020

	EMLA		NAFTA		APAC		Total	
	Absolute	%	Absolute	%	Absolute	%	Absolute	%
Women	202	9.8%	51	8.3%	127	9.7%	380	9.5%
< 30 years	42	10.7%	5	6.1%	22	14.4%	69	11.0%
30 to 49 years	82	7.6%	19	6.2%	81	7.7%	182	7.4%
≥ 50 years	78	13.1%	27	11.9%	24	22.5%	129	13.8%
Men	628	8.0%	176	8.1%	183	5.7%	987	7.5%
< 30 years	117	8.7%	17	7.0%	42	10.4%	176	8.8%
30 to 49 years	191	5.9%	40	4.2%	103	4.2%	334	5.0%
≥ 50 years	320	9.9%	119	12.3%	38	9.9%	477	10.4%
Total	830	8.4%	227	8.2%	310	6.8%	1,367	7.9%

¹ The number and percentage of employees are calculated on the basis of full-time equivalents (FTE). The attrition 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).

Compliance and compensation

Covestro regards fair and respectful working conditions as essential. We provide information, advice, and resources to prevent violations of laws or corporate policies. If any breach is suspected, employees can contact the Compliance Officer in their country at any time, anonymously if they wish. 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, they are published in the notes to the consolidated financial statements.

 See "Compliance" and "Human rights due diligence."

In the year under review, around 55% of our employees worldwide, mainly in Central Europe and South Korea, were subject to collective bargaining or company agreements. 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 regardless of gender and other diversity criteria. As of December 31, 2020, 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.

[< Supplementary information](#)

Integrated Management System for Health, Safety, Environment, Energy, and Quality

Covestro's stated aims are to take preventive measures to protect employees, suppliers, and service providers; ensure uninterrupted operations; and continually improve quality. The head of the corporate function for health, safety, environment, energy, and quality (HSEQ) is commissioned directly by the Board of Management. The system ensures implementation of the requirements of the HSEQ corporate regulations and is based on internationally recognized standards governing occupational safety (ISO 45001), the environment (ISO 14001), energy (ISO 50001), and quality (ISO 9001).

Adherence to processes and workflows is verified through regularly conducted internal audits, annual self-assessments, and external certifications. The insights we gain from these measures are incorporated into our annual management review. Every process is thus subject to ongoing monitoring and is updated as required.

Our existing HSEQ management system corresponds to the requirements of the current ISO 9001:2015, ISO 14001:2015, and ISO 45001 standards. In fiscal 2020, based on the respective new ISO standards, it was also successfully reviewed, audited, and had its certification upheld by an external certification body. Specific targets in line with the aforementioned ISO standards have been defined.

 See "Safety" and "Environmental protection" for additional details on the aforementioned targets.

In fiscal 2020, Covestro decided to reorganize the HSEQ functions throughout the Group to encourage the individual regional and global functions to coalesce. The Environmental Management and Occupational Safety corporate functions were consolidated for this purpose into a new function called Environment, Health, and Safety. In the future, all regional HSEQ functions will follow the same organizational logic and act based on clear roles and responsibilities. The range of responsibilities exercised by the new corporate function will be expanded, and wellbeing will be emphasized as an increasingly important aspect of occupational safety. The second step will be to adapt the structure of the existing HSEQ-related communities to reflect the changes in the HSEQ organization there, too. This will also reduce existing redundancies in the handling of certain issues and guarantee a clear delineation of responsibilities. Coordinated roles and responsibilities are intended to promote cooperation and exchange between regions. Internal stakeholders benefit from the more consistent provision of a full range of HSEQ services and better site coverage. At the same time, HSEQ will play a more active role in implementing the integrated HSEQ management system. The integrated management system comprises the following three sub-sections:

Occupational health and safety

In the area of occupational health and safety, globally applicable processes and workflows include detailed rules governing the safety of production facilities and manufacturing processes, the investigation of accidents and environmental as well as transportation incidents, health care and occupational safety, and emergency management at Covestro. In fiscal 2020, we completed our migration to the new ISO 45001, the international occupational health and safety standard. The rules stipulated by international standards such as ISO 45001 comprise the minimum requirements applicable worldwide and are supplemented with additional regulations if needed. They are intended to prevent accidents and incidents at the workplace or on transportation routes that could have adverse consequences for people or the environment. In addition, we offer support to our customers, for example by providing training on the safe handling of our products in and outside of our facilities. We increasingly rely on the support of third-party databases to help us identify and comply with legal and other requirements.

Environment and energy

Minimum environmental and energy standards applicable worldwide were specified to ensure that our high standards for resource conservation and emissions reduction are met. These requirements are based on internationally recognized standards and rules such as ISO 14001 (environmental management) and ISO 50001 (energy management). Each year we analyze and evaluate the effects of our activities on the environment. From our environmental performance assessment, we derive measures to reduce and minimize environmental impacts. Global process and workflow descriptions help us implement these measures throughout the Group. In the year under review, the energy efficiency system we introduced in 2008 based on ISO 50001 was reviewed, audited, and recertified for the ninth time at the main German production sites by an independent certification body.

Quality

We have very high expectations of the raw material quality we use, and we set ourselves standards for their processing into high-performance plastics and polyurethane precursors. Within the framework of our integrated HSEQ management system, our quality management activities meet the requirements of the current ISO 9001:2015 standard. Thanks to our quality management system, we can put in place the conditions necessary for incorporating our customers' requirements and their satisfaction into our products and services.

[Supplementary information >](#)

Audits and certifications

Our binding Group regulations that serve to achieve HSEQ goals are available to all employees in the Group's in-house databases and are reviewed annually using internal audits and external certification companies. This may require the management system to be adjusted. Our business activities are covered by certified HSEQ management systems to the degree outlined below:

Certification of HSEQ management systems to external standards¹

	2019	2020
Certified to various quality management standards such as ISO 9001	100%	100%
ISO 14001 certified/EMAS validated (environment)	96%	96%
ISO 45001 (formerly OHSAS 18001) certified (occupational safety)	89%	89%
ISO 50001 certified (energy)	46%	46%

¹ In % of business activity, measured according to energy usage.

[< Supplementary information](#)

Safety

The continuous improvement of a safe work environment is both a high priority and a key component of Covestro's corporate responsibility and corporate culture. The company's top priorities include preventing injuries, equipment breakdowns, and transportation incidents, as well as preserving the health of our employees in the workplace and during work-related activities. This also applies to partner companies (contractors) who work for our company within the scope of operational activities. Detailed rules and regular checks are instrumental in meeting these goals, as are safe production processes, plants, and transportation. Another priority is protection of the environment, and safe handling and use of products as part of our product stewardship. In addition, we have transferred the insights obtained from the SafeGuard safety program into our integrated management system in which we address all aspects of safety of importance to Covestro in a comprehensive and global manner.

Safety incidents that – under other circumstances – could have led to a High Potential Event (HPE) are examined using a set of criteria we have defined that includes their potential effects. Events classified as HPEs are thus treated as comparable to events that have actually occurred; they require a detailed cause analysis and must be communicated. Promoting safety awareness among employees is essential for minimizing hazards during day-to-day operations. In the year 2019, the Team Resource Management training program was set up to further increase safety awareness among our staff. Due to the coronavirus pandemic, this in-person training could not be held in fiscal 2020 and is expected to be continued in 2021.

The CEO Safety Award was awarded for the twelfth time in the reporting year. All employees were once again called upon to submit suggestions for improving safety. The ideas submitted were evaluated by a jury of in-house experts, and our CEO presented awards to the winners at the virtual Covestro Safety Day in September 2020.

Occupational Health and Safety

An integrated information management system (IIMS) implemented throughout the Group exists for reporting and processing work-related accidents and illnesses, as well as potential hazards. The classification and documentation follows the U.S. OSHA Standard 1904 "Recording and Reporting Occupational Injuries and Illness." The IIMS makes it possible to identify trends in a timely manner so that corresponding short-term corrective and long-term improvement measures can be implemented if necessary. Covestro's safety experts, supported by external expertise if needed, analyze the background circumstances and the consequences. The results of the root cause analysis conducted after an incident occurs and the corrective measures taken are published throughout the Group in order to raise employees' safety awareness. As a result, everybody can better assess comparable hazards and situations and proactively remedy them. In the reporting year, the topic of electrical safety was identified as a priority and given the requisite attention with a global campaign. Furthermore, the working group on human-machine interaction launched in the year 2019 continued to meet.

Covestro processes documentable workplace accidents and illnesses involving the company's own staff and contractors as part of the recordable incident rate (RIR) and lost time recordable incident rate (LTRIR), as per OSHA 1904. The RIR is calculated as a ratio of the total number of documentable workplace accidents and illnesses to hours worked (standardized to 200,000 working hours per year). The LTRIR is calculated as a ratio of lost time in days to the same hours worked figure. We calculate the number of hours worked by our employees based on the number of employees in the Group and multiply this figure at country level by the average working hours in the member states of the Organisation for Economic Co-operation and Development (OECD) and the International Labour Organization (ILO). If no OECD or ILO data is available, then we use the average number of hours worked at Covestro.

Due to the coronavirus pandemic, approximately 684,000 fewer hours were worked in fiscal 2020. This was taken into account in calculating the incident rates. The reduction in working hours was primarily attributable to government-mandated site closures and the research facilities affected by the home office regulations.

The number of hours worked by our contractors is calculated using a methodology that includes various categories for recording working hours, broken down by electronic or manual timekeeping or obtained using supplier invoices. The figure can also be calculated based on valid assumptions (estimates). At sites with fewer than 50 Covestro employees, no contractor working hours are counted, so these are not included in the incident rates calculation. We apply controls and other measures at the global level as well as individual site level to prevent possible errors in calculating contractor working hours. Implementation of the new system continued in fiscal 2020.

In the fiscal year 2020, we documented 29.5 million total hours worked (THW) for our employees (previous year: 31.1 million THW). During the same period, contractors reported 16.7 million THW (previous year: 20.2 million THW). This results in the following rates according to OSHA:

Work-related accidents¹

	2019	2020
Recordable incidents		
in relation to Covestro employees	46	35
in relation to contractor employees ²	26	26
Recordable incident rate (RIR)		
in relation to Covestro employees	0.29	0.24
in relation to contractor employees ²	0.26	0.31
Recordable incidents in connection with days lost		
in relation to Covestro employees	30	20
in relation to contractor employees ²	19	19
Lost time recordable incident rate (LTRIR)		
in relation to Covestro employees	0.19	0.14
in relation to contractor employees ²	0.18	0.23
Fatal injuries		
in relation to Covestro employees	0	0
in relation to contractor employees ²	0	0

¹ Includes work-related accidents and illnesses taking into account all fully consolidated companies, provided that they are part of the consolidation scope.

² Employees of partner companies contracted by Covestro whose accidents occurred on one of our company premises.

We work tirelessly to keep the incidence of accidents as low as possible in the future as well. Implementation of the SafeGuard safety program and introduction of the ISO 45001 standard provided fresh momentum for our efforts toward safety in the workplace. This was an important step for us toward meeting our goal of zero accidents. In the reporting year, workplace accidents involving our employees declined to 35 (previous year: 46), improving our employees' RIR by 0.05 points. In contrast, the RIR of our contractors' employees rose by 0.05 points.

We are facing enormous health and safety challenges due to the coronavirus pandemic as well. Our crisis management teams at the sites countered these with a range of measures. This effort even received recognition from outside the company from the European Chemical Industry Council (CEFIC). We were awarded a Responsible Care™ prize in the "Protecting Workers and the Workplace" category for our health and safety measures during the coronavirus pandemic. The Corporate Security function was the central point for consolidating information on country-specific conditions and reporting to the Board of Management. In this way, we were able to fulfill the requirements of the pandemic plan developed and implemented by Covestro.

Process and Plant Safety

We aim to ensure the safety of processes and plants in a way that avoids unacceptable risks to our employees, our neighbors, and the environment. We therefore conduct extensive, systematic safety inspections at regular intervals. An early indicator for all Covestro plants is the Loss of Primary Containment (LoPC) indicator, which is uniform throughout the world and is integrated into the Group's safety reporting.

Since the year 2019, Covestro has applied the German Chemical Industry Association's (Verband der Chemischen Industrie, VCI) guidelines on documenting plant safety performance indicators. The new reporting criteria are thus aligned with the updated and globally harmonized definition by the International Council of Chemical Associations (ICCA). A LoPC event comprises

- The release of chemicals classified according to the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) exceeding the defined volume thresholds within one hour,
- A reportable injury according to OSHA criteria to an employee or contractor as a result of product release or the release of energy,
- The release of energy (e.g., fire, explosion) that leads to damage with direct costs totaling more than €2,500,
- An evacuation officially declared outside the plant.

We use the LoPC incident rate (LoPC IR) to determine the number of LoPC incidents per 200,000 TWH per year by Covestro employees and contractors. In the year 2016, the ICCA adjusted the volume thresholds used to identify incidents and published these changes, which are binding for its members starting in the year 2020. We applied these volume thresholds at Covestro in the year 2019 so that our statistics would be comparable within the chemical industry and the benchmark. After the adjustments were made, the volume threshold for chlorine, for example, is now one kilogram instead of the original five kilograms. The considerably lower volume thresholds mean that less significant incidents have been systematically documented and investigated as LoPC events since the year 2019. In the reporting year, our LoPC IR was 0.64 (previous year: 0.66).

Every LoPC incident as well as minor and near-miss incidents are carefully analyzed to determine their causes, and the results and corrective actions taken are publicized throughout the Group. The criteria (e.g., low thresholds or non-hazardous substance releases) were selected so that even releases of substances or energy that have no impact on employees, neighbors, or the environment are systematically recorded. This contributes to maintaining the integrity of our facilities. The global exchange of experiences relevant to safety is intended to help maintain the existing high standard of procedural and plant safety within the company. Globally binding standard processes and their uniform implementation also contribute to this effort, which led to the rollout of a mandatory IT application for technical change management at key production sites in fiscal 2019.

Safety at Work

The safety of employees, plants, data, and information as well as uninterrupted workflows and processes are particularly important to Covestro. This is why Covestro's safety strategy systematically focuses on meeting these safety targets. The corresponding duties and responsibilities are assigned to various departments of the responsible corporate functions. The Corporate Security, Information Technology, and Production Management functions therefore have special authority to effectively counter current and future risks and threats, especially those that are virtual or digital. Decision-making and management bodies focusing on risk, compliance, and crisis management as well as on information security management have been established.

Environmental and Transportation Safety

We work continually toward maximum safety during transportation of our products. We report all incidents at all sites operated by Covestro worldwide in line with our internal directives. These are documented according to defined criteria such as quantity of loss of containment, material hazard class, degree of personal injury, and blocked transportation routes. In the case of certain hazardous materials, we record and categorize all leaks starting with as little as five kilograms, according to our Corporate Commitment. Global events on transportation safety are held at regular intervals. Here, corrective measures are developed and implemented based on actual incidents, and tried-and-tested approaches are exchanged.

[Supplementary information >](#)

Safety and accident prevention

Our safety management activities take into account requirements and standards applicable around the world. We continually update our safety management system in line with our corporate culture. The safety of our employees and the protection of their health in the workplace are a focal point of this work, as is preventing potential effects on the environment and harmful health effects caused by leaks at production facilities, or accidents involving hazardous goods and other transportation accidents. Our integrated HSEQ management system is a major contributor to achieving these goals.

Over the long term, we want to prevent all workplace accidents and work-related illness. For this reason, we regularly analyze the accident rate by site as well as by region and type of accident. The fluctuations observed indicate to us the structural differences that are discussed in analyzing and determining measures to be taken with the sites and segments, and adapted to local requirements.

Activities that led to accidents in the year 2020

Recordable incidents	Movement (stumbling/ falling)	Mechanical work	Chemical contact	Traffic and transportation	Other	Total
Employees	8	21	2	0	4	35
Contractors	6	14	5	0	1	26
Total	14	35	7	0	5	61

We classify accidents at Covestro according to the American Society for Testing and Materials (ASTM) standard E2920-14 to devote particular attention to the life-threatening or life-changing accidents among the entirety of the accident data. In the year 2020, five contacts with chemicals, one case of third-degree burns, and one finger injury were classified as serious accidents.

Hazard avoidance

Repairs, inspections, and technical modifications frequently require work that is potentially hazardous. Such jobs are performed individually or pooled and performed at one time during plant downtimes, which are planned well in advance. A work permit process is applied here. In addition to a precise description of the work to be performed, this includes a hazard assessment and a determination of the required safety and protective measures. All individuals involved in the work are informed of these parameters and must confirm receipt of this information with a signature. The responsible facility, participating technical crews, and, if necessary, additional safety officers monitor adherence with the measures and ensure the work is performed safely.

[< Supplementary information](#)

Product Stewardship

To Covestro, product stewardship means comprehensively evaluating health, safety, and environmental risks in connection with the use and handling of our products. We want to ensure that our products are safe throughout their entire life cycle – from research to production and marketing to their intended use by the customer and all the way to disposal.

Monitoring the quality of our products and their suitability for particular applications is anchored in our operational units. Safe transportation, qualification for specifically regulated applications, and marketability are centrally managed at Covestro, as is the obligation to report to the Board of Management on these matters.

The safe use and application of our products have high priority. It is very important to us to communicate product safety information transparently and comprehensively. In addition to the documents required by law, we therefore provide supplementary information and offer training as part of the global product strategy of the InterCCA. Furthermore, experts throughout the company work closely with suppliers, customers, industry associations, and the public. Covestro thus aims to ensure the effective communication and observance of health, safety, and environmental information along the entire supply chain.

Management of product stewardship

Product stewardship involves both compliance with statutory requirements and voluntary commitments. Here we also take into account the so-called precautionary principle as explained in Principle 15 of the Rio Declaration of the United Nations and communication COM(2000) 1 of the European Commission. This important means of protecting consumers and the environment within the context of risk management may be used in special cases in which, according to an objective and comprehensive scientific evaluation, material or irreversible harm to people and the environment may occur, but the risk of this cannot be determined with sufficient certainty. In this regard, we follow the corresponding principles of the European Commission when applying the precautionary principle. These include especially the proportionality of the measures taken, an examination of the benefits and the costs of all relevant options, as well as the review of the measures taken in light of new scientific developments. Arbitrary decisions cannot be justified by invoking the precautionary principle.

As a contribution to the safe handling and use of chemicals, risk assessments are carried out applying recognized scientific principles such as those described by the European Chemicals Agency (ECHA) in its Guidance on Information Requirements and Chemical Safety Assessment. A determination is made based on a hazard assessment and exposure estimation as to which additional information is required for the risk characterization of a product.

All product groups at Covestro undergo a multiple-step product assessment process. At first, we identify chemicals that are subject to statutory regulations and document the corresponding regulations. We then examine the risk potential of our products. During this process, we also identify substances for which only limited use or marketing are permitted based on the applicable laws and regulations. These include, for example, Substances of Very High Concern (SVHC) as classified in accordance with the European Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and substances covered by the European regulation on greenhouse gases. Substance compositions in all regions are checked with the help of IT systems against lists of regulated substances so that noncompliance with regulatory requirements is identified reliably. Should the assessment or new findings reveal that it is not safe to use a certain chemical, we take the necessary risk mitigation measures. Those can range from technical measures such as protective gear and revised application recommendations to the withdrawal of support for a certain application or the substitution of a substance. In this case, an adequate replacement must be sought which can be produced in an economical and technically feasible way. Finally, we produce safety data sheets and labeling for all chemicals in up to 40 different languages, including chemicals that are not subject to any legal obligation. In this respect Covestro also exceeds the statutory requirements by making these safety data sheets publicly available.

We collect, document, and analyze all information about the safe and compliant use of our products in a global information system, which provides the basis for further improvements. This includes product monitoring and reporting on product-related and compliance incidents. Our global regulations for the Group contain rules and guidance on when and how this information is to be used. For example, this has helped us improve the information on the safe handling of our products and provide customers with specific training. Furthermore, workshops and online training sessions for our employees contribute to solidifying the understanding and importance of product stewardship in the company.

For fiscal 2020, we know of no material incidents of noncompliance with regulations or voluntary codes – either concerning the health and safety impacts of products and services, or relating to product information and labeling.

The optimization of products and processes is an ongoing task of the chemical industry and is integral to our commitments as part of the Responsible Care™ initiative. This is an initiative by the chemical industry that aims for continual improvement by companies in the areas of environment, safety, and health, regardless of the legal requirements. We also participate in the further development of scientific risk assessments through our involvement in associations and initiatives. International associations such as the European Chemical Industry Council (CEFIC) and ICCA are working to improve the scientific assessment of chemicals and research new testing methods. Moreover, they monitor implementation of legal regulations. Covestro is actively involved in industry association activities. Furthermore, we endorse the initiatives of the World Health Organization (WHO) and the European Union (EU) to improve health and the environment, for example with the further development of human biomonitoring through an alliance with the German Chemical Industry Association (Verband der Chemischen Industrie, VCI) and the German Federal Ministry of the Environment.

Implementation of regulations and voluntary programs pertaining to chemicals

Covestro adheres to the applicable regulations pertaining to chemicals, such as REACH in Europe and the Toxic Substances Control Act (TSCA) in the United States. These regulations are aimed at protecting human health and the environment from the risks posed by chemicals, and thus shape our activities as a manufacturer, importer, and user of chemicals. We have established internal regulations to adequately address the range and complexity of the relevant requirements. They guide our employees in fulfilling regulatory requirements.

Substances registered according to REACH are assessed by regulators. This can result, for example, in additional testing requirements, new risk management measures, or inclusion in the REACH authorization or restriction procedure. A number of Covestro substances are also affected by this procedure, which restricts the use of particularly hazardous substances or can lead to their substitution or prohibition. The restriction on diisocyanates published in the Official Journal of the European Union in August 2020 is one example of a restriction. In this case, labeling of diisocyanates must be modified by February 2022, but this will not affect their availability. However, all users of products containing diisocyanates at a concentration of more than 0.1% of the residual monomer must be trained in their use by August 2023. Covestro supports this process and advocates for the practical and effective implementation of this requirement, for instance in the preparation of training materials. As a member of the European chemical industry, we made a voluntary commitment to review and improve the REACH registration dossiers by the year 2026.

In addition, Covestro pursues the goal of completing the assessment of the hazard potential for all substances used around the world in quantities exceeding one metric ton per annum by the end of 2020. This goal was more than 99% achieved in the reporting year. We thus exceed statutory requirements. In addition, we ensure that substance assessments comparable to those meeting the high standards of REACH or the TSCA will also be applied at Covestro sites that are not subject to these regulations. The relevant procedure is established in the corporate regulation on "Product Stewardship" in the attachment entitled "Substance Information and its Availability." When it comes to purchased substances, we are dependent on information provided by our suppliers.

Another example of our commitment to Responsible Care™ is the worldwide support we provide for customers for safely handling large quantities of reactive products through tank-farm safety assessments.

Covestro has also committed to compliance with animal welfare policies during toxicological and ecotoxicological testing.

+ Additional information is available at:

www.productsafetyfirst.covestro.com/en/resources/resources/detail-pages/statement-on-animal-studies

We support the Global Product Strategy (GPS), a voluntary commitment by the chemical industry initiated by the ICCA. Its objective is to improve knowledge about chemical products, especially in emerging and developing countries, and thus increase safety in the handling of these products. GPS is accessible at Covestro through the Product Safety First internet portal and is available worldwide. On this website, we inform our customers and other interest groups about safety-relevant properties and the safe handling of our products.

Substances that are the subject of public debate

Covestro is following the scientific discussion about the chemical bisphenol A (BPA), an important raw material for various plastics. Critics, but also some authorities, are concerned that risks could result for users and the environment if traces of BPA are released from products. At this time, these concerns are primarily being discussed in the context of the European chemical regulation REACH.

Based on numerous scientifically valid and high-quality studies, Covestro is confident that BPA can be safely used in all areas of application supported to date. This assessment is underscored in the case of food safety, for instance, by the latest evaluations from the responsible European and American authorities, namely the European Food Safety Authority (EFSA) and the US Food and Drug Administration (FDA). By participating in regulatory processes, Covestro works actively to dispel uncertainties and answer open questions. In addition, we continue to advocate for more objective discussions based on all of the scientific data in cooperation with the PlasticsEurope association, the American Chemistry Council (ACC), and the China Petroleum and Chemical Industry Federation (CPCIF). Covestro is involved in the discussions and provides information to customers and the public on this issue through associations, on the Covestro website, and through direct contacts.

Environmental Protection

Environmental protection and the efficient use of resources are fundamental drivers of Covestro's actions as an energy-intensive company, both in terms of our own business activities with substantial energy demands and the development of innovative product solutions. We continually strive to use materials and energy more efficiently and to reduce emissions and waste generated. Our innovative products also support the efforts of our customers in many sectors such as the automotive and construction industries, wind turbine operation, the electronics industry, as well as the furniture, sports, and textile industries, to improve their own resource efficiency and cut emissions.

Environmental protection key performance indicators (KPIs) are reported for all fully consolidated companies. Since these figures are calculated only at the end of the year they include the group of companies consolidated as it stands at year-end. Moreover, we include data from all environmentally relevant Covestro sites, i.e., all production sites and relevant administrative sites. This data is used in addition to the environmental reporting contained in this report to communicate with various stakeholders, e.g., associations, the press, and government agencies, as well as to continually improve our environmental performance. In order to comply with publication deadlines, the sites estimate the environmental data for the final weeks of the current fiscal year on the basis of established estimation methodologies that ensure accurate reporting of data as close as possible to the actual figures for the year. If, however, in the course of the following year, we become aware of material deviations based on internally defined thresholds, the figures in question are corrected retroactively to promote the transparency and comparability of our reporting. This was not required in fiscal year 2020.

Energy usage

Covestro's energy usage includes the primary energy used in production and during electricity and steam generation by the company as well as additionally acquired quantities of electricity, steam, refrigeration energy, and process heat. This takes into account the energy lost while distributing electricity and steam. All told, these figures make up Covestro's equivalent primary energy usage.

The use of energy and materials and the level of greenhouse gases emitted are closely related to the quantity of materials we produce. In fiscal 2020, total energy usage in the Group dropped by 2.4%, while the equivalent primary energy usage at our key production facilities fell by 2.7% – in line with a 5.4% decline in production volumes. As a result, the equivalent primary energy usage for a given production volume (energy efficiency) deteriorated by 2.9%. The increase in specific energy usage in the reporting year can therefore be mainly attributed to the cyclical decline in plant capacity utilization. When the capacity of production facilities is not optimally utilized, and economic conditions necessitate start-up and shut-down processes, this inevitably results in less efficient energy usage per production unit (specific energy usage).

Energy usage in the Covestro Group at the main production sites

	2019	2020
Equivalent primary energy usage ^{1,2} (MWh)	20,773,977	20,212,384
Production volume ³ (million metric tons)	14.80	13.99
Specific energy usage (energy efficiency)⁴ (MWh per metric ton)	1.40	1.44

¹ Sum of all individual energies used at our main production sites (responsible for more than 95% of our energy usage), converted into primary energy.

² Equivalent to 72,765 TJ in the reporting year (previous year: 74,786 TJ).

³ All in-spec key products – which, in addition to our core products, also include precursors and by-products – manufactured at our main production sites, which are responsible for more than 95% of our energy usage.

⁴ Ratio of equivalent primary energy usage to production volume.

Our continued long-term positive trend indicates an overall 34.2% improvement in energy efficiency compared to the base year 2005. This is attributable to factors that include our ongoing efficiency improvement programs and the global energy efficiency system implemented by Covestro.

 See "Optimizing energy usage."

Of particular note in the reporting year is the commissioning of a heat recovery system in the Makrolon® plant and process optimization of the plant producing methylene dianiline (MDA), a key intermediate in the manufacture of diphenylmethane diisocyanate (MDI), at the Krefeld-Uerdingen site. Steam usage was therefore cut by more than 19,000 MWh of primary energy in fiscal 2020, which is the equivalent of reducing emissions by some 5,400 metric tons of CO₂.

Greenhouse gas (GHG) emissions

Along with governments, non-governmental organizations, and other private-sector companies, Covestro supports implementation of the results of the 21st UN Climate Change Conference, which took place in Paris at the end of 2015, and is committed to the UN Sustainable Development Goals (SDGs).

Covestro calculates greenhouse gas emissions according to the internationally recognized standards of the Greenhouse Gas Protocol (GHG Protocol). The calculations include both direct emissions from the burning of fossil fuels and indirect emissions from the procurement and consumption of energy generated outside the company such as electricity, heating, or refrigeration energy. In addition to CO₂, all other relevant greenhouse gases are also documented. The emissions factors for calculating CO₂ equivalents for global warming potential were taken from the Fifth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC). Additionally, a completely revised and updated greenhouse gas regulation has been used since the year 2019. Information about the upstream and downstream GHG emissions throughout the entire value chain (Scope 3 emissions) has not been collected or reported to date. We are currently reviewing how to reliably and efficiently collect information about Scope 3 emissions and the requirements for reporting this data.

Our environmental protection goal



Specific greenhouse gas emissions per metric ton of product manufactured are expected to be reduced by 50% from the 2005 benchmark by the year 2025.

Status

2020: -46.2%
2019: -46.1%

In fiscal 2020, specific emissions totaled 0.3892 metric tons of CO₂ equivalents per metric ton of product. Compared with the base year 2005, this corresponds to a cumulative drop of 46.2%, and a 0.2% decrease compared to the previous year. We have used a calculation methodology based on the market-based method pursuant to the current GHG Protocol since the year 2018.

Covestro Group greenhouse gas emissions at the main production sites¹

	2019	2020
Total greenhouse gas emissions ² (million metric tons of CO ₂ equivalents)	5.77	5.45
Production volume ³ (in million metric tons)	14.8	13.99
Specific greenhouse gas emissions⁴ (metric tons of CO₂ equivalents per metric ton of production volume)	0.3901	0.3892

¹ Portfolio-adjusted based on the financial control approach of the GHG Protocol; global warming potential (GWP) factors according to the IPCC's Fifth Assessment Report.

² Total greenhouse gas emissions (Scope 1 and 2, GHG Protocol) at the main production sites (responsible for more than 95% of our energy usage).

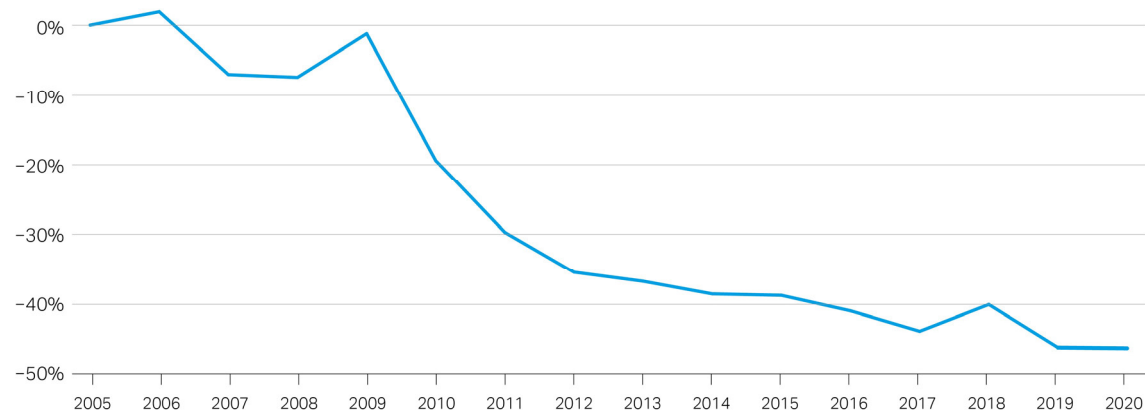
³ All in-spec key products – which, in addition to our core products, also include precursors and by-products – manufactured at our main production sites, which are responsible for more than 95% of our energy usage.

⁴ Total GHG emissions divided by production volume. Market-based emissions factors were mostly used when calculating specific Scope 2 greenhouse gas emissions; wherever these were not available, the calculation was based on country-specific emissions factors from a generally accepted source (e.g., International Energy Agency, IEA).

Key drivers of the reduction are the developments at the production sites in Dormagen, Krefeld-Uerdingen, and Leverkusen in Germany. In combination with a cyclical decline in energy usage, we obtained energy such as steam and electricity externally with a significantly lower carbon footprint at these sites in the reporting year. We continue to find ourselves on the right path to reaching our GHG emissions target, i.e., halving specific emissions by the year 2025.

Development of specific greenhouse gas emissions

(Cumulative annual change in the specific greenhouse gas emissions per metric ton of product manufactured, compared with the base year 2005 – expressed in %)¹



¹ The calculation methods for fiscal 2018 onward were changed to the current market-based method in accordance with the Scope 2 Guidance of the GHG Protocol. The values reported for the year 2005 to the year 2017 are calculated throughout in accordance with the methods in the GHG Protocol in effect until the year 2014. When calculating changes in percentage points from the year 2017 to the year 2018, the value for the year 2017 was recalculated on the basis of the market-based method for comparability purposes.

We continue to drive the development of products whose manufacture results in lower carbon emissions than those of conventional products – by using CO₂ as a raw material, for instance. In this context, the company began marketing an innovative polyol in fiscal 2018 for which a key component is produced using as much as 20% CO₂. This conserves the same quantity of petrochemical raw materials and improves our carbon footprint.

Water, effluents, and waste

Covestro takes a holistic view of water as a resource: We take not only our water usage and the related problems of water scarcity and quality into consideration, but also the wastewater we generate and the growing concern about plastic waste in the oceans. This is underscored in our Corporate Commitment on Water.

➤ Additional information is available at: www.covestro.com/en/sustainability/service-downloads/policies-commitments

In fiscal 2017, we therefore initiated a risk assessment of our production sites to examine water availability, quality, and accessibility. In our production activities, we strive to use water several times and to recycle it. Covestro primarily generates wastewater from once-through cooling systems and production. All wastewater is subject to strict monitoring and analysis according to the applicable legal regulations before it is discharged into disposal channels.

 See "Water usage and consumption."

For economic considerations alone, Covestro's manufacturing processes are already as efficient as possible when it comes to the use of materials; relatively little waste is produced as a result. We observe and evaluate our manufacturing processes on an ongoing basis to minimize material consumption and disposal volumes as much as possible. This is achieved by safe disposal channels with separation according to the type of waste and economically expedient recycling processes. However, production fluctuations, building demolition and refurbishment, and land remediation can also influence waste volumes and recycling paths. The total volume of waste produced declined in fiscal 2020, mainly due to decreases in nonhazardous waste from construction and demolition activity at the Dormagen and Krefeld-Uerdingen sites in Germany. The volume of hazardous waste produced also fell in the reporting year. One of the main reasons for this is the production-related waste at our production facilities in Baytown, Texas (United States) and Dormagen (Germany). We determine specific opportunities for waste reduction with targeted projects and put these into practice within the context of our existing manufacturing processes. For instance, in the manufacturing process for our toluene diisocyanate (TDI) product, our Dormagen site began testing a new procedure that significantly reduces the resulting process waste volumes in the year 2019. After its successful implementation, the findings can subsequently be transferred to additional plants at other Covestro sites. We therefore plan to equip our large-scale TDI production facility in Shanghai (China) with this technology. Due to pandemic-related restrictions, however, this project was postponed for two years and is not currently being carried out.

Covestro also supports the reuse and treatment of its materials in accordance with economic and environmental criteria. Some of the waste created by our production processes with a high heating value is burned as fuel to generate steam for our production facilities.

Our commitment to the topic of sustainability plays an increasingly vital role with regard to the purchasing of packaging materials. We have implemented an approach to address this: When procuring packing materials, Covestro reviews in principle whether and to what extent used or reconditioned packaging can be used in the place of new packaging. For instance, Covestro uses post consumer regrind (PCR) plastic barrels for waste transportation. Drums made of recycled plastic replace plastic drums from virgin material. Thus, Covestro uses fewer raw materials, reduces emissions, and has established the initial building blocks for a circular economy in the area of transportation and packaging.

Covestro also supports initiatives such as Operation Clean Sweep (OCS), which focuses on preventing plastic particles from entering waterways and oceans. We have introduced global measures to minimize the loss of plastic pellets on the way from production to the finished product at our customers' locations. In fiscal 2018, we urged our partners in the supply chain to join the initiative; at the same time, we are continually monitoring its progress. In fiscal 2019, Covestro started work on a proposal for an external certification system in cooperation with the PlasticsEurope association and other members. Building on this effort, we added the topic of OCS to Covestro's health, safety, environment, energy, and quality (HSEQ) certifications in the year 2020. Auditors from an external certification body will now incrementally review and assess the relevant sites using a list of specifications to this end, and document the results in a report. The aforementioned list includes systematic environmental aspect analyses, risk assessments, preventive measures, targets, improvement measures, and employee training. Corrective measures must be taken in the case of identified deviations. We are further reviewing how we can make OCS targets part of the sustainability issues covered by contracts with logistics partners.

[Supplementary information >](#)

Environmental protection targets

We aim to use all natural resources as efficiently as possible while reducing emissions into the environment to the greatest extent possible. Our integrated management system, which is continually refined, serves as a steering mechanism for this purpose. Moreover, sophisticated data management systems help us to identify and leverage potential efficiency improvements and to keep the environmental impact of our production activities to a minimum.

Covestro's goal is to halve direct and indirect emissions of greenhouse gases per metric ton of product by fiscal 2025 as compared with the 2005 base year levels. In addition, by the year 2030 we also want to halve the specific energy usage of our production facilities compared with the same base year. This energy efficiency boost will contribute to further reducing specific GHG emissions.

Optimizing energy usage

Covestro's STRUCTese™ (Structured Efficiency System for Energy) system played a key role in permanently improving our specific energy usage. The energy efficiency system developed by Covestro compares actual energy usage in production with the realistic potential optimum. Eliminating inefficiencies results in permanent energy savings. STRUCTese® includes several different steps that enable the identification of improvement measures – from analysis to monitoring to benchmarking. These measures are known at Covestro as STRUCTese® projects. The system, which has been gradually rolled out since the year 2008, is now used in many of our energy-intensive production facilities around the world and will be implemented in other facilities going forward.

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. The latter are calculated to reflect the energy required to generate them.

Energy usage by energy type

	2019	2020
Primary energy usage for the in-house generation of electricity and steam (net, TJ)	7,348	7,450
of which Natural gas	7,676	7,991
(of which Natural gas sold to external third parties)	(98)	(98)
of which Coal	0	0
of which Liquid fuels	183	85
of which Waste	934	574
of which Other ¹	(1,445)	(1,200)
Secondary energy usage (net, TJ)	49,465	48,019
of which Electricity ²	24,145	22,790
(of which Electricity sold to external third parties)	(1,985)	(1,953)
of which Steam	22,293	22,301
(of which Steam sold to external third parties)	(556)	(556)
of which Steam from waste heat (process heat)	2,481	2,488
of which Refrigeration energy	546	440
(of which Refrigeration energy sold to third parties)	(32)	(73)
Total energy usage (TJ)	56,814	55,469
Equivalent primary energy usage ³ (TJ)	74,786	72,765
Production volume ⁴ (million metric tons)	14.80	13.99
Specific energy usage ⁵ (MWh per metric ton of product)	1.40	1.44

¹ e.g., hydrogen.

² Secondary energy usage for electricity is based on the raw material mix of the country concerned.

³ Total of all individual energies used at our main production sites (responsible for more than 95% of our energy usage), converted into primary energy. Secondary energy usage is recalculated to equivalent primary energy usage at all sites based on specified factors aligned with indicators (literature values) for best-in-class energy generation plants operating at maximum efficiency.

⁴ All in-spec key products manufactured at our main production sites (responsible for more than 95% of our energy usage).

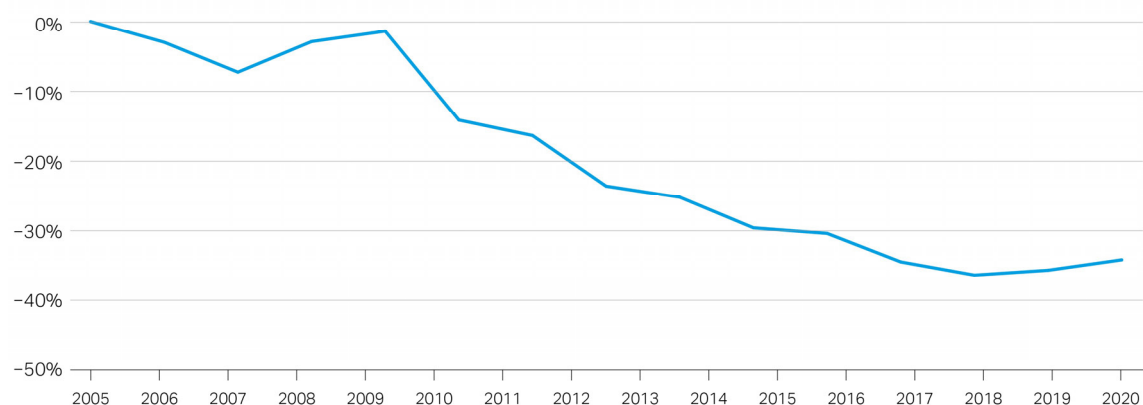
⁵ Specific energy usage: ratio of equivalent primary energy to in-spec production volume at our main production sites (1 MWh = 3,600 MJ).

Every year, projects are implemented under STRUCTese® that bring about lasting energy savings. An example is the use of waste heat from the plant neighboring the Bisphenol-A (BPA) facility in Shanghai (China). This cut steam usage considerably, which in turn reduced the energy required by some 16,000 MWh of primary energy and decreased emissions by around 3,000 metric tons of CO₂ in the year 2020. Covestro carried out various other projects in fiscal 2020, resulting in annual savings of 58,000 MWh of primary energy, or 12,000 metric tons of CO₂ emissions. Combined, all the projects implemented since the introduction of STRUCTese® in the year 2008 have resulted in lasting reductions totaling 2.32 million MWh of primary energy and around 700,000 metric tons of CO₂ per year.

These energy savings become particularly evident when viewing the significant fall in specific energy usage in production since fiscal 2005 as indicated in the following chart.

Development of specific energy usage at our main production sites

(Change in specific primary energy usage per metric ton of product, compared with the base year 2005, expressed in %)¹



¹ (Equivalent primary energy usage/production volume)/(equivalent primary energy usage 2005/production volume 2005).

GHG emissions in detail

The data on direct emissions from Covestro's own plants (Scope 1) is collected at all of our production sites 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 (CH₄), and partly fluorinated hydrocarbons.

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. Here we use the latest available IEA factors (IEA (2020), Emission Factors. All rights reserved). Since the 2018 reporting year, Scope 2 emissions have been reported using the location-based method and the market-based method in accordance with the most recent requirements of the GHG Protocol (dual reporting). The new form of presentation does not affect comparability with prior-year figures with regard to the two long-term corporate goals of lowering specific energy usage and specific greenhouse gas emissions.

The Group's total greenhouse gas (GHG) emissions declined by 5.6% over the previous year, with direct greenhouse gas emissions down by 3.3% and indirect greenhouse gas emissions down by 6.2%. At our major production sites, which account for over 95% of our energy usage, the production volume fell by 5.4% in fiscal 2020. As a result, specific emissions also dropped by 0.2% year over year.

Greenhouse gas emissions¹ (million metric tons of CO₂ equivalents)

	2019	2020
Direct greenhouse gas emissions ²	1.29	1.25
Indirect greenhouse gas emissions calculated using the location-based method (GHG Protocol 2015) ³	4.66	4.48
Indirect greenhouse gas emissions calculated using the market-based method (GHG Protocol 2015) ³	4.62	4.33
Total greenhouse gas emissions, comprising Scope 1 and 2 emissions according to the market-based method of the 2015 GHG Protocol	5.91	5.58

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

² In the year 2020, 58.2% of emissions were CO₂ emissions, 40.1% were N₂O emissions, 1.6% 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.

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). Whereas emissions of carbon monoxide and nitrogen remained at their prior-year levels, sulfur dioxide emissions dropped (–35.0%), primarily as a result of production declines and lower volumes of sulfurous waste at our largest facility in North America. Dust emissions also declined (–8.7%), mainly as a result of downtime caused by the pandemic as well as lower capacity utilization overall at our Greater Noida site. The figure reported for NMVOC emissions dropped by 14.3%, but the value for ODS remained stable at the prior-year level.

Other important direct air emissions (1,000 metric tons p.a.)

	2019	2020
CO	0.28	0.28
NO _x	0.59	0.59
SO _x	0.06	0.04
Dust	0.11	0.10
NMVOC ¹	0.16	0.13
ODS ²	0.0001	0.0001

¹ Non-methane volatile organic compounds (NMVOC).

² Ozone-depleting substances (ODS).

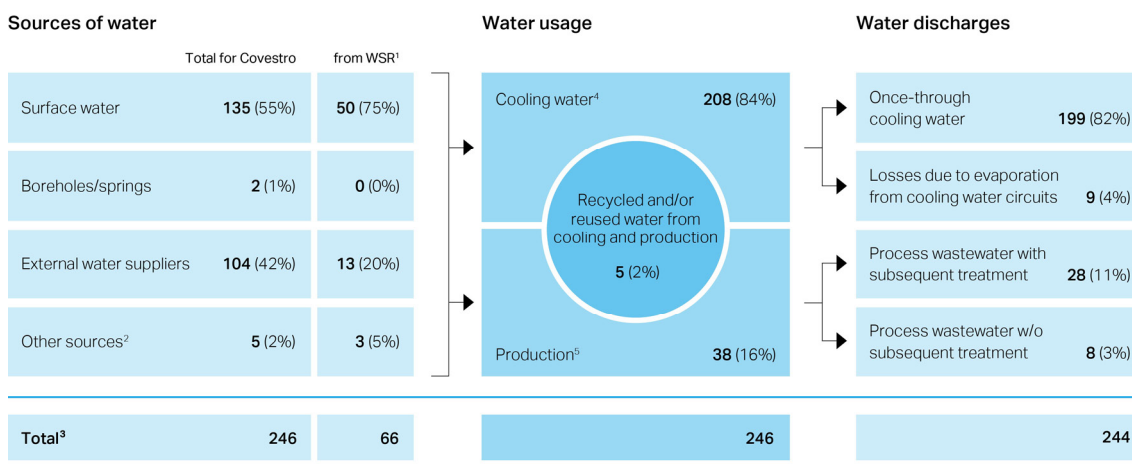
Water usage and consumption

The availability and accessibility of clean water is vital for our production sites. As part of our Corporate Commitment on Water issued in the year 2017, we initiated and have continually refined a global risk assessment of all of our production sites covering water availability, quality, and accessibility.

In fiscal 2020, our risk-based water approach was expanded. In addition to physical risks such as water scarcity and quality, we now also consider potential regulatory risks at our production sites. This approach is followed at the main production sites currently exposed to a high risk of what is known as water stress. Water stress includes water scarcity as well as other factors such as water quality and access to water. We identify locations subject to water stress using recognized tools, such as the Aqueduct Water Risk Atlas by the World Resources Institute and the Water Risk Filter by the World Wide Fund for Nature (WWF). In addition, we have internal exchanges with the experts at each site. Sites located in current water stress regions account for 27% of our total water usage. By analyzing the local water management at the sites, risks can be spotted at an early stage and potential for improvement can be identified. For instance, the production site in Antwerp (Belgium) launched a program in the year 2018 to reduce water consumption and increase the percentage of recycled water used. Moreover, the site along with 50 other chemical and pharmaceuticals companies joined a project called "Learning Network Water" organized by Essenscia, the Belgian Federation for Chemistry and Life Sciences Industries. The project aims to develop action plans for water protection and circular water usage and to provide a platform for members to learn from one another.

In addition, Covestro set up a water community in the year 2020 in which the affected sites can exchange information and share good practices.

Use of water in the year 2020 (million cubic meters)



¹ Water stress regions.

² e.g., rainwater.

³ 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.

⁴ Also includes water for irrigation purposes.

⁵ Total from production processes, sanitary wastewater, and rinsing and purification in production.

At 246 million cubic meters, overall water usage in the Group is below the previous year's figure. This is mainly attributable to a decline in the volume of water obtained from external suppliers by our North Rhine-Westphalia sites due to lower capacity utilization for economic reasons. Once-through cooling water accounts for over 80% of this figure, and consequently represents most of the water used by Covestro in fiscal 2020. 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 199 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. This permits corresponding quantities of fresh water to be conserved each year. In the reporting year, the volume of recycled water used stood at approximately 5 million cubic meters, around the same share as the prior year.

Total water consumption amounted to approximately 2 million cubic meters in the reporting year. This results from the difference between total water used and total water discharged. We currently calculate our total water consumption according to GRI Standard 303-5 (2018).

Wastewater

Our goal is to minimize wastewater emissions, which depend largely on our production volumes and the current product portfolio, as much as possible.

The volume of process wastewater saw a year-over-year decline of 4.0%. The proportion of process wastewater purified at a wastewater treatment plant operated by Covestro or a third party amounted to 76.9% worldwide. Following careful analysis, another 22.8% 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 decreased by 2.2% to a total of 9 million cubic meters.

Total organic carbon (TOC) emissions into wastewater were down by 8.7% compared with the previous year. The volume of phosphates discharged was down 12.8%. The amount of nitrogen compounds discharged and the volume of inorganic salts introduced into wastewater grew by 17.7% and 1.9%, respectively. The volume of heavy metals emitted in the reporting year rose by 17.4%.

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

	2019	2020
Phosphor	0.03	0.02
Nitrogen	0.23	0.27
TOC ¹	0.51	0.46
Heavy metals	0.0035	0.0041
Inorganic salts	714	727

¹ Chemical oxygen demand (COD), calculated based on total organic carbon (TOC) values: $1.39 \text{ (TOC} \times 3 = \text{COD)}$.

Work on the collaborative Re-Salt project, which was launched in the year 2016 by the Federal Ministry of Education and Research (BMBF) for the purpose of recycling salt-laden industrial process water, was successfully completed in fiscal 2020. A pilot plant we operated at the Krefeld-Uerdingen site effectively demonstrated that the salt concentration in process wastewater could be increased from 7% to around 12% using a membrane process. Currently, the plant is being used to gauge options for further increasing concentrations and reducing energy requirements. Covestro submitted a funding request to the BMBF to continue developing this process. At the same time, we are investigating ways to optimize the two recycling plants in operation at our production sites in Krefeld-Uerdingen (Germany) and Shanghai (China). Covestro's projects aimed at recycling salt-laden water were singled out by the Finnish innovation fund SITRA as examples of innovative circular economy solutions and showcased at the World Circular Economy Forum (WCEF) in September 2020.

Waste and recycling

In nearly all countries, the law stipulates exhaustive reporting on waste volumes and waste streams, a requirement complied with accordingly by Covestro's sites. In Germany, for example, there are waste-tracking procedures between the source of the waste and its disposal that enable end-to-end traceability of the waste flows. We classify waste in the individual waste categories and the corresponding methods of disposal according to the locally applicable definitions. Based on this documentation, we prepare and evaluate our waste footprint, which is published annually.

Waste generated (1,000 metric tons p.a.)

	2019	2020
Total waste generated	236	175
of which non-hazardous waste generated	122	68
of which hazardous waste generated ¹	114	107
of which hazardous waste from production	109	103

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

Waste by means of disposal (1,000 metric tons p.a.)

	2019	2020
Total volume of waste disposed of¹	234	175
of which incinerated	106	106
of which recycled	74	49
of which hazardous waste removed to landfill	6	3
of which non-hazardous waste removed to landfill	42	14
Other ²	6	3

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

² e.g., passed on to third parties (such as providers/waste disposal companies).

[< Supplementary information](#)

Sustainability in the Supply Chain

Covestro regards adherence to sustainability standards within the supply chain as a fundamental factor in value creation and an important lever for minimizing risks. For this reason, Covestro sets not only economic standards but also social, ethical, and environmental standards as well as those related to corporate responsibility when selecting new suppliers and in our relationships with existing suppliers. All required standards are defined in Covestro's Supplier Code of Conduct, which is available online in 13 languages and is the basis for our collaboration with suppliers. The Code is derived from the principles of the UN Global Compact and our Corporate Commitment on human rights. It is integrated into the electronic ordering systems and contracts across the Covestro Group. New and renewed supply agreements in particular generally contain special clauses requesting that suppliers adhere to the sustainability requirements outlined in the Code of Conduct and entitling Covestro to verify compliance.

 See "Human rights due diligence."

 Additional information is available at: www.supplier-code-of-conduct.covestro.com

Covestro has set ambitious measurable targets through 2025 aimed at systematically promoting sustainability in supplier management. All suppliers must comply with our code of conduct, which they commit to by accepting the conditions of our purchase orders or contracts. In addition, relevant suppliers accounting for a repeat purchasing value exceeding €100,000 per year are assessed. They comply with Covestro's sustainability requirements by meeting the minimum result as defined by us in the supplier evaluations described below. In the year under review, around 95% of our total purchasing value was attributable to these target-relevant suppliers. In addition, we work closely with our strategically most important suppliers to improve their sustainability performance. We have also incorporated this approach into our sustainability goals.

Evaluation methods and processes of the Together for Sustainability (TfS) initiative

Covestro is a member of Together for Sustainability AISBL, a joint initiative undertaken by the chemical industry that now includes 29 companies. This nonprofit organization pursues the goal of establishing a program of global standards for responsibly sourcing goods and services and standardizing supplier evaluation methods worldwide. Covestro supports all criteria by the TfS initiative concerning the areas of ethics, employee rights, human rights, health and safety, and the environment.

As a member of TfS, Covestro is responsible for monitoring and auditing the sustainability performance of its suppliers. TfS supports this effort by providing the infrastructure for online assessments and on-site audits of suppliers by third parties. The results of these supplier evaluations can be shared via an online platform. During the reporting year, Covestro once again played an active role in all TfS work streams in designing and improving the TfS program and the associated evaluation process.

Covestro uses a standardized TfS assessment process to evaluate whether the suppliers maintain the required sustainability standards. Covestro uses a structured prioritization process to select the suppliers to be evaluated and initiates either an online assessment or an on-site audit for these suppliers – provided that there are no current results. In prioritizing the suppliers for these evaluations, Covestro considers a combination of country and material risks. The risk assessment for country and material groups that we use for our risk analysis is based on recognized external sources.

EcoVadis SAS (EcoVadis), an established external provider accredited by TfS, conducts the online assessments. It evaluates the degree to which suppliers' business practices are aligned with sustainability principles. The questionnaire suppliers complete for the online assessment is based on internationally recognized sustainability standards and includes 21 sustainability criteria grouped into the categories of environmental protection, labor and human rights, ethics, and sustainable procurement. The section on sustainable procurement also inquires about the extent to which the sustainability standards of upstream suppliers are considered. Certain suppliers that do not engage in wholesale trade and do not employ more than 25 people receive an abbreviated questionnaire that does not address the topic of "Sustainable Procurement".

The questionnaire is dynamically adapted by EcoVadis depending on factors such as the industrial sector, company size, and country risk. Suppliers must document their responses to the questionnaire with corresponding supporting documents. The EcoVadis analysts assess supplier responses and supporting documents under consideration of international standards, such as the UN Global Compact, and consolidate the data into a scorecard available online that shows results by category. This scorecard information includes a detailed overview of identified strengths and areas for improvement as well as a weighted overall result for the suppliers analyzed.

External, independent auditors trained and accredited by TfS conduct on-site audits of selected companies – and follow-up audits, if necessary, based on the TfS sustainability criteria. For the purpose of monitoring the quality of the audits, the initiating TfS member takes part in audits selected on a random basis and evaluates them using a standardized checklist.

Covestro analyzes and documents the online assessments and on-site audits. The number of supplier evaluations conducted and the overall results are reviewed regularly and reported to the Board of Management member responsible for Production and Technology. In the event of noncompliance with our sustainability requirements, we work with suppliers to define specific improvement measures and corresponding targets, and Covestro constantly verifies the implementation of the required improvements.

In spite of the coronavirus pandemic and its effects on our suppliers, the number of supplier evaluations conducted in the reporting year rose to 846 (previous year: 778).

Key data from the sustainability evaluations of Covestro's suppliers

	2019	2020
Supplier evaluations conducted in the reporting year	778	846
of which through online assessments	760	812
of which through on-site audits	18	34
Total supplier evaluations conducted	1,638	1,706
of which through online assessments	1,478	1,540
of which through on-site audits	160	166

¹ Online assessments (conducted by external, independent, TfS-accredited provider EcoVadis) and on-site audits (conducted by external, independent, TfS-accredited auditors) of Covestro's suppliers, both initiated by Covestro and shared within the TfS initiative, are taken into account. Only assessments of our active suppliers that are no more than three years old are included.

Supplier evaluation results*

At the end of fiscal 2020, the number of supplier evaluations whose results met our sustainability requirements amounted to 1,204 (previous year: 1,133). Of these supplier assessments, 950 involved our target-relevant suppliers, who account for 79% (previous year: 81%) of our target-relevant purchasing value. Furthermore, 60% of our target-relevant suppliers who underwent a repeat assessment in fiscal 2020 have improved compared with their previous results.

Our supplier management goal

	All of our suppliers with regular purchasing volumes of more than €100,000 per year are expected to comply with our sustainability requirements by 2025.	Status 2020: 79% 2019: 81%
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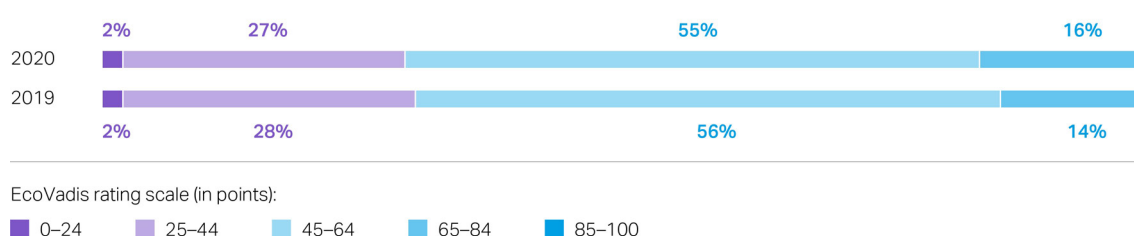
In the year 2020, assessment results considered critical by Covestro were identified for nine target-relevant suppliers (previous year: nine); that is, these suppliers failed to meet the required minimum result by a significant margin. Covestro responds to such infractions with specific action plans and demands that the suppliers in

* The results provided by the external providers EcoVadis SAS and Together for Sustainability AISBL were not subject to the audit by KPMG AG Wirtschaftsprüfungsgesellschaft.

question implement appropriate corrective measures; supplier assessments will be conducted in future to verify compliance.

The share of online assessments in which suppliers met the minimum result we defined – 45 out of 100 possible points – was 71% for the online assessments conducted in the year under review (previous year: 70%). Thanks to our joint efforts toward continually improving our sustainability performance, the results of the online assessments improved year over year.

Overall results of the online assessments completed in the reporting year



The share of on-side audits in which suppliers met the minimum result we defined – 45 out of 100 possible points – was 100% for the on-side audits conducted in the year under review (previous year: 100%).

None of the supplier assessments conducted revealed any indication of child or forced labor. In addition, Covestro had no cause to terminate a supplier relationship in the reporting year or in the previous year solely on account of an externally determined result or a serious sustainability deficit, e.g., human rights violations like child labor or forced labor.

Sustainability training and dialogue

For Covestro, it is important for our own procurement staff, in particular, to have a comprehensive understanding of the significance of sustainability in the supply chain. Awareness of this issue was raised among employees again in fiscal 2020 in company-wide sustainability training plus region- and country-specific training on evaluation methods and processes.

During the reporting year, we continued to promote the implementation of four strategic principles in procurement (reliability, sustainability, cost transformation, and innovation). Moreover, our Regional Program Managers in the EMLA, NAFTA, and APAC regions are working on permanently improving our sustainability program.

 See "Procurement."

Dialogue and close collaboration are essential in enabling suppliers to successfully comply with Covestro's sustainability requirements. We therefore offer our suppliers a range of opportunities for training and dialogue. This provides the foundation for building reliable relationships and enables us to identify and eliminate issues at an early stage. Continually improving our suppliers' sustainability performance is a priority for Covestro and is supported by the TfS initiative, which regularly organizes supplier days and promotes further training, among other activities. TfS provides a wide range of information materials and various online training courses on its website. In fiscal 2020, six online training sessions were offered in various languages, and one supplier day was held in China.

 Additional information is available at: www.tfs-initiative.com

[Supplementary information >](#)

Worldwide supplier evaluations through the TfS initiative*

Since the start of the TfS industry initiative in the year 2011, the now 29 members of TfS have evaluated the sustainability performance of a total of 13,776 suppliers through online assessments and have performed 2,202 on-site supplier audits.

All of the results from the online assessments and on-site audits are available to members of the initiative on an online platform, thereby enabling continual monitoring of suppliers with a view to improvements. The TfS initiative also benefits suppliers because their standardized evaluations can be viewed by all TfS members. This means they do not have to complete multiple evaluation surveys by various (potential) customers.

In fiscal 2020, TfS members conducted a total of 5,315 online assessments and 258 on-site audits across the globe.

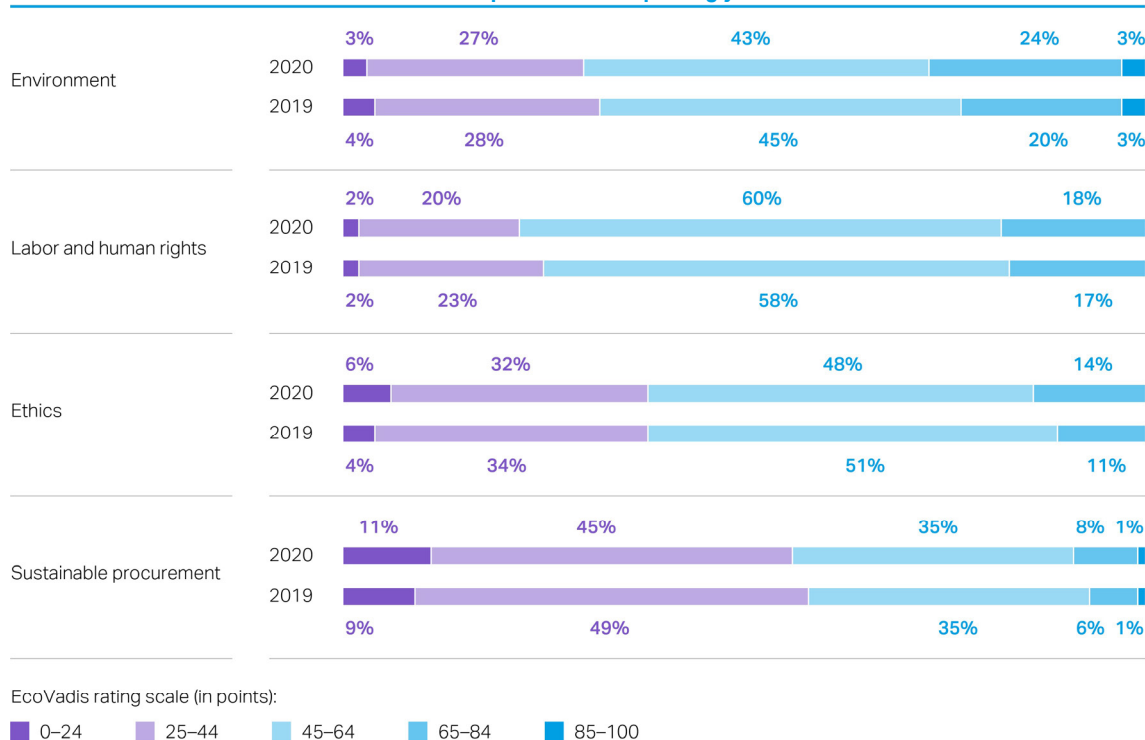
The new "TfS Grow & Deliver" strategy applicable for the next five years was approved at the TfS Steering Committee meeting held in February 2020 in Germany and ratified by the Annual General Meeting. The strategy focuses on four key pillars: Stronger Community, Higher Standards, Closer Collaboration, and Extended Reach.

➕ [Additional information is available at: tfs-initiative.com](https://tfs-initiative.com)

Detailed results of the supplier evaluations*

We regularly analyze the results of the online assessments in the areas of environment, labor and human rights, ethics, and sustainable procurement. The results of the assessments carried out in the previous year and the reporting year are summarized in the following chart:

Detailed results of the online assessments completed in the reporting year



* The results provided by the external providers EcoVadis SAS and Together for Sustainability AISBL were not subject to the audit by KPMG AG Wirtschaftsprüfungsgesellschaft.

The detailed results in all areas indicate a neutral or positive trend (unchanged or increased share of online assessments reaching a score of 45 or higher).

In analyzing the supplier evaluations for the year 2020, we identified deviations from our sustainability requirements in all listed areas. This was due to factors including missing documentation of policies and measures relating to waste management, emissions, and energy, as well as a lack of occupational safety measures such as a failure to install emergency exits or exceeding the weekly working hours according to the TfS standard.

Procurement of key products

In fiscal 2020, the procurement spending of Covestro's main sites in Germany, the United States, and China accounted for just under 79% of Covestro's global spending. Most of this amount – around 79% – went to local suppliers in the individual countries.

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 (3TG) from the Democratic Republic of Congo or neighboring states do not enter their products through the supply chain. European Union Regulation (EU) 2017/821, which entered into force on January 1, 2021, stipulates an expanded duty to perform human rights due diligence for the 3TG that includes all global conflict and high-risk regions. Covestro uses tin-containing compounds in production and therefore monitors all its suppliers of tin-containing raw materials. The requirements of the EU regulation on conflict minerals are being reviewed and integrated into the processes.

Using a structured survey process, we verify that our suppliers and their upstream suppliers obtain tin-containing material that is free from conflict minerals. Confirmations of conflict mineral-free procurement are documented centrally in the respective material/supplier combinations in our database.

Our requirements regarding conflict minerals are clearly communicated in our Supplier Code of Conduct. Covestro has obtained confirmations of compliance as regards conflict minerals from 100% of the suppliers from whom it actively purchases such minerals (38 material/supplier combinations) and who were identified as potentially affected by this issue. We update a list of potentially affected suppliers on an ongoing basis, and monitor the validity of all existing supplier confirmations. To date, there have been no critical results and no need for action regarding this issue.

[< Supplementary information](#)

Social Responsibility

Covestro is a signatory to the UN Global Compact charter and participates in the industry-led Responsible Care™ initiative and in global sustainability forums such as the World Business Council for Sustainable Development (WBCSD). We publish voluntary Corporate Commitments on important topics on our website, thus undertaking to comply with certain standards.

+ Additional information is available at: www.covestro.com/en/sustainability/service-downloads/policies-commitments

Human rights due diligence

Covestro is committed to respecting human rights on the basis of the United Nations Guiding Principles on Business and Human Rights. We advocate for compliance with the various national action plans and laws on human rights due diligence. In doing so, we clearly take responsibility as a company for respecting human rights in all of the Covestro Group's activities, at subsidiaries and throughout global supply chains and value chains, as well as for guarding against violations of human rights.

The principles of our human rights due diligence are delineated in various Corporate Commitments, company regulations, and in our Supplier Code of Conduct. In these documents, we have specified key international conventions and principles as the basis of our conduct. We expect our employees and business partners around the world to conduct themselves in accordance with these principles.

A key component of our commitment is zero tolerance of child labor, forced labor, and human trafficking. In the reporting year, we once again made a public statement on slavery and human trafficking ("Corporate Commitment against Slavery and Human Trafficking") to underline our position.

+ Additional information is available at: www.covestro.com/-/media/covestro/country-sites/global/documents/sustainability/policies/covestro-corporate-commitment--slavery-and-human-traffickingsigned.pdf?la=en

Human rights due diligence is carried out using Covestro's management systems and has been integrated into these for a long time now for aspects such as safety, product stewardship, compliance, and personnel policy.

☞ See "Employees," "Safety," "Product stewardship," and "Compliance."

Covestro also regards compliance with sustainability standards within the supply chain as a fundamental factor in value creation and a lever for minimizing risks. In our Supplier Code of Conduct, we therefore require suppliers to protect the human rights of their employees and treat them with dignity and respect. We monitor their compliance with human rights standards through detailed supplier sustainability assessments and audits.

☞ See "Sustainability in the supply chain."

+ Additional information is available at: www.supplier-code-of-conduct.covestro.com

To address the growing importance of human rights due diligence inside and outside the company, we established a cross-departmental Human Rights Task Force in the reporting year so as to fully integrate human rights requirements into our management systems.

The comprehensive management approach is based on the UN's Guiding Principles on Business and Human Rights, the core elements of the German national action plan, and the French law on human rights due diligence. We regularly monitor other national and international laws and legislative initiatives such as the German Supply Chain Act and the EU law on supply chain due diligence.

The Task Force is managed by the Sustainability corporate function and is composed of permanent members from the corporate functions of Health, Safety, Environment, Energy, and Quality (HSEQ); Procurement; Human Resources; Law; and Compliance as well as an expanded group of quality management, business, and risk management experts. The human rights-related responsibilities of the Task Force include developing and implementing the comprehensive management approach, systematically assessing risks, prioritizing and monitoring the implementation of individual measures, reporting to the Board of Management, and communicating about this issue in general. The individual corporate functions are responsible for identifying and assessing risks, and developing and implementing specific measures based on the Task Force's minimum requirements and best practice approaches, among other things. Measures are defined in consultation with the Task Force. In the reporting year, the corporate functions reported monthly to the Task Force about the measures implemented and their effectiveness.

The Human Rights Task Force presented the human rights due diligence approach and the status of this work to the Board of Management twice in the year under review. In addition, the priorities for the reporting year and the years 2021 to 2025 were determined. They are based on the human rights risk analysis carried out for the first time in the prior year, which is likewise underpinned by the aforementioned frameworks. As part of this analysis, material human rights risks and their possible occurrence in our value chains are identified and prioritized as a first step. Human rights risks are defined as any potential risk to those affected that could arise directly or indirectly from our business activity, the supply chain, or our products. Potentially affected persons could include Covestro's own employees, contractors, suppliers, customers, or even neighboring communities. The risk analysis covered all our own production and distribution sites as well as the supply chain and the use phase of our products. The potential risks were identified, discussed, and prioritized with selected corporate functions based on the severity of a possible human rights violation and the extent of Covestro's possible influence for purposes of further work on the matter. Potential human rights violations assigned the highest degree of severity always take top priority for us.

As a result, various human rights topics along the value chain were identified which the Task Force will prioritize in its five-year plan. An initial status-quo comparison of existing processes and structures likewise provided insight into the extent to which priority topics are already addressed and where there is room for improvement. In the reporting year, initial measures were implemented in the Procurement, Human Resources, and Export Control corporate functions, and the risk-based approach for priority topics at Covestro was refined.

Alliance to End Plastic Waste

As a founding member of the Alliance to End Plastic Waste, Covestro is expanding its commitment against the uncontrolled disposal of plastic waste in the environment. This global network of companies strives to minimize, manage, and reuse plastic waste – and above all, prevent plastic waste from entering the environment. By the end of the year 2023, USD 1.5 billion (around €1.2 billion) is expected to have been provided for this purpose by the network. More than 50 companies from the chemical, plastic, consumer goods, and waste management sectors currently participate in this initiative.

For Covestro, the Alliance is a key component of the strategic Circular Economy program to close product loops worldwide. The Alliance identifies, invests in, and manages economically viable and sustainable waste collection and recycling solutions in cities with the support of strategic partners. Furthermore, the Alliance unlocks market opportunities for recycled materials and promotes the development of improved recycling processes and potential closed-loop products. These measures aim to transform unused and improperly disposed of plastic waste into sources of raw materials. The Alliance also advocates for sustainable consumer habits.

Besides the activities of the Alliance as a whole, its members' activities are a key element in preventing plastic waste from entering the environment. In the year 2020, the Alliance compiled and assessed all activities in its first progress report. Covestro contributes to the Alliance not only financially, but also through the active participation of company experts and executives, including our CEO. Moreover, Covestro additionally contributes by pursuing

13 partnerships and our own projects that concentrate primarily on researching and developing new recycling methods, and identifying and setting up waste-based raw material streams. These include measures to reclaim and mechanically recycle polycarbonate water bottles in cooperation with mineral water supplier Nongfu Spring in Hangzhou (China) and recycling company Ausell in Shanghai (China). By the end of the year 2020, Covestro's total contribution amounted to USD 8.2 million (€7.2 million).

Inclusive business

Our inclusive business activities focus on the needs of underserved markets. With our collaborative approach, we ensure that we are offering scalable solutions that reach as many people as possible. We collaborate with customers as well as governmental and nongovernmental organizations to develop affordable solutions based on our technologies and products to benefit underserved populations and regions. Our employees focus on three regions (India, Southeast Asia, and East/South Africa) and work on improving the living conditions of disadvantaged and mostly low-income people by implementing new innovative solutions for affordable housing, food security, and water and sanitary facilities. In cooperation with partners, we develop affordable products based on our raw material technologies and tailored to user needs. One area of activity is post-harvest losses in the food industry in developing countries. Post-harvest losses are all losses that occur after the harvest (e.g., as a result of improper storage). They are an economic challenge particularly for smallholder farmers. Solar greenhouse dryers and cold storage, which are developed with industry partners within inclusive business, contribute substantially toward improving the financial situation of these farmers by reducing post-harvest losses. At the same time, innovative solutions help open up new markets for our company.

In the year 2020, we once again concentrated on collaboratively developing new, affordable solutions with partners who passed a due diligence review in advance. These solutions are financed by governmental and non-governmental organizations. Our work in consortia – always preceded by our standard due diligence process for new partners – also ensures that the relevant segments of the population ultimately profit from the jointly developed end products.

Our inclusive business goal



We want 10 million people in underserved markets to benefit from our solutions by the year 2025. The goal is to improve their standard of living primarily through affordable housing, sanitation, and food security.

Status

2020: 1.1 million people
2019: 0.7 million people

In line with the United Nations Sustainable Development Goals (SDGs), Covestro is pursuing the goal of improving the lives of 10 million people in underserved developing and emerging countries by the year 2025. The Board of Management is informed annually about these global activities. By the year 2020, we reached more than 1.1 million people with inclusive business solutions (previous year: more than 0.7 million people). We arrive at this number for the installed solutions by considering the people who could potentially benefit from our projects as part of their work or daily lives based on local conditions. The beneficiaries include farmers and their families from projects involving post-harvest solutions, schoolchildren thanks to the construction of training centers and installation of drinking water systems in schools, and other people due to new jobs that are created during our projects or the installation of solutions. The data collected as part of a defined process is reviewed at local and global level and the processes are continuously refined. The data is collected with the help of participating governmental and nongovernmental organizations as well as third-party sources of data for determining average family sizes in the respective countries.

Our inclusive business activities were severely affected by the global coronavirus pandemic in the year 2020 due to measures such as worldwide travel restrictions. Our activities in Africa felt the impact in particular. For this reason, we were forced to delay initiatives including water supply projects until the year 2021. Pandemic-related measures in Asia, which also affected the post-harvest handling of agricultural products, triggered an unexpected glut of fruit and vegetables in Malaysia. In the reporting year, we worked with the Malaysia Fruit Farmers Association to support farmers with food preservation by providing training. In Kenya, partnerships with our customers also enabled us to manufacture over 230 mattresses using our donated precursors and deliver them to hospitals, where they can continue to be used even after the coronavirus pandemic.

The main focus in Africa was on drying agricultural products. In the reporting year, we were able to continue the partnership with Tshwane University of Technology in Pretoria (South Africa) announced in the previous year. The students at the university will work on various research projects that use solar greenhouse dryers with a focus on alternative methods for drying traditional African fruits. We also cooperated with the University to run two workshops on strategic financial management and corporate governance in the South African province of Venda Limpopo. When the drying systems are successfully commissioned, we will be able to help a total of 900 people, mostly smallholder farmers and their families.

On the Indian subcontinent, our inclusive business activities in the reporting year focused on food preservation, construction, and the water supply. For instance, solar food dryers and solar cold storage help smallholder farmers increase their income, particularly in rural areas. In cooperation with the Fecal Sludge Management and Toilet Program, we successfully demonstrated the advantages of systems for drying fecal sludge based on polycarbonate technology in Karnataka and Odisha. In Maharashtra and Telangana, we were also able to use prefabricated construction modules to contribute substantially to building sanitary facilities. As a result of the coronavirus pandemic, the Indian government has increasingly concentrated on the procurement processes of health centers, especially in rural areas. During the construction process, our contribution of prefabricated construction modules shortened the construction time and positively influenced the result.

In Southeast Asia, the inclusive business team further stepped up its activities over the prior year by working on various community projects in the year 2020. We were able to more actively involve women in Vietnam in post-harvest management through our partnership with the GREAT program, an initiative of the Australian Department of Foreign Affairs and Trade. This initiative taught its female participants various methods of increasing value to generate higher income.

Our involvement in the Coffee Innovation Fund in Vietnam, which is run by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, allowed us to work closely with Sau Nhung Coffee Production. With the help of solar greenhouse dryers, the coffee farmers there were able to reduce coffee bean loss and cut drying times while increasing drying efficiency. Improving the quality of their coffee beans enabled them to sell their harvests for up to three times the regular price.

Social engagement and dialogue

Social and societal matters are of great significance to Covestro. We address our responsibility to society through corporate citizenship as well as ongoing constructive dialogue with authorities, neighbors, individual stakeholders, and organizations interested in Covestro. More specifically, we maintain regular contact with authorities and operate neighborhood offices. Donations, support programs, and special partnerships are further expressions of Covestro's active commitment to society. The particular areas of emphasis are determined in conjunction with the Board of Management. As a result of the coronavirus pandemic, Covestro donated IT equipment for virtual learning in addition to PPE such as masks. Due to the coronavirus pandemic, the plant tours (and participation in Currenta plant tours) that would have otherwise taken place regularly were not offered during the year under review.

In fiscal 2020, we worked as part of the THINC³⁰ program in conjunction with our stakeholders in Pittsburgh, Pennsylvania (USA), mainly on partnerships and local initiatives relating to the SDGs for a more just, socially balanced, and sustainable society.

Access to education, technology, and a better life

Covestro wants to facilitate access to education, technology, and a better life, and help achieve the SDGs through its social engagement. As one of the world's largest polymer companies, Covestro uses its position to work with different organizations in numerous regions around the world to advance projects for protecting the environment, improving the welfare of society, and stimulating the economy. The Sustainability corporate function supports Group-wide efforts to plan and implement cooperative efforts with partners and donation management in order to put an even greater emphasis on the SDGs.

 See "Inclusive business."