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. Covestro has two reportable segments, Performance Materials (PM) and Solutions & Specialties (S & S). The segments comprise seven business entities. These are set up according to their respective success factors. All mission-critical operations along the value chain are incorporated into these business entities. Covestro has thus focused its businesses perfectly on the requirements of individual markets and aligned them with its customers' needs.

→ See "Group Strategy" and note 4 "Segment and Regional Reporting" in the Notes to the Consolidated Financial Statements.

The Performance Materials segment forms a separate business entity comprising Covestro's standard urethane components, standard polycarbonates, and base chemicals businesses. The focus here is on reliably delivering standard products at competitive cost. The Solutions & Specialties segment comprises six business entities: Engineering Plastics, Coatings & Adhesives, Tailored Urethanes, Thermoplastic Polyurethanes, Specialty Films, and Elastomers. In this segment, Covestro combines sophisticated products with a high pace of innovation and application technology services.

→ See "Performance Materials Segment Strategy" and "Solutions & Specialties Segment Strategy."

In addition, the Group has established central corporate functions which work toward the further long-term development of Covestro (Build), for instance permanently ensuring the Group's competitiveness and supporting efficient corporate governance (Run).

Group structure

COVESTRO
Board of Management

Segments and business entities	Corporate functions
Performance Materials • Performance Materials	• Strategy • Portfolio Development • Group Innovation • Sustainability & Public Affairs • Process Technology • Engineering • Information Technology & Digitalization • Group Health, Safety and Environment • Group Procurement • Central administrative functions (Accounting; Communications; Controlling; Corporate Audit; Finance & Insurance; Human Resources; Investor Relations; Law, Intellectual Property & Compliance, Taxes) • Supply Chain & Logistics EMLA, NA, APAC
Solutions & Specialties • Engineering Plastics • Coatings & Adhesives • Tailored Urethanes • Thermoplastic Polyurethanes • Specialty Films • Elastomers	

Build
Run

As of December 31, 2022, the Covestro Group comprised 60 consolidated companies in 21 countries in addition to Covestro AG, and employed 17,985 people*.

→ See note 5.1 "Scope of Consolidation and Investments" in the Notes to the Consolidated Financial Statements.

The Board of Management of Covestro AG runs the company on its own responsibility with the goal of sustainably increasing the company's enterprise value, and determines and pursues its corporate objectives. It defines the company's portfolio, allocates resources, and decides on both the financial and nonfinancial steering and reporting of the Covestro Group.

Covestro's Chief Executive Officer (CEO) is Dr. Markus Steilemann. His area of responsibility includes the corporate Strategy; Sustainability & Public Affairs; Group Innovation; Corporate Audit; Human Resources; and Communications functions.

Sucheta Govil is Covestro's Chief Commercial Officer (CCO). She is in charge of the seven business entities, including all business-related processes and areas of production, from procurement and application technology to sales. In addition, she is responsible for the three regional Supply Chain & Logistics units, which handle internal and external supply chains worldwide.

Dr. Klaus Schäfer is the company's Chief Technology Officer (CTO). He is responsible in that role for the corporate functions of Process Technology; Engineering; Group Health, Safety and Environment; and Group Procurement. He also coordinates the rollout of and compliance with global processes and standards and the rollout of initiatives in Covestro's production network. Dr. Klaus Schäfer will leave Covestro's Board of Management as of June 30, 2023, and hand the office of Chief Technology Officer (CTO) to Dr. Thorsten Dreier as of July 1, 2023.

Dr. Thomas Toepfer is Covestro's Chief Financial Officer (CFO) and additionally holds the position of Labor Director. His responsibilities comprise the corporate functions of Accounting; Controlling; Finance & Insurance; Information Technology & Digitalization; Investor Relations; Law, Intellectual Property & Compliance; Portfolio Development; and Taxes. Dr. Thomas Toepfer is also responsible for country-specific topics in the United States and China.

→ See "Composition of the Board of Management."

The Supervisory Board oversees and advises the Board of Management. The Supervisory Board has 12 members, half of whom are shareholder representatives and half employee representatives pursuant to the German Codetermination Act. Dr. Richard Pott is the Supervisory Board Chair and Petra Kronen is Vice Chair.

→ See "Declaration on Corporate Governance."

Business Model

In its core business, 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 noncore precursors in Covestro's product portfolio include chlorine and by-products like styrene.

The company's materials are used in many areas of modern life. Covestro offers its clientele innovative and sustainable solutions that enable improved performance on the one hand and help reduce carbon footprints on the other. The array of products ranges from insulation for refrigerators and entire buildings, laptop and smartphone cases, and medical technology 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.

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

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 fully aligns its entire production and product range – and ultimately the company itself – to the circular concept in the long term. As part of that, we intend to accelerate transformation to a climate-neutral and resource-conserving economy. The focus here is on alternative raw materials, renewable energy, innovative recycling, and joint solutions. Covestro's aim is to pave the way and support these trends with its materials. By replacing traditional materials with durable, light, 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 materials, and improving the shelf-life of food through better insulation along the entire refrigeration chain. Covestro is continually increasing its share of alternative raw materials in production to replace conventional materials, some of which require large amounts of raw materials from nonrenewable sources.

→ See "Circular Economy."

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

Covestro 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. Covestro's main competitors are BASF, Dow Chemical, Huntsman, Mitsubishi, Saudi Basic Industries Corporation (SABIC), and Wanhua Chemical.

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

Segments

Performance Materials

The Performance Materials segment focuses on developing, producing, and reliably supplying high-performance materials such as standard polyurethanes and polycarbonates, as well as base chemicals. These include diphenylmethane diisocyanate (MDI), toluylene diisocyanate (TDI), long-chain polyols, and polycarbonate resins. Those materials are used in sectors such as the furniture and wood processing industry, the construction industry as well as the automotive and transportation industry. These materials are used in roof structures, insulation for buildings and refrigerators, mattresses, and car seats, among other applications.

Solutions & Specialties

The Solutions & Specialties segment consolidates Covestro's solutions and specialties businesses, and combines chemical products with application technology services. A fast pace of innovation is a key success factor since customer requirements change quickly. Covestro's Solutions & Specialties business comprises a variety of polymer products including polycarbonates, precursors for coatings and adhesives, MDI specialties and polyols, thermoplastic polyurethanes, specialty films, and elastomers. They are used in sectors such as the automotive and transportation industry; the electrical, electronics and household appliances industry; the construction industry; and the healthcare industry. These materials include composite resins for wind turbine rotor blades; precursors for coatings and adhesives; laptop cases; floodlights; and high-quality specialty films.

Procurement

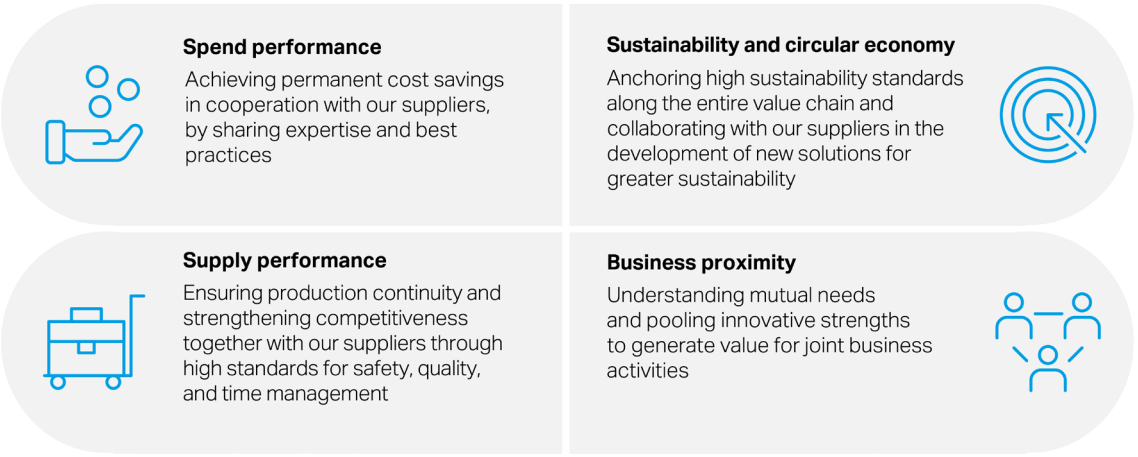
Purchasing at Covestro is handled by the corporate Group Procurement function. Group Procurement works with the business entities and regional hubs of the corporate Supply Chain & Logistics function to ensure the timely global supply of goods and services to all divisions of the company on the best possible terms and conditions. This ensures that the Group's high quality standards are met. Furthermore, Group 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.

→ See "Sustainability in the Supply Chain."

+ Additional information is available at: www.covestro.com/en/company/profile/procurement/sustainability-in-procurement/supplier-code-of-conduct

In the year 2022, Group Procurement defined details of the strategy and strategic principles (cost optimization, supply chain optimization, sustainability, circular economy, and business proximity). The objective is still to generate a competitive advantage for Covestro and make a decisive contribution to overall value. Group Procurement contributes to realizing Covestro's vision of becoming fully circular by, among other things, purchasing renewable energy and alternative raw materials.

Strategic principles in procurement



Covestro is an energy-intensive company and depends to a large extent on gas. It is predominantly used as a source of energy and as process gas in chemical reactions and there is no comprehensive short-term substitute for gas in the production processes. For this reason, in the procurement of sources of energy, Covestro, along with large parts of the chemical industry, is very majorly affected by the persistently high and volatile prices amid the Russian war against Ukraine. Given the nature of the energy markets, it will only be possible to influence this effect in future by switching to sources of energy other than gas. Group Procurement is planning to source alternative fuels, such as hydrogen, ammonia, biogas, or green methane, wherever the potential to switch to other fuels has been identified in production processes. In this way, Covestro will be able to reduce its current dependence on gas in the medium to long term. At the same time, the significant increase in energy prices in the year 2022 is increasingly driving up demand for circular solutions. We have for this reason redoubled our efforts to actively develop new long-term supply plans and signed purchase contracts for renewable energy (particularly electricity). This resulted in Procurement sourcing around 740 GWh of electricity (around 12% of total usage) from renewable sources in the year 2022.

→ See "Electricity from renewable sources."

GHG emissions in connection with the procurement of raw materials account for the majority of Covestro's Scope 3 emissions. Group Procurement therefore plays a key role in achieving any future Scope 3 reduction target. In addition, the corporate Group Procurement function promotes the digitalization of purchasing processes and systems in the interest of improving procurement efficiency and effectiveness for Covestro and its suppliers.

→ See "Sustainability in the Supply Chain."

In fiscal 2022, goods and services were procured from some 16,000 suppliers (previous year: some 13,000) in 61 countries (previous year: 66) for €14.5 billion (previous year: €11.3 billion)*. In fiscal 2022, the procurement spending of Covestro's main sites in Germany, the United States, and China accounted for 78% of Covestro's global spending. Most of this amount –81% – went to local suppliers in the individual countries.

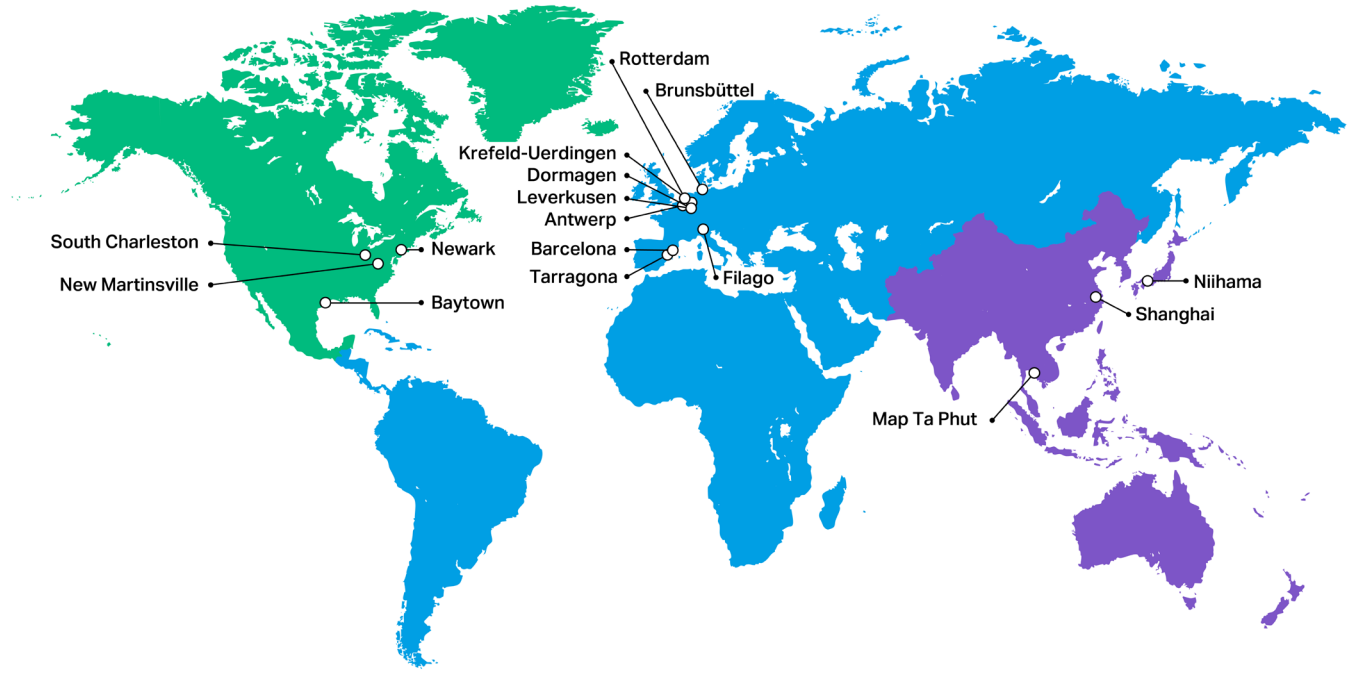
The most important raw materials for our products are petrochemical substances such as phenol, benzene, propylene/propylene oxide, toluene, and acetone – which collectively account for 40% of our purchasing value (previous year: 35%). Moreover, the operation of our production facilities requires large amounts of energy, which we primarily procure from external sources in the form of power and steam. We endeavor to procure raw materials essential for operations which are difficult for Covestro to obtain from external supply sources from within the Group or through joint ventures. 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 consolidated by the corporate Group Procurement and Supply Chain & Logistics functions. We also regularly monitor the sustainability and quality of our suppliers and ensure that they comply with internal and external standards.

* Due to the ongoing system integration of Resins & Functional Materials (RFM) acquired from Koninklijke DSM N.V., Heerlen (Netherlands), the RFM-related procurement volume was only partially included for fiscal 2021. Since fiscal 2022, RFM fully integrated.

Production Sites and R&D Sites

Covestro operates production and research and development (R&D) sites for various product groups throughout the world. The following chart shows the geographical distribution of Covestro's 50 production sites and 13 R&D sites in the EMLA, NA, and APAC regions.

Covestro's production and R&D sites



NA[1]

Mexico
Santa Clara ● | S&S

United States
Baytown ● | PM | S&S
New Martinsville ● | S&S
Newark ● | S&S
South Charleston ● | S&S
Augusta ● | S&S
Channelview ● | PM
East Providence ● | S&S
Elgin ●
Frankfort ● | S&S
Pittsburgh ●
South Deerfield ● | S&S
Wilmington ● | ● | S&S

EMLA[2]

Belgium
Antwerp ● | ● | PM | S&S

France
Fos-sur-Mer ● | PM
Romans-sur-Isère ● | S&S

Germany
Brunsbüttel ● | PM
Dormagen ● | ● | PM | S&S
Krefeld-Uerdingen ● | ● | PM | S&S
Leverkusen ● | ● | S&S
Bomlitz ● | S&S
Markt Bibart ● | S&S
Meppen ● | S&S

Italy
Filago ● | S&S

Netherlands
Rotterdam ● | PM
Geleen ● | ● | S&S
Hoek van Holland ● | S&S
Schoonebeek ● | S&S
Waalwijk ● | ● | S&S
Zwolle ●

Spain
Barcelona ● | S&S
Tarragona ● | PM
Parets ● | S&S
Santa Margarida ● | S&S

United Kingdom
Cheadle Hulme ● | S&S

APAC[3]

China
Shanghai ● | ● | PM | S&S
Guangzhou ● | S&S
Kunshan ● | S&S
Qingdao ● | S&S
Shenzhen ● | S&S
Shunde (Foshan) ● | S&S
Tianjin ● | S&S

India
Ankleshwar ● | S&S
Cuddalore ● | S&S
Greater Noida ● | S&S

Japan
Niihama ● | PM | S&S
Amagasaki ●
Sakai ● | S&S
Tsuchiura ● | S&S

Taiwan, Greater China
Changhua ● | S&S
Linyuan ● | PM
Pingtung ● | S&S
Taoyuan City ●
Zhangbin ● | S&S

Thailand
Map Ta Phut ● | PM | S&S

SITES & FACILITIES: ⊶ **Main production sites** ● Production site ● R&D site

SEGMENTS: PM Performance Materials S&S Solutions & Specialties

[1] NA: North America region (Canada, Mexico, United States).
[2] EMLA: Europe, Middle East, Latin America (excluding Mexico), Africa region.
[3] APAC: Asia and Pacific region.

In pursuit of our objective to supply customers reliably and efficiently, we make the Performance Materials segment's products at large-capacity production facilities in the respective regions. Additional plants in selected countries manufacture polyurethane precursors and products for the Solutions & Specialties segment. Moreover, we operate production plants in certain 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 achieve 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 sites 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 the year 2022 included the new production line for prepolymers of the Desmodur® 15 product group in Barcelona (Spain) and precursors of the Vulkollan® product group in Map Ta Phut (Thailand).

→ See "Cash Flows from Investing Activities."

Covestro primarily conducts research and development at three major centers in Germany, the United States, and China. Customer-oriented applications are generally developed in the relevant regions, while global, fundamental research and technology development are mainly conducted in Germany. Our global presence allows us to respond to regional trends and customer requirements in the best possible ways.

→ See "Innovation."

Marketing and Sales

Industry-specific marketing and sales teams are responsible for developing new business with prospective customers and expand business relationships with existing customers, as well as for continually analyzing markets and trends. Each business entity engages in sales and marketing activities for 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. All activities are conducted in close cooperation between marketing, sales, and application development teams. At Covestro, marketing activities are comprehensively managed by the business entities.

In recent years, selected business entities transferred some of their sales activities to the Covestro Direct Store, our digital sales channel. In fiscal 2022, around 13,000 transactions (previous year: more than 13,000 transactions) with a total value in the mid- to upper three-digit million euro range (previous year: mid- to upper three-digit million euro range) were processed via this digital platform. Both the number of transactions and their total value were therefore almost at the prior-year level, despite the dynamic business environment. Besides selling products through the Covestro Direct Store, the company is also working on placing a selection of products on third-party digital sales platforms to align our range of offerings even more closely with our customers' needs and to give them a completely digital customer experience.

As part of our Sustainable Future strategy and the Customer Centricity concept described there, we use the Net Promoter Score (NPS) to measure customers' willingness to recommend Covestro (based on the question of how likely it is that customers would recommend the company to employees or business partners). Covestro uses the NPS score, which ranges between –100 and +100, as a measure of customer satisfaction. An NPS of +42 was measured for fiscal 2022. According to those surveyed, the main reasons for this high willingness to recommend Covestro are the company's customer service, the good business relationship, and product quality.

→ See "Group Strategy."

Our global marketing and sales activities continue to focus on progressive digitalization, the circular economy, and collaboration. We have significantly expanded the range of webinars and digital events we offer. We participate in trade fairs in hybrid form to supplement and enhance physical events with digital content. In this way, we reach out to more people and offer our customers a wider choice of ways to make contact and interact with us. The tool we use to manage hybrid trade fair participation is called Digital Event Space, a platform on which customers can, for example, prepare for their visits to physical events, make personal appointments, hold digital meetings, view the exhibition online in advance, and obtain a large range of additional information. In addition to the ability to digitalize events, we also scrutinize our marketing activities to establish to what extent they can make a contribution to sustainability. Our stand for this year's appearance at the K 2022 plastics trade

fair in Düsseldorf (Germany), was redesigned using, among other items, reusable furniture, which can be redeployed for future trade fair appearances.

In addition, we conducted marketing campaigns on a number of topics, such as the Sonnenwagen project, which involves a solar car developed by a team of students at RWTH Aachen University (Germany). Built using Covestro materials, it takes part in international races and world record attempts. The vehicle is continuously enhanced and demonstrates that the possibilities of zero-emission mobility have by no means been exhausted. The Sonnenwagen is only one example of how Covestro and its partners jointly develop advanced solutions and drive the creation of a better, more climate-friendly future. Another campaign that we have launched relates to the Circular Intelligence (CQ) label for products, a module on our path to becoming fully circular. As part of this campaign, a brand named Evocycle® CQ has been introduced for recycling programs within the company. The first initiative under this brand is the Evocycle® CQ mattress, for which chemical recycling is used to obtain recycling polyol as well as recycled toluylene diamine (TDA); these compounds are then returned to the value chain for high-quality polyurethane foam. In this initiative, we collaborate with partners at all stages of the value chain, such as taking back, recycling, and reusing materials.

→ See “Labeling of Circular Solutions in the Product Portfolio” and “Other Collaborative Projects.”

The corporate Supply Chain & Logistics function with its regional hubs in EMLA, NA, and APAC is primarily responsible for customer care and efficient order processing. Supply Chain & Logistics owns the entire process – from order acceptance to factory logistics, and from shipping planning to invoicing and complaints handling. Thanks to customer-oriented support in the individual regions, orders can be processed particularly quickly and smoothly. Covestro makes use of channels such as e-commerce platforms for order entry and processing. Our customers can place orders and check the status of their orders at any time in the Order@Covestro self-service portal. Order@Covestro is not used to initiate new business: Rather, the portal complements the services we provide to our existing customers and helps us handle routine inquiries during times outside our customer service and sales staff’s business hours. Covestro is working in all regions on a shipment tracking solution that is to give customers a transparent overview of their orders and deliveries.

Covestro operates a global production network and produces in the EMLA, NA and APAC regions, in particular for customers in the respective regions. Our products are transported to the customer by logistics service providers, which we select and evaluate based on strict safety, environmental, and quality criteria. In addition to protecting people and the environment, delivery reliability is particularly important to us. Our foremost quality goal is therefore to eliminate errors in all our processes to guarantee a high level of customer satisfaction. This is regularly determined worldwide in a global management system: We take into account customer satisfaction analyses in which we are rated as a supplier, as well as supplier assessments in which we evaluate our transport service providers on the basis of the responses from our customers. We use this data to derive corrective and preventive measures for the purpose of continually increasing quality and customer satisfaction and lowering the error rate and the incidence of complaints.

In the reporting year, we received 5.11 customer complaints per 1,000 deliveries. Complaints caused by logistical problems are included in Covestro’s assessment of the performance of the freight forwarders and are discussed in the regularly held review meetings. Overall, the year 2022 was characterized by a challenging transport environment, mainly due to the coronavirus pandemic and the Russian war against Ukraine. The preferred mode of transportation in the regions is rail or intermodal – a combination of different modes of transportation. When choosing the transport route, we pay particular attention to resource efficiency and the associated reduction in GHG emissions. Projects on drives with alternative sources of energy and the use of alternative fuels are the main focus of cooperation with our logistics partners. At the same time, we are driving further automation and digitalization of our business processes.

→ See “Sustainability in the Supply Chain.”

Strategy

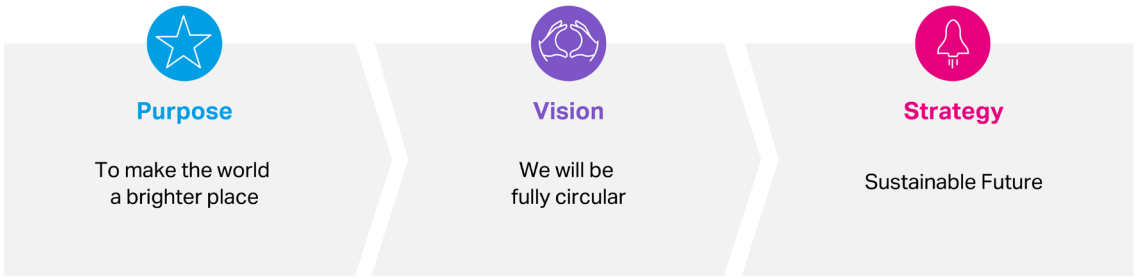
Purpose and Vision

Advancing climate change, the growing global population, increasing urbanization, and new forms of mobility are enormous global challenges. Covestro faces 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.

Building on our purpose, the implementation of our vision of becoming fully circular forms the basis of our Group's Sustainable Future strategy. Our vision sets a clear direction for our company's future development.

Purpose, Vision, and Strategy



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."

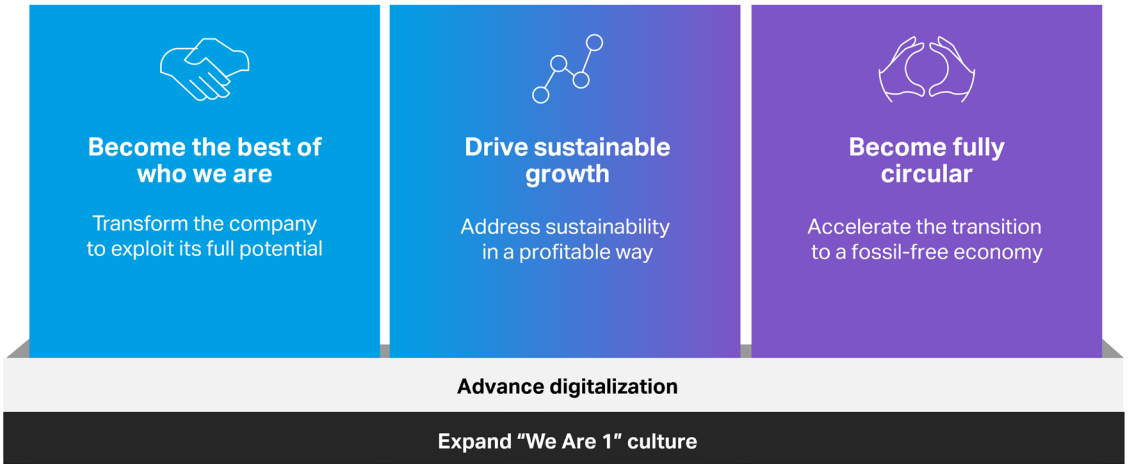
Group Strategy

Strategic Goals and Activities

Our overarching goals derived from our purpose and our vision set the course for our Group's Sustainable Future strategy. This reflects the new influence of our vision and incorporates the changing external and internal dynamics, such as shifts in climate policy, in markets, and in digital transformation. Our Group strategy comprises three strategic chapters: 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.

→ See "Corporate Values and Corporate Culture."

The Group's Sustainable Future strategy



"Become the Best of Who We Are"

"Become 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 optimize 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 deliver high-quality standard products fast, or assist with our technical expertise in improving or developing (specialty) products.

We have launched a global transformation program to implement the first strategic chapter. This program realigns structures, processes, and control mechanisms to position our company to the best extent possible. The measures under the transformation program began in fiscal 2021 and implementation will be completed by the end of the year 2023. Our organization, workflows, and responsibilities were already restructured in the year 2021. This includes structuring our business into standard products (Performance Materials) and specialty products (Solutions & Specialties). Furthermore, the program aims to bundle central aspects of certain areas of competence, with the primary objective of profitably furthering our business with a view to sustainability and the circular economy.

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. 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 most important elements for driving this development include managing and steering the product portfolio toward greater sustainability and circularity. A product sustainability assessment method is currently being developed to manage our portfolio.

→ See "Sustainable Products."

In order to generate value with the capital invested, we are analyzing and managing our investment portfolio according to profitability and sustainability criteria. We support investment projects with a return on capital employed (ROCE) above certain thresholds that generate the lowest possible GHG emissions or even bring about a reduction.

→ See "Management" and Compensation Report, section "Long-Term Variable Compensation."

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

"Become Fully Circular"

The third strategic chapter comprises measures to allow Covestro to "become fully circular." As part of that, we intend to accelerate transformation to a climate-neutral and resource-conserving economy. We see this orientation as an opportunity for Covestro to add solutions to global challenges – our circular products – along the entire value chain. Implementation of the third strategic chapter, and thus our vision, is driven by the Group's structure established in fiscal 2021 and our global strategy program "Circular Economy." This program has consolidated and driven the implementation of circular economy activities at Covestro in a comprehensive global structure since fiscal 2019. In addition to management of the implementation of activities aimed at achieving a circular economy, the program covers strategic issues such as alternative raw materials, marketing products based on these raw materials, and using recycling to develop sources for raw materials. Building on this foundation, in the reporting year, Covestro developed a program to transform the production sites to achieve climate neutrality and published sustainability targets for reducing CO_2 emissions.

→ See "Circular Economy" and "Climate Neutrality."

We also want to drive the circular economy by developing and using innovative recycling options. In this context, we consider chemical recycling particularly promising as an effective tool for reclaiming considerable quantities of feedstocks for reuse. It is suitable primarily for materials and waste that cannot be mechanically recycled due to their properties or when the recycling process must produce like-new materials.

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.

→ For more information on our activities, see "Circular Economy."

Digitalization and Corporate Culture

Our Sustainable Future strategy rests on a solid foundation, with digitalization and our "We Are 1" corporate culture as key elements. We are focused on tackling digital transformation and the associated opportunities by implementing an extensive range of measures along the entire value chain, in the corporate functions, and at all points of contact with our customers. This involves Covestro promoting the use of digital technologies and leveraging the potential of artificial intelligence. At the same time, Covestro encourages an open climate at work that spurs employees to question existing concepts and develop new approaches for our business.

The digital transformation of our business aims to generate competitive advantages for Covestro. This includes expanding our digital R&D activities and collaborations with major corporations such as Google. Insights provided by data science additionally support the corporate functions in profitably deploying algorithms and machine learning. We drive the development and implementation of our digital products and business models.

→ See "Digital Innovation."

We have embedded our "We Are 1" culture firmly in our company to fully leverage internal potential and meet our corporate goals. The key here is our employees who bring this culture to life. We work consistently on developing our corporate culture and simplifying implementation by deriving specific measures from our four cultural dimensions.

→ See "Corporate Values and Corporate Culture."

Segment Strategy

Performance Materials Segment Strategy

The Performance Materials segment comprises mainly polyurethanes and polycarbonates product groups. The segment's standardized products are marketed to outside customers and also sold to the Solutions & Specialties segment at arm's length prices. The Performance Materials segment exclusively manufactures standardized products, aiming mainly to increase efficiency through cost management as well as process innovations. There is an increasing focus on sustainable products in this regard, such as renewable toluylene diisocyanate (TDI) and climate-neutral diphenylmethane diisocyanate (MDI).

In the medium to long term, demand for polyurethanes is expected to grow sharply. This trend may benefit our company, as we manufacture the precursors for flexible and rigid foams required for the production of polyurethanes. Strategically important sectors include the construction industry and the furniture industry, where we already occupy a strong position, which we want to expand further. Global efforts to meet the United Nations Sustainable Development Goals (SDGs) are also reflected in short- and long-term demand for our products. For instance, growing calls for energy-efficient living space are expected to increase long-term demand for particularly effective insulation solutions in the construction industry.

The market for standardized polycarbonates is, however, anticipated to grow only minimally in the coming years because of a current lack of impetus for increased demand from sectors such as the construction and consumer goods industries. In the future, the majority of our polycarbonate volume will be passed on to the Solutions & Specialties segment for further processing and sale in high-growth markets, such as electromobility and 5G infrastructure.

The Performance Materials segment is home to most of our production facilities, and as such is key to implementing our circularity strategy. The focus here is on steps such as continually optimizing our production facilities, procuring alternative raw materials, and developing more sustainable product solutions, e.g., for MDI and TDI. The use of alternative raw materials enables us to produce these diisocyanates with a smaller carbon footprint, which is demonstrated and certified by way of mass balancing and the ISCC PLUS certification for end products.

Many of the products of the Performance Materials segment are further processed in the Solutions & Specialties segment or sold with additional, customer-focused services.

Intersegment transactions are conducted at arm's length and reported separately as intersegment sales.

Solutions & Specialties Segment Strategy

The Solutions & Specialties segment covers a broad range of specialty products and customer-specific solutions in the following business entities: specialty polycarbonates (Engineering Plastics), precursors for coatings and adhesives (Coatings & Adhesives), polyurethane specialties and solutions (Tailored Urethanes), Thermoplastic Polyurethane, high-quality films (Specialty Films), and specialty elastomers (Elastomers). Covestro projects above-average growth in this area, above all in the Engineering Plastics and Specialty Films business entities.

We continually update our product portfolio to generate further growth in the Solutions & Specialties segment with a particular focus on sophisticated, sustainable solutions for which there is strong demand in promising applications. These include smart homes, medical technology, holography, and materials for electric vehicles and wind turbines.

The continual development of innovative products and applications with significant customer benefit is therefore a core element of the segment's strategy. Other crucial factors for the success of our growth strategy in this segment are the respect and appreciation of our customers for our strong technological competence, standing apart from the competition based on our global leadership in consulting on application technology and carrying out complicated projects for customers, our expertise in chemical formulations and compounding, the efficient expansion of our capacities, customer-focused product development, and the continual improvement of our customer-centric pull supply chain.

Management

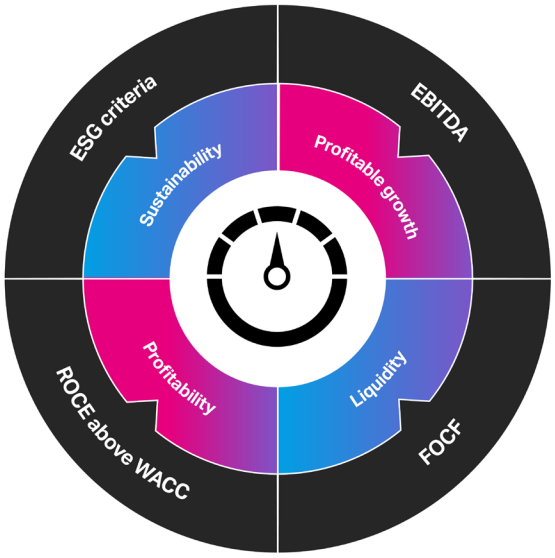
Management System

Covestro's management system is oriented toward long-term, profitable growth, continuous value creation, and sustainability. The Board of Management is the chief operating decision maker responsible for our global business and approving the planning derived from our Group 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, while driving its sustainable orientation. The Board of Management manages this orientation on the basis of defined sustainability goals and selected nonfinancial performance indicators.

Key Management Indicators

The Covestro Group assesses its performance using the following four elements: Profitable growth measured in terms of EBITDA (earnings before interest, taxes, depreciation and amortization), liquidity measured in terms of free operating cash flow (FOCF), profitability measured in terms of return on capital employed (ROCE) above the weighted average cost of capital (WACC), and sustainability measured in terms of selected environmental, social, and governance (ESG) criteria.

Key management indicators



These key management indicators are incorporated into Covestro's Group-wide bonus system (Covestro Profit Sharing Plan), which applies to almost all Covestro employees worldwide, including the Board of Management; any exceptions are essentially due to collective bargaining arrangements. The four areas of profitability, liquidity, profitable growth, and sustainability, each account for one quarter of the calculation formula used to measure target attainment. As a result, all employees can share in the company's success.

→ See "Overall Assessment of Business Performance and Target Attainment" and Compensation Report, section "Short-Term Variable Compensation."

EBITDA

EBITDA is used to assess profitable growth of Covestro and its reportable segments. EBITDA replaced core volume growth as a key management indicator in the reporting year. It represents EBIT plus amortization and impairment losses on intangible assets, and depreciation and impairment losses on property, plant and equipment, less impairment loss reversals.

→ See "EBIT" and "EBITDA."

FOCF

The ability to generate a cash surplus is measured by 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 allows dividends and interest to be paid and debt to be repaid.

ROCE above WACC

The ROCE above WACC key management indicator, which is used to assess profitability, measures the amount by which the return on the company's capital employed exceeds the weighted average cost of capital. If ROCE exceeds WACC, i.e., the minimum return expected by equity and debt capital providers, the company has created value. ROCE above WACC is calculated annually at the end of each fiscal year.

ROCE is calculated as the ratio of net operating profit after taxes* (NOPAT) to average capital employed. ROCE is also used as a standalone variable, in addition to ROCE above WACC, to measure Covestro's profitability.

Calculation of the Return on Capital Employed

NOPAT	/	Avg. capital employed	=	ROCE

The weighted average cost of capital (WACC) is relevant to the calculation of ROCE above WACC 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 arising from the legal deductibility of interest on borrowed capital. Calculation of the cost of capital generally has a long-term perspective; short-term fluctuations are evened out. WACC is calculated at the end of the fiscal year for the subsequent fiscal year on the basis of historical capital market data.

→ See "Return on Capital Employed (ROCE) above Weighted Average Cost of Capital (WACC)."

ESG Criteria

Since the year 2022, a sustainability component, measured against selected ESG criteria, has been laid down in the management system. The sustainability component in relation to the environment is determined on the basis of direct and indirect GHG emissions (Scope 1 and Scope 2) of the main sites. Other criteria relating to social and corporate governance are also to be incorporated in the future.

→ See "Scope 1 and Scope 2 GHG Emissions."

* Since the year 2022, the imputed income taxes have been determined by multiplying the imputed tax rate of 25% (previously: effective tax rate) by the operating result (earnings before interest and taxes, EBIT).

Other Relevant Financial Performance Measures

Throughout its financial reporting, Covestro uses further indicators in addition to the key management indicators to assess the business performance of the Group; details are provided below.

EBIT

EBIT, which corresponds to income after income taxes plus financial result and income taxes, allows us to assess income without the influence of the income-dependent tax liability and/or various financing activities.

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) above Weighted Average Cost of Capital (WACC)."

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 "Cash Flows from Financing Activities."

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, including in the areas of value creation; sustainability; innovation; employees; health, safety, environment, energy, and quality (HSEQ); and compliance. The standards outlined in these policies must be adhered to by all employees worldwide. Additional details are provided in directives. Local procedures are used to implement the directives in the country subsidiaries. Compliance with the directives and local instructions is verified using internal audits and other measures. In addition, issues and action plans as well as target attainment are monitored in a management review. Corporate policies, directives, and local procedures together make up the Group regulations.

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

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Corporate Policies

Value Creation

Covestro's primary objective is to turn development activities and products into solutions that create value for customers, society, the environment, employees, and investors. We accomplish this, for instance, by manufacturing products with superior properties, environmental performance, usability, and cost effectiveness. At the same time, we aim to make the life cycle of our 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 in this way conforms to Covestro's purpose to make the world a brighter place. In making decisions and taking actions, we therefore equally consider the three dimensions of sustainability – people, planet, profit – while trying to avoid a negative impact on any of them. Our corporate "Sustainability" policy underscores this intention. Special committees at Covestro are responsible for defining and managing important sustainability topics. These include the development and implementation of targets and packages of measures.

→ See "Sustainability."

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 develop 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 one of our employees.

→ 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. Our integrated HSEQ management system ensures the implementation of the specifications in our HSEQ Group Regulation in orientation to or conformity with the internationally recognized standards ISO 45001, ISO 14001, ISO 50001, and ISO 9001.

→ 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 corporate guidelines, the text of these commitments is publicly available. The minimum standards applicable to such efforts are governed by our voluntary corporate commitments. The corresponding Group regulations ensure that they are complied with. 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 stewardship, corporate compliance, responsible lobbying, responsible marketing and sales, tax transparency, and conflict minerals. In terms of lobbying in particular, we have laid down clear and binding rules for our engagement in the political arena. In combination with comprehensive Group regulations applicable worldwide, the voluntary commitments 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

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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 Board of Management has tasked the management of the corporate Group Health, Safety and Environment (HSE) function with this responsibility directly. The integrated system implemented throughout the Group ensures that the requirements of the health, safety, environment, energy, and quality (HSEQ) directives are carried out. It is based on internationally recognized standards governing occupational health and 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 45001:2018 standards. In fiscal 2022, based on these 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.

Last year's acquisition of the Resins & Functional Materials (RFM) business from Koninklijke DSM N.V., Heerlen (Netherlands), resulted in new sites being added to the Covestro Group. Covestro's regulations will be applied to the new sites gradually, since different HSEQ guidelines and standards have applied to some of these locations in the past. This process will still take some time and will run beyond the year 2023 in specific cases.

→ See "Health and Safety" and "Environmental Impact of Own Operations" for additional details on the aforementioned targets.

The corporate Group HSE function is responsible for the integrated HSEQ management system, which comprises the following three elements:

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. 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 work-related health impacts and 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, review, and update our compliance with mandatory legal and other requirements.

→ See "Health and Safety."

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 reporting year the energy efficiency system at the major German production sites introduced in the 2008 fiscal year was reviewed and audited by an independent certification body, and its certification to ISO 50001 upheld.

Quality

We have very high expectations of the raw material quality we use, and we set ourselves high 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.

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 according to external standards[1]

	2021	2022
	%	%
Certified according to various quality management standards such as ISO 9001	100	100
ISO 14001 certified/EMAS validated (environment)	95	95
ISO 45001 (formerly OHSAS 18001) certified (occupational safety)	87	87
ISO 50001 certified (energy)	48	44

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

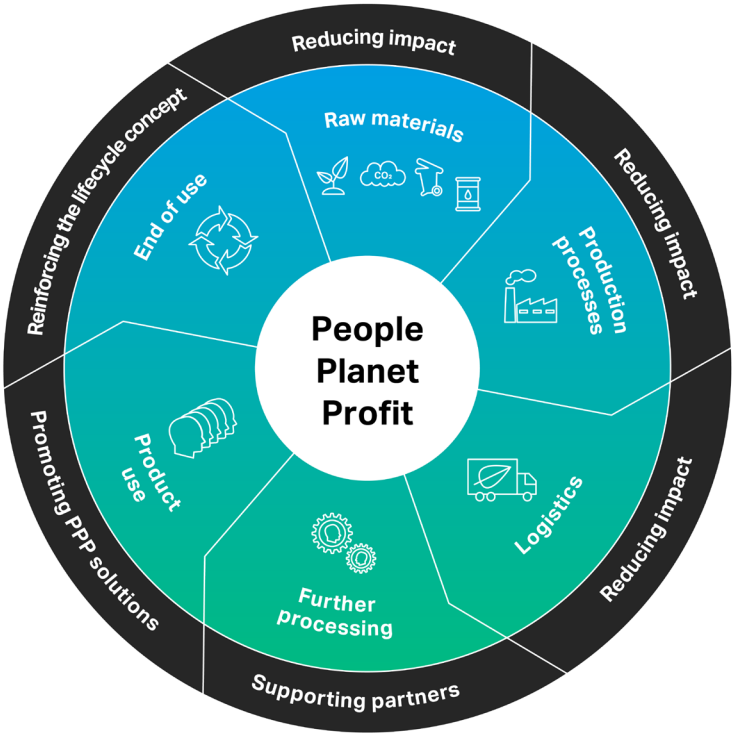
Sustainability

Covestro is fully committed to sustainability, as shown in our purpose "to make the world a brighter place." This is underscored by our vision, "We will be fully circular," as well as by the Group's Sustainable Future strategy, which has "Drive Sustainable Growth" and "Become Fully Circular" as strategic chapters. We set sustainability targets as early as in fiscal 2016 and continually adapt these targets in line with our strategy and vision. We announced in the year 2022 that we would reach net-zero emissions* by the year 2035 in our own production and in the provision and use of energy produced outside the company at all environmentally relevant sites. Moreover, a sustainability component, measured against selected ESG criteria, was laid down in the management system in the reporting year.

→ See "Covestro's Sustainability Targets" and "Management System."

We integrate sustainability into our business activities, while at the same time ensuring that we deal with related topics and issues of greatest relevance to us and our stakeholders. In addition to our responsibility for the environment, we also want to fulfill our social responsibility within society in accordance with our purpose. This is why we strive to add value at the social, environmental, and economic levels. Our decisions and our actions take into account the three dimensions of sustainability: people, planet, and profit (PPP). This is to ensure that every decision, every action we take, and the resulting consequences are considered holistically, that is, throughout the entire value cycle.

Sustainability approach of people, planet, and profit in the value cycle



United Nations Sustainable Development Goals (SDGs)

Against the backdrop of our commitment to sustainability, the SDGs are critically important to us as a guideline for improving living conditions worldwide. The SDGs serve primarily as a source of direction and inspiration for innovation and as a guide for the future positioning of the company.

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

* Achievement of net-zero GHG emissions is defined as a balance between anthropogenic production of GHG emissions (caused by the company's own production activities and by the provision and use of energy produced outside the company) and anthropogenic reduction of GHG emissions.

Covestro already makes positive contributions to all 17 SDGs and many sub-goals. The majority of these relate to products in our core business that, for example, help conserve large amounts of energy during their use phase or are used in other sustainable applications. Additional contributions stem from production activities, workflows, and our business practices, from our social engagement, and from solutions for underserved markets (the inclusive business segment). In addition to evaluating the positive contributions to the SDGs that Covestro is already making, we believe that any analysis of SDGs must also aim to identify potential additional requirements that Covestro could face. By this, 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. We are aligning our research and development (R&D) portfolio to the SDGs to increase our contributions further.

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Covestro's contributions to the SDGs

	AREAS OF ACTIVITY[1]				
	R&D projects[2]	Core business products	Production, workflows, business practices	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

Internal analysis from fiscal 2017; updated in fiscal 2022 with reference to R&D projects, core business products, production, workflows, business practices, inclusive business, and social engagement (abridged process).

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

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

< Supplementary information

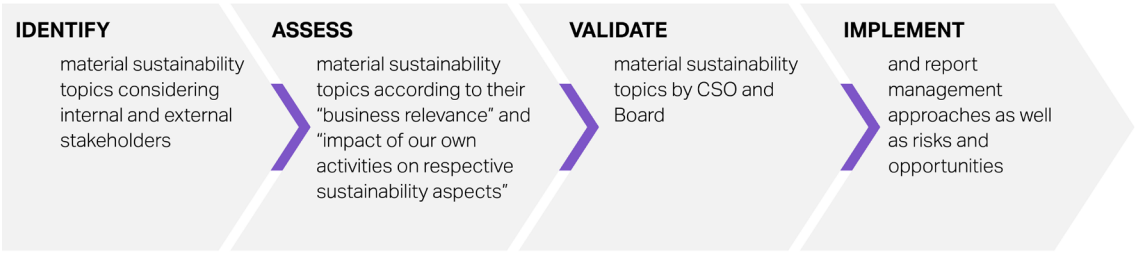
Materiality Assessment

We identify material sustainability topics to create a foundation for Covestro's worldwide sustainability efforts and define focal points for our sustainability management activities. Specific targets, measures, and management approaches for the respective material sustainability topics are specified in the detailed information of the relevant chapters of the Group Management Report.

Materiality Assessment Process

Regularly conducted materiality assessments help us to identify and prioritize the sustainability topics most important to the company. We perform both comprehensive materiality assessments every three to four years and annual reviews, an abridged process with reduced scope and effort. The most recent comprehensive materiality assessment was conducted in the fiscal year 2020. In fiscals 2021 and 2022, we reviewed all material topics and modified them as necessary in line with the latest developments. Both comprehensive and annual reviews are conducted in four steps: identify, assess, validate, implement. In the reporting year, we took account of the revised Global Reporting Initiative (GRI) Standards and from now on report "in accordance with GRI." The amendments to the GRI Standards led to stakeholder relevance, the third materiality dimension that was previously considered, being dropped from explicit consideration; it will instead be dealt with along with the remaining materiality dimensions. This did not affect the assessment of material sustainability topics.

Steps in the materiality assessment process



Identify

We complete a comprehensive analysis every three to four years to identify the material sustainability topics that could be significant for Covestro and compile an extensive list of topics from internal and external sources. At the annual review, we assess the previous year's material issues using an abridged process and adapt them or add new issues.

Assess

For both the comprehensive materiality assessment and annual reviews, an internal committee of experts assesses the material sustainability topics for their relevance to Covestro; this process takes feedback and opinions of external and internal stakeholders into account. To identify the material sustainability topics for Covestro, we apply the two dimensions of materiality: "business relevance" and "impact of Covestro's activities on the respective sustainability aspects." Rated on a scale from "not relevant" to "highly relevant," business relevance takes account not only of the possible or real financial impact of a sustainability aspect on the company, but also issues that receive a lot of attention from the Board of Management, strategic topics, or opportunities and risks. When assessing the "impact of Covestro's activities on the respective sustainability aspects," likewise rated on a scale from "not relevant" to "highly relevant," probability, scale and severity, duration and irremediability, and opportunities and risks for people and the environment are considered. Sustainability topics are considered material if they have at least medium relevance in one of the two materiality dimensions.

Validate

The internal committee of experts, which is involved in the review of the material sustainability topics, confirms the result of the materiality assessment. The material topics and their assessment are reviewed and acknowledged annually by the Chief Sustainability Officer (CSO) and the Board of Management.

Implement

The material sustainability topics are handled and managed by the topic owners from the respective expert functions according to the need for action identified. This includes a review of nonfinancial opportunities and risks as part of risk management.

→ See "Opportunities and Risks Report."

Details of the material sustainability topics and the corresponding management approaches are provided in the nonfinancial section of the Group Management Report.

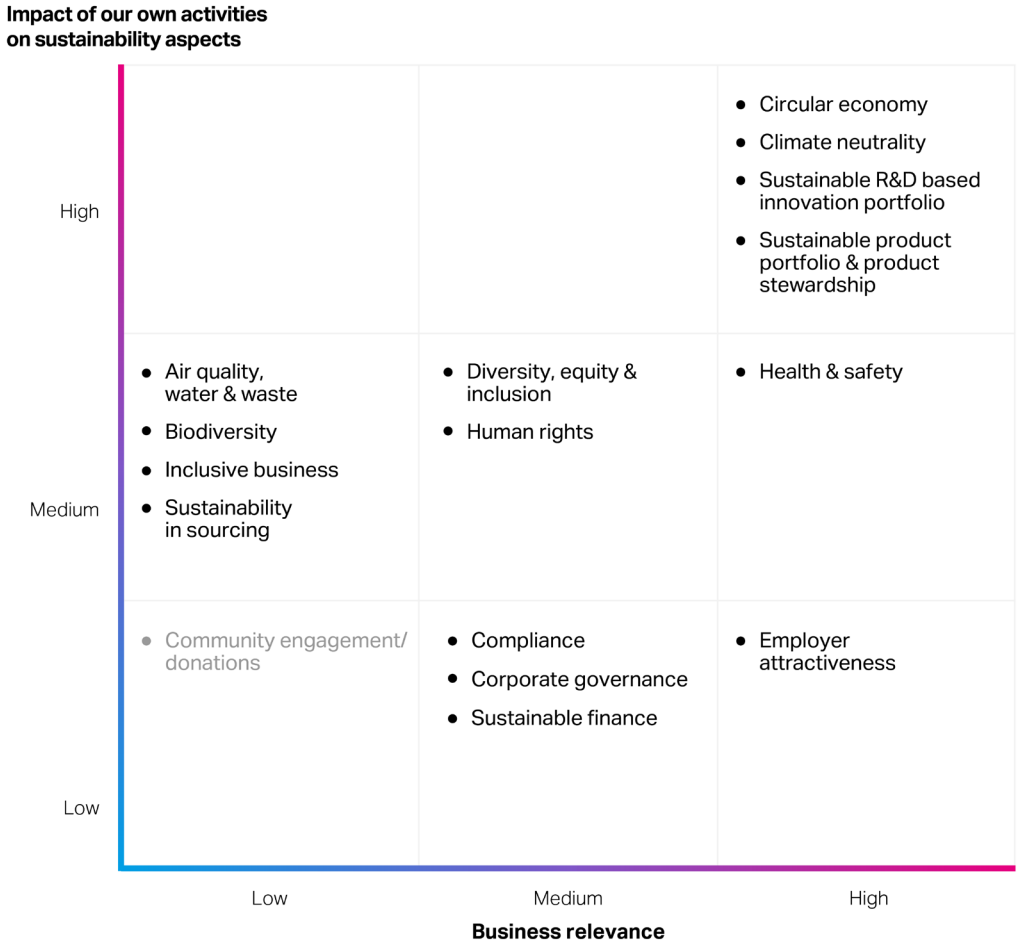
→ See "Nonfinancial Group Statement."

In the reporting year, the annual review was conducted by a committee of experts consisting of employees from the corporate functions (including, but not limited to, Strategy; Portfolio Development; Investor Relations; Group Health, Safety and Environment; Sustainability & Public Affairs) and from Risk Management, as well as topic owners. This group was tasked with responsibilities including bringing in the views of stakeholders from inside and outside the company. In addition, a global network of employees whose work interfaces with the area of sustainability was surveyed on possible topics to be included for review in the materiality assessment. The feedback was taken into account by the committee of experts when it identified and evaluated the material sustainability topics.

Material Sustainability Topics in Fiscal 2022

The committee of experts confirmed the material sustainability topics identified in the previous year, also taking into account recent external developments, such as the energy crisis. Moreover, the material sustainability topics were aligned more closely with the Sustainable Future strategy.

Materiality matrix



The previous year's topics ("Recyclability & end-of-life solutions," "New business models," and "Alternative raw materials") were consolidated under the "Circular economy" topic. We devote our expertise in chemical processes to supporting the development of recycling processes for used materials for plastics production. Covestro aims to use alternative raw materials to switch the fossil raw materials we use in production to renewable. Through our activities in these areas, we develop innovative action areas for implementing our vision of becoming fully circular.

→ See "Circular Economy" and "Innovation."

The material sustainability topic of "Climate neutrality" combines the Scope 1, Scope 2, and Scope 3 "GHG emissions" and "Renewable energy," which reflect the aspects of the goal we published in the reporting year to become climate-neutral by the year 2035 in our own production (Scope 1 emissions) and in the provision and use of energy produced outside the company (Scope 2 emissions) at all environmentally relevant sites. In addition to energy efficiency measures for the manufacture of our products, renewable energy will continue to be used as part of our efforts. Innovative approaches will be required in particular for reducing our Scope 3 GHG emissions. We want to announce a reduction target for our Scope 3 GHG emissions in fiscal 2023.

→ See "Climate Neutrality."

The material sustainability topic of "Sustainable products and product stewardship" combines the previous year's topics of "Sustainable product portfolio" and "Product stewardship"; it is of particular importance for the implementation of our Sustainable Future strategy. For us, a sustainable product portfolio plays a key role in fulfilling our purpose of becoming fully circular and making our contribution to climate neutrality. To us, the safe handling of our products is the prerequisite to making our product portfolio sustainable.

→ See "Sustainable Products and Product Stewardship."

Our "Sustainable R&D-based innovation portfolio" forms the basis for a sustainable product portfolio. Since the year 2017, we have aligned innovation more closely with the SDGs as a way of driving sustainable product development. Covestro's goal is to devote 80% of its R&D costs by 2025 to projects that contribute to achieving the SDGs.

→ See "Innovation."

"Diversity, equity, and inclusion," which are elements of our "We Are 1" culture and therefore part of the foundation of our Group strategy, play an important role in the company's sustainability position. The topic's relevance to our business has increased year-on-year as a result. We therefore continue to pursue innovative solutions to topics that concern our employees.

→ See "Promoting Diversity, Equity, and Inclusion."

The business relevance of the material sustainability topic of "Health and safety" increased in the reporting year in view of our accident statistics. As a chemical company, we bear a special responsibility for the health and safety of our stakeholders. Safety is a fundamental principle of our actions. The topic, which combines the sub-topics of "Workplace health and safety" and "Process and plant safety," is an integral part of our integrated Health, Safety, Environment, Energy, and Quality (HSEQ) management system. We strive to eliminate workplace incidents and accidents and operate our plants safely to protect people and the environment.

→ See "Health and Safety" and "Integrated Management System for Health, Safety, Environment, Energy, and Quality."

For the material sustainability topic of "Human rights," we have likewise established an effective management system to contribute to respect for human rights in all the Covestro Group's activities and throughout global supply chains and value chains, and to prevent potential human rights violations. We expect the business relevance of this topic to continue to increase.

→ See "Human Rights."

Our commitment to sustainability also includes our suppliers. We promote "Sustainability in the supply chain" with social, ethical, and environmental standards for new and existing suppliers. We have set ourselves the goal of having 100% of our suppliers with regular purchasing volumes of more than €1 million comply with our sustainability requirements by the year 2025. The assessments of our suppliers in this regard are an integral part of our processes.

→ See "Sustainability in the Supply Chain."

We consolidate our activities around the sustainability topic of "Inclusive business" in a program under which we aim to meet needs in what are known as underserved markets. Although we continue to pursue the aim to have 10 million people in underserved markets benefit from our solutions by the year 2025, the topic's significance to us declined in the course of the fiscal year in relation to other material sustainability topics.

→ See "Inclusive Business."

The topic of "Air quality, water, and waste" is an integral part of our integrated HSEQ management system. Aspects associated with this topic (emissions into the air, waste, and wastewater) are integral to our management and business processes. Emissions are included in the collection of data throughout the Group and in environmental impact assessments. We strive to reduce waste streams by disposing of waste by type and implementing economically feasible recycling processes. We view water and wastewater holistically with regard to water usage and quality as well as wastewater volumes and possible plastic waste in the world's oceans.

→ See "Environmental Impact of Own Operations" and "Integrated Management System for Health, Safety, Environment, Energy, and Quality."

The material sustainability topic of "Employer attractiveness" is highly relevant to our business. Against the backdrop of growing skills shortages, we continue to drive our efforts to win qualified expert staff and retain them for the long term.

→ See "Place to Be' Action Area."

Our commitment to sustainability is also reflected in our financing activities. With our material sustainability topic of "Sustainability in finance," we firstly want to increase our attractiveness for investors interested in sustainability; secondly, financial instruments linked to sustainable performance offer attractive possibilities for obtaining sustainable capital. Already, important financial instruments are linked to the performance of relevant strategic sustainability rankings and have a direct impact on our cost of financing.

→ See "Sustainable Finance" and "Financial Position."

The material sustainability topics of "Corporate Governance" and "Compliance" form the foundation of our business practices. Both topics are embedded in our organization's processes and workflows.

→ See "Compliance."

We anticipate that the material sustainability topic of "Biodiversity" will gain in business relevance in the future. Contributing factors will be our commitment to a circular economy and environmental protection and the associated increase in the use of biobased raw materials. In connection with our alternative raw materials, we have begun to have sites certified under the ISCC PLUS system. International Sustainability and Carbon Certification (ISCC) is a recognized system for the sustainability certification of biomass and bioenergy. The standard, which covers all stages of the value chain, is recognized worldwide. It is a supply chain standard and therefore also includes requirements for producers of these alternative raw materials.

→ See "Circular Economy."

Although "Transparency and trust" was no longer explicitly considered a material sustainability topic in the fiscal year under review, internal and external stakeholder expectations were nevertheless addressed with different activities.

While we want to contribute to sustainable development through our "Social engagement and donations" activities, this topic has not been treated as a material sustainability topic since the reporting year. Our work continues, however, and we report on it on our website and through social media channels.

Sustainability Management

Covestro's Sustainability Targets

We have already embedded sustainability-related factors in our management system in order to further drive the implementation of our Sustainable Future strategy. Since fiscal 2022, we have measured our business success partly on the basis of selected environmental criteria. In the year 2022, the direct and indirect GHG emissions, measured in terms of CO_2 equivalents, of the main sites were to this end integrated into the management system. In future, we also want to include social and governance criteria to cover all three of the environmental, social, and governance aspects. This sustainability component – one of a total of four – is relevant for the Covestro Profit Sharing Plan (Covestro PSP), our short-term variable compensation program, which as from the year 2022 applies to all Covestro employees worldwide, including the Board of Management; any exceptions are essentially due to collective bargaining arrangements.

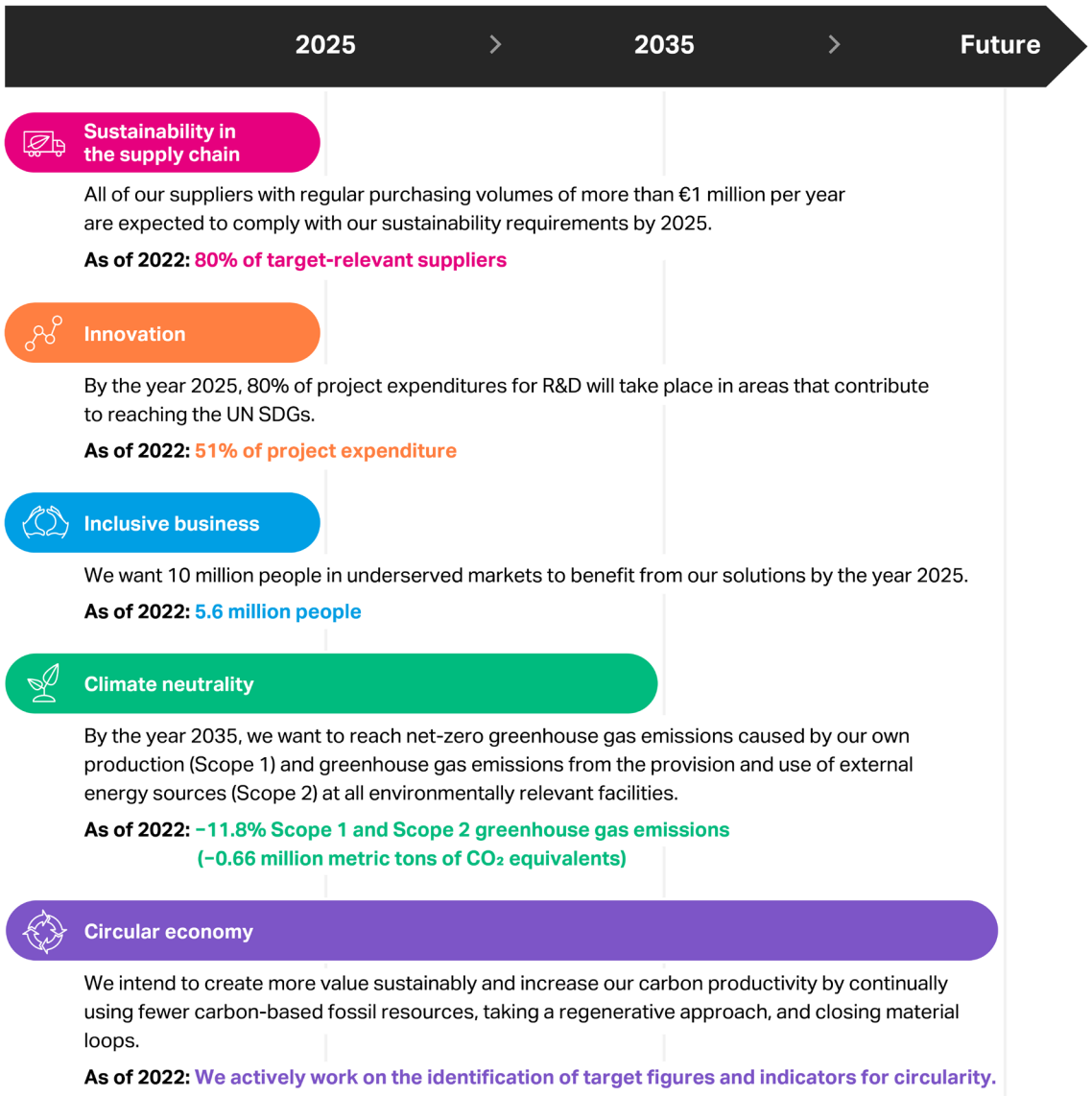
→ See "Management System."

In addition, back in 2021, we introduced a sustainability component – one of a total of three – into Prisma, our long-term variable compensation system for the Board of Management and eligible senior management employees.

→ See Compensation Report, section "Long-Term Variable Compensation."

The approach that we apply to our sustainability targets aims to cover the entire product life cycle, including social, environmental, and economic aspects. Our sustainability targets contribute to achieving the SDGs and reflect the aims of some of our material sustainability topics. We continually observe developments outside the company and develop our sustainability targets in line with our vision and corporate strategy. As a result, we announced our climate neutrality goal in the reporting year. We report on details of our sustainability targets and progress toward meeting them in the appropriate sections of the Group Management Report:

Covestro's sustainability targets



Apart from the above, we pursue other sustainability goals and ambitions:

- Our production processes are intended to use 100% alternative raw materials and thus contribute to our pursuit of a circular economy and to reducing our Scope 3 GHG emissions.
  → See "Circular Economy."
- We aim to cut the specific primary energy usage by at least 50% at all environmentally relevant production sites by the year 2030. This is an important milestone of our energy efficiency measures. Meeting this target will therefore also make an important contribution to climate neutrality on our part.
  → See "Climate Neutrality."
- By the year 2029, we want women to account for at least 40% of the workforce in all employee categories and in this way promote diversity and equity for all genders at all levels.
  → See "Employees."
- The above ambition is underpinned further by the target for the proportion of women in the first two management levels below the Board of Management for the period through June 30, 2027. This target replaces our previous target to deploy at least 30% women in the first two management levels below the Board of Management by June 30, 2022. Due to the change in general conditions and the impact this had on the composition of our management structure, we did not meet this target, even though we increased the proportion of women in the Covestro Group by 2022.
  → See "Declaration on Corporate Governance."

Monitoring

Sustainability is a core element of our Group strategy with an increasing impact on our business activities. Oversight of sustainability at Covestro begins with the company's highest governing body, the Supervisory Board, whose Sustainability Committee was established in the year 2021. It advises the Supervisory Board, some committees, and the Board of Management in particular on issues of sustainable corporate governance and on the company's activities relating to environmental, social, and governance criteria. Shareholders and employees are equally represented on the Sustainability Committee, with two representatives each. As of December 31, 2022, the proportion of women was 25%. The committee is chaired by Lise Kingo, a Supervisory Board member with proven expertise in the area of sustainability. As part of its function, the Sustainability Committee supports, monitors, and issues recommendations on the Board of Management's ESG strategies, targets, and initiatives, including the environmental, social, societal, ethical, and circular economy aspects of Covestro's business along the entire value chain. The Sustainability Committee helps the Audit Committee examine sustainability-related statements ahead of the audit of the Group's nonfinancial statement. Furthermore, it advises the Human Resources Committee on setting ESG targets for Board of Management compensation.

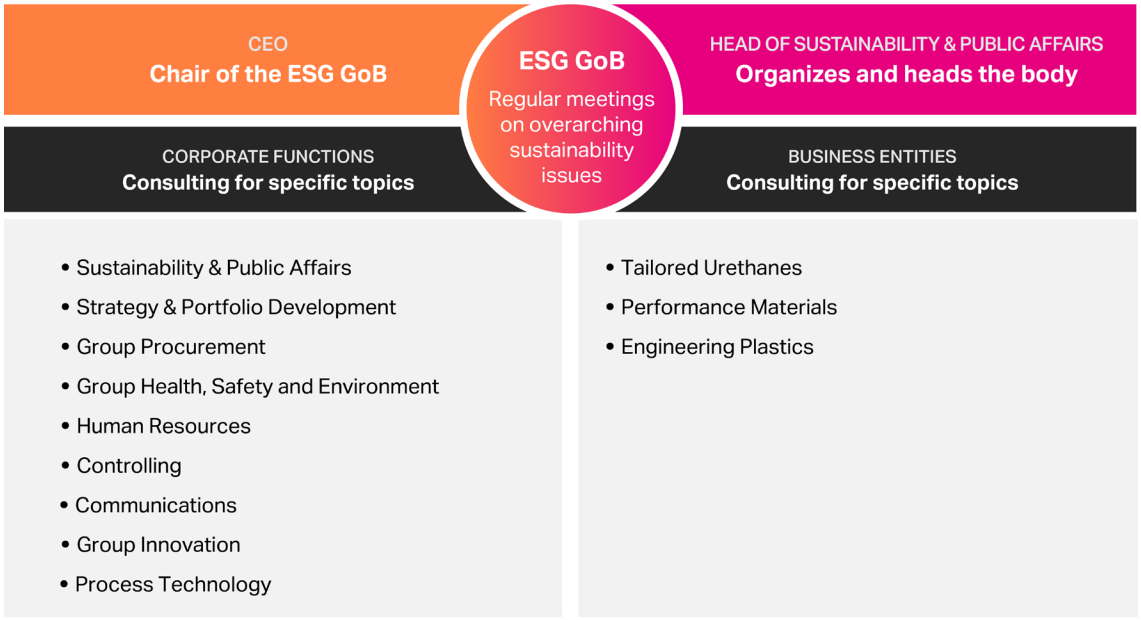
+ Additional information is available at: https://www.covestro.com/en/company/management/supervisory-board
+ See Capital Market, section "Report of the Supervisory Board."

Even though responsibility for sustainability has been assigned to our CEO, this area is dealt with by the Board of Management as a whole. The management monitors progress, sets priorities, and, where necessary, adjusts the allocation of resources. The meetings of the Board of Management, which are regularly convened, addressed a number of different sustainability focus areas in the course of the fiscal year. The agenda included, for example, the targets to cut Scope 1 and Scope 2 GHG emissions announced at the beginning of 2022, progress in the drafting of reduction targets for Scope 3 GHG emissions, regulatory developments such as the EU Taxonomy Regulation, the German Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains, and the assessment of our investment portfolio according to sustainability criteria.

A central governance body for environmental, social, and governance (ESG) issues was set up in the year 2021 to ensure continual progress and the permanent integration of our sustainability-related activities into all corporate functions. The ESG Governance Body (ESG GoB) is staffed with top-level executives from the business entities and relevant corporate functions. Depending on the topic, additional internal and external guests may be invited to participate. The Chief Executive Officer (CEO) chairs the committee, and the Head of the corporate Sustainability and Public Affairs (S & PA) function is tasked with organization and management.

The committee is responsible for Group-wide sustainability issues, oversees mission-critical projects and activities related to sustainability, and possesses the corresponding decision-making powers. In addition, in-depth discussions are held throughout the Group to identify important issues and trends and to promote the implementation of sustainability-related activities in the corporate functions and business entities. The goal here is to manage sustainability issues consistently and holistically and to accelerate the implementation of the sustainability agenda. At regular meetings held in the reporting year, the issues discussed by the ESG GoB included the targets for Scope 1 and Scope 2 GHG emissions announced at the beginning of the year 2022, possible reduction targets in relation to Scope 3 GHG emissions and the circular economy, rating performance, and the strategic focus of ratings. Other topics of discussion were progress of the portfolio sustainability assessment, mass balancing, and donations in response to the humanitarian crisis in Ukraine.

Composition of the ESG Governance Body (ESG GoB)



The head of the corporate S & PA function, who also acts as Chief Sustainability Officer (CSO), reports to the CEO. As a corporate function, S & PA defines the sustainability strategy and spearheads general sustainability projects and programs in the company. In addition, S & PA coordinates Covestro's sustainability activities and supports the other corporate functions and business entities in implementing them in operations. Furthermore, it represents Covestro's interests outside the company.

The corporate function, which consists of several central departments, is responsible for circular economy, climate and energy, sustainable product portfolio management, stakeholder engagement, and social issues. The departments are supported by additional regional experts who pursue an integrated sustainability and interest agenda while taking into account regional requirements. The central departments report to the CSO.

Supplementary information >

Stakeholder Dialogue

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. 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 materiality analysis, our sustainability agenda, our human rights management system, and our opportunity and risk management activities throughout the Group.

→ See "Material Sustainability Topics in Fiscal 2022 " and "Human Rights."

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 staff with procurement responsibilities
Associations	• Active member in national and international associations, e.g. Association of the Chemical Industry e. V. (VCI), 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
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 report, half-yearly, and quarterly reporting, as well as presentations and speeches from conferences and meetings (also available on our website)

Depending on the topic and its relevance, we identify and prioritize our stakeholders and select the appropriate dialogue format and frequency of contact in each case. We have a number of different channels available to facilitate our dialogue.

Our sales and procurement employees, for example, use various digital and personal channels to stay in touch with our customers and suppliers.

→ See "Procurement" and "Marketing and Sales."

In addition, site-specific functions look after the interests of local communities in the proximity of our sites. To report suspected or potential human rights violations in the supply chain, we also use our existing whistleblower tool, which consists of a worldwide hotline and an online tool.

→ See "Human Rights" and "Compliance."

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 the company stays in touch with stakeholders during the ongoing coronavirus pandemic.

< Supplementary information

Sustainability in Finance

The issue of sustainability is gaining in importance for global financial markets and investors and is becoming increasingly relevant for investment decisions.

→ See "Material Sustainability Topics in Fiscal 2022."

This trend is boosted at the global level by specific legal requirements and initiatives relating to climate and environmental protection. The European Commission's Green Deal, for example, includes measures and instruments for the financial market. Since this means that sustainability is increasingly turning into a success factor for competitiveness on the capital market, our capital market communications regularly report on our strategy, goals, as well as concrete initiatives and progress in the area of sustainability.

→ See "Stakeholder Dialogue."

Sustainable Finance

We investigated innovative sustainable finance solutions at an early stage. As early as in the year 2020, we obtained a syndicated revolving credit facility. Some of the terms of this line of credit are linked to our performance in the ESG rating that is currently issued by Sustainalytics. In October 2022, we issued our first Schuldschein loan, whose financing costs are likewise based on the performance of an ESG rating.

We moreover extended our commitment in the reporting year by staking out a framework for sustainable finance. This Green Financing Framework enables green bonds to be issued where the funds raised are tied to sustainable investments that we can use, e.g., to (re)finance products or projects with a clear benefit for the environment. The framework's conformity to the Green Bond Principles of the International Capital Markets Association (ICMA) has been confirmed by the independent ESG rating agency ISS ESG. In November 2022, on the basis of the Green Financing Framework, we issued our first green euro bond with a total volume of €500 million on the capital markets. This step underscores or strong commitment to sustainability. All the proceeds from the bond issue are to be used to fund projects that contribute to the circular economy and originate in areas such as renewable energy, energy efficiency, and sustainable building.

→ See "Material Sustainability Topics in Fiscal 2022" and "Financial Position."

External Ratings

The recognition and assessment of our sustainability performance by rating agencies creates additional transparency and confirms that we are successfully implementing our strategic focus on sustainability. We recalibrated our rating strategy in the reporting year and now actively participate only in ratings that add significant value for our stakeholders and the company.

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

We took part in the following ESG ratings in the year under review: CDP Climate, EcoVadis, MSCI ESG, and Sustainalytics. Covestro was again part of the CDP Climate initiative to enhance climate protection transparency for investors and markets. As in the year 2021, the Group was awarded an "A–" rating. Since we are a member of the Together for Sustainability (TfS) initiative, our sustainability management was again assessed by the rating agency EcoVadis and given Gold status. At MSCI ESG, one of the global leading providers of sustainability analyses and ESG ratings, our rating improved to "AA," from "A" in the previous year. Covestro is one of the leading companies in the Sustainalytics ESG rating, where it was honored as an ESG Industry Top Rated Company.

Covestro was also included again in the FTSE4Good Index Series of the global index provider FTSE Russell.

Ratings by external ESG rating agencies

Rating	Rating scale	Covestro's score	Award
CDP DISCLOSURE INSIGHT ACTION	**A to D–** (top score: A)	**2022 A–** 2021 A–	**"Leadership" status** (since the year 2021)
ecovadis SUSTAINABLE SUPPLY MANAGEMENT	**0–100 points** (the higher the better)	**2022 72** 2019 80	GOLD 2022 ecovadis Sustainability Rating
MSCI	**AAA to CCC** (top score: AAA)	**2022 AA** 2021 A	
SUSTAINALYTICS	**0–100 points** (the lower the better)	**2022 21.1** 2021 18.3	SUSTAINALYTICS ESG INDUSTRY TOP RATED 2022

Index
FTSE4Good

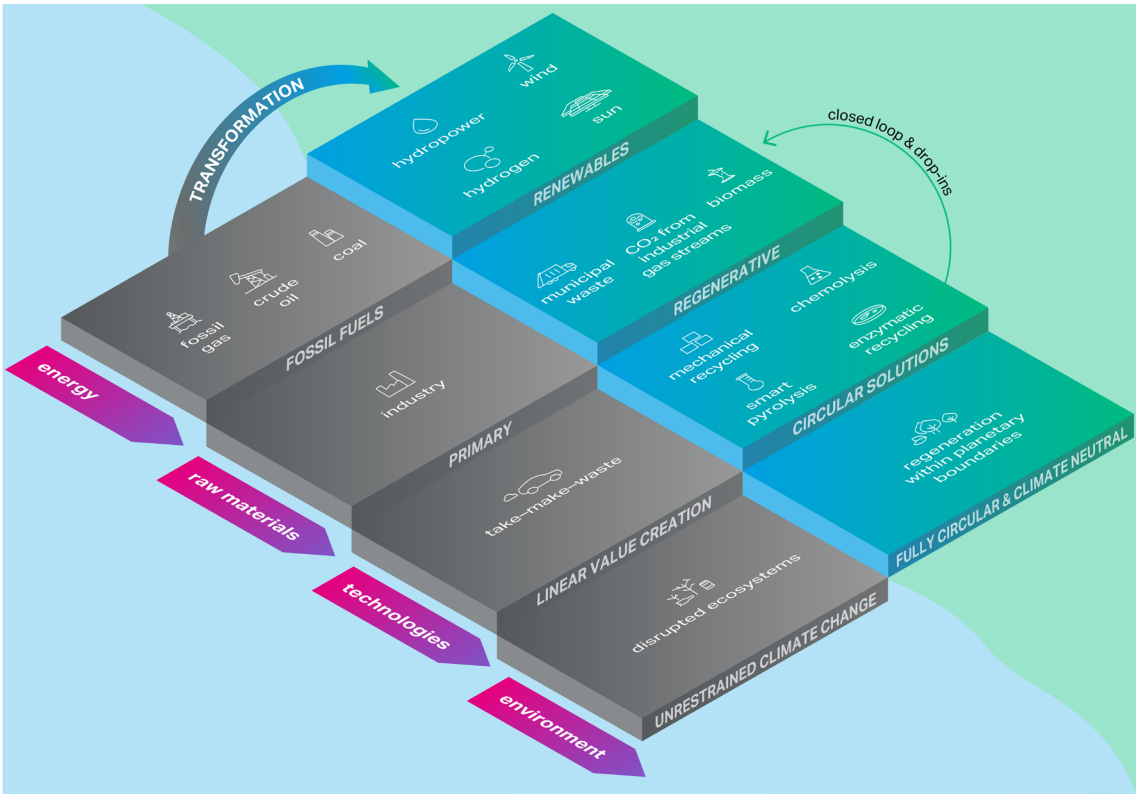
+ Additional information is available at: www.covestro.com/en/sustainability/what-drives-us/rating-and-indices

Circular Economy

Strategy, Management, and Implementation

A key component of Covestro's Group strategy is the aim to become fully circular. This helps us address the environment-related sustainability aspects of our activities in particular. This means moving away from the use of fossil-based raw materials and a holistic orientation toward regenerative production and business models in order to keep the environmental footprint of our business activities, such as the concentration of CO_2 in the atmosphere, within planetary boundaries.

Transformation to the circular economy



The aim is to return products and materials to the value 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 sources of carbon and the intended full conversion to regenerative methods of production, e.g., with renewable energy, are supplementary measures Covestro will take. They are aimed at helping the company become fully circular in the future and on this basis achieve climate neutrality within the company and increasingly launch products with a more climate-friendly footprint. In the reporting year, Covestro took additional steps to meet these objectives.

OUR CIRCULAR ECONOMY GOAL

STATUS

We are actively working on identifying suitable circularity targets and indicators.

We intend to create more value sustainably and increase our carbon productivity by continually using fewer carbon-based fossil resources, taking a regenerative approach, and closing material loops. The goal is to decouple our value-generating activities from nonrenewable and noncircular raw materials such as fossil carbon.

Our global Circular Economy strategy program is our contribution to promoting and enhancing the circular economy. In fiscal 2022, a number of different initiatives were managed under this program, with a special focus on advocacy and market design, technological development, the identification of technology paths, and the development of appropriate nonfinancial indicators. New ways of cooperating in the technology and market development environments as part of research consortiums, and alliances such as the World Economic Forum (WEF) and the Alliance to End Plastic Waste, were investigated in the year 2022 and actively pursued and enhanced with different partners.

Key indicative findings and questions regarding the circular economy strategy are handled by the Group's top-level governance body on environmental, social and governance (ESG) issues.

→ See "Sustainability Management."

Measuring the Circular Economy and Trends in Relevant Indicators

Efforts toward building a circular economy in the company can be measured by verifying the degree to which we can replace fossil sources of carbon for production with alternative raw materials and create a closed loop for producing renewable inorganic compounds. We accomplish this for carbon sources by concentrating on products and processes that permit us to employ biomass, CO_2, and raw materials recycled from waste. Synthetic raw materials manufactured using green electricity, such as hydrogen, are also becoming increasingly important. In particular, Covestro can leverage procurement on the one hand and the development of our own innovative process technologies for biotechnology, and plastics recycling using chemical means on the other. We are counting on new strategic partnerships to promote recycling within the value chain to make alternative raw material use transparent and to ensure used plastics are recycled at the end of their life cycle.

→ See "Procurement."

We continued to work on identifying suitable circularity indicators in the year under review. We assessed the corresponding options in order to define appropriate nonfinancial indicators and targets for Covestro and use them to steer the company further in the direction specified by the corporate vision. The indicators considered include the proportion of alternative raw materials in production or the proportion of circular solutions in the overall product portfolio.

Recyclability and End-of-Life Solutions

Our core technical competence is the development and application of complex chemical procedures and 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 establish specific processes that will allow us to focus on producing from plastic waste the raw materials that Covestro requires. The use of these recycled raw materials in our production processes will lead to products with a lower carbon footprint and increase the recycling ratio. In addition, we also want to use raw materials that were recycled in upstream stages of the value chain at Covestro. To this end, we use ISCC PLUS-certified raw materials and intermediates. On the whole, chemical recycling processes are an important tool to help Covestro in gradually replacing the use of fossil-based materials and in closing carbon loops. We therefore want to use the circular economy and our climate targets as a way to reduce the environmental footprint of our product portfolio and make it climate-neutral. These processes will continually be verified by means of a life cycle assessment (LCA), in other words, taking into account effects and contributions throughout the entire life cycle.

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.

→ See "Strategic Partnerships and Collaborations."

Covestro is already testing the thermal decomposition of chemical compounds at elevated temperatures (pyrolysis) in laboratories in Antwerp (Belgium) and Dormagen (Germany). These facilities can break down polycarbonate as well as rigid foam into high-quality molecules that can then be recycled and integrated into production processes as raw materials. Our low-temperature pyrolysis process enables us to eliminate several steps and therefore to considerably cut carbon emissions compared with conventional high-temperature pyrolysis.

Both pyrolysis and depolymerization are being investigated and enhanced as possible chemical recycling technologies for polycarbonates and rigid polyurethane foams. In depolymerization, polymers are turned back into materials such as monomers and intermediates using solvents, catalysts, and heat, and under pressure if necessary. CIRCULAR FOAM, an EU project to research circular solutions coordinated by Covestro, was launched to this end in October 2021.

→ See "Strategic Partnerships and Collaborations."

Another strategic option for Covestro is enzymatic recycling, which involves using enzymes to very selectively break down plastics into smaller fragments (monomers) at low temperatures. These monomers can then be reused to produce new, equally high-quality plastics. Enzymatic recycling is still in the early phase of development, but due its high selectivity (generating few to no by-products) and low processing temperatures, this technology is very promising. Covestro has identified this potential and, in addition to our own research, has entered into key partnerships to deploy this innovative technology in recycling and take it closer to an industrial scale.

→ See "Strategic Partnerships and Collaborations."

Furthermore, in the year 2022, Covestro made progress in the chemical recycling of flexible polyurethane foam from mattresses. After commissioning a pilot plant in Leverkusen (Germany) at the end of fiscal 2020, we continued to research detailed process parameters in the reporting year and were therefore able to confirm the laboratory results to date. This innovative technology enables us to supply high-purity recycling polyol that meets customer specifications and recycled toluylene diamine (TDA), which can in turn be processed into toluylene diisocyanate (TDI). We forge alliances along the entire value chain to close product loops on an industrial scale. The convergence of the chemical and recycling industries is aimed at creating new value cycles for the circular economy.

→ See "Strategic Partnerships and Collaborations."

Covestro also provides solutions to support the expansion of wind energy, which is a crucial technology for generating power from renewable sources and for decentralizing energy supplies. The recyclability of wind turbine rotor blades is currently one of the remaining challenges on the road to a more sustainable energy industry. We are working on developing a solution to this problem on the basis of a unique polyurethane structure.

Market Design for Alternative Raw Materials

We want to be a pioneer in the circular economy of plastics and play an active role in shaping the market transformation. A key aspect in this regard is to continuously expand our product portfolio by adding sustainable products based on the use of alternative raw materials.

In addition to Covestro's own production of recycled and biogenic raw materials, the strategic alignment of our raw material and energy procurement activities is vitally important to our corporate vision. We aim to continually increase the share of alternative raw materials used in production and reach 100% in the long term. Covestro defines alternative raw materials as all raw materials made from biomass, CO_2, or waste, or manufactured on a nonfossil basis using renewable energy.

In the fiscal year 2022, Covestro further stepped up the procurement of alternative raw materials. In total, we purchased over 55,000 metric tons of alternative raw materials (previous year: over 20,000 metric tons) for use in production activities in Antwerp (Belgium), Changhua (Taiwan, Greater China), Dormagen (Germany), Filago (Italy), Leverkusen (Germany), Krefeld-Uerdingen (Germany), Map Ta Phut (Thailand), and Shanghai (China). The goal here is to be able to offer a broad market a steadily growing portfolio of sustainably manufactured materials.

We have begun to have our production sites audited and certified to the ISCC PLUS process to reflect the certification of these raw materials for 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.

Labeling of Circular Solutions in the Product Portfolio

To enhance the transparency of circular solutions in the market, Covestro introduced a new product label, Circular Intelligence (CQ), in the reporting year. The purpose of the CQ label is to identify new products, for example, that have minimum alternative or recycled raw material content. The minimum threshold is 25%, although some products receive the cradle-to-gate* assessment on the path to climate neutrality. The "climate neutral" label is the result of an assessment of a segment of the product's entire life cycle based on ISO standard 14040.

In the reporting period, the business entities identified various products to be established under the CQ label.

Global and Regional Promotion and Advocacy of the Circular Economy

We also promote the circular economy by participating in regional and global initiatives. When we engage in dialogue with politicians and the public, we advocate for structuring the required regulatory environment for establishing a 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. Another aim is to remove other regulatory hurdles to the integration of alternative raw materials and the gradual substitution of fossil-based raw materials.

As a founding member of the Alliance to End Plastic Waste, Covestro actively campaigns for regulated systems for disposing of and recycling plastic waste to stop it from entering the environment. The Alliance to End Plastic Waste is a global, nongovernmental, nonprofit organization established by companies representing the entire plastic value cycle. The Alliance supports specific, sustainable, and scalable collaborative projects that prevent plastic waste from entering the environment, collect and recycle plastic waste, and use it as a raw material. The projects focus in particular on locations and waste streams that are majorly impacted by incorrect plastic waste disposal. They comprise the creation of local infrastructure, piloting and scaling of innovative solutions, partnership development, and training, as well as local cleanup campaigns. The Alliance provides financial support to these projects and shares with them the expertise of the entire value chain of its more than 75 sponsoring members. According to data provided by the Alliance, projects supported by the Alliance channeled 33,670 metric tons of plastic waste to a new regulated waste management process and recycled

* The "climate neutral" label is the result of an assessment of a segment of the product's entire life cycle. In this case, we analyzed the period from resource extraction (cradle) to the factory gate based on ISO standard 14040. The analysis was then critically evaluated for plausibility by TÜV Rheinland AG, Cologne (Germany). The analysis takes into account biogenic carbon sequestration on the basis of provisional data from the supply chain and the use of renewable electricity in the production process. Electricity usage was allocated based on what are known as guarantee-of-origin certificates. Carbon offset credits were not used.

20,370 metric tons of plastic waste in the year 2022, while gradually increasing the relevant capacities for future years. Its members had undertaken to invest USD 1.2 billion (around €1.1 billion) in the Alliance and their own waste-related projects by the end of the year 2022; the Alliance is moreover using these activities and investments to mobilize additional private and institutional capital to promote a circular economy and reduce the amount of plastic entering the environment. The Alliance therefore entered into a new partnership with Lombard Odier Investment Managers in the year 2022 with the aim of launching an investment fund with a volume of USD 500 million (around €465 billion).

Covestro provides financial support to the Alliance and its mission through active involvement in different projects and working groups as well as through our own partnerships and internal projects accepted by the Alliance, which are aimed at gradually reducing the amount of plastic entering the environment.

Under the Low-Carbon Emitting Technologies initiative led by the World Economic Forum and the various Chief Executive Officers (CEOs) of a number of global chemical companies, Covestro is committed to finding solutions jointly with industry partners. For example, in a collaborative approach with other partners from the chemical industry, the industrial-scale use of waste streams as a raw material for the chemical industry is being investigated and research projects to facilitate plastic waste processing are in the planning.

Europe

In addition to various research & development (R&D) projects on the circular economy, Covestro participates in other circular economy projects at the sociopolitical level in Europe. 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 individual working groups. Covestro is an active member in the automotive, packaging, construction, electronics, and monitoring groups.

In Germany, Covestro is a member of organizations such as the Circular Economy initiative of the Federation of German Industry, which is working on a political framework for the transition to the circular economy. The CEO of Covestro is himself an active member of the board of this initiative.

China

In China, we were 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). By participating in these associations, Covestro wants 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. As one of the world's most important producers of plastics, China is taking steps to further domestic plastic recycling and, at the same time, to prohibit or limit the use of single-use plastics.

In the reporting period, Covestro invested in its first own plant for mechanical recycling of polycarbonates at the site in Shanghai (China); the plant has a capacity of 25,000 metric tons per year. In addition, Covestro, together with the China Automotive Technology & Research Center (CATARC), worked on developing the standard for recycled plastics in automobiles and on creating the China Industrial Carbon Emission Information System (CICES).

United States

Covestro and the University of Pittsburgh, Pennsylvania (United States) have launched a new postgraduate academic program, the Covestro Circular Economy Program, in the United States. The research and innovation program teaches students wanting to engage in sustainability issues methods focused on the circular economy to manage global waste streams. The Covestro Circular Economy Program, which is located at the Mascaro Center for Sustainable Innovation and at the Swanson School of Engineering of the University of Pittsburgh, deals with the need to integrate circular design principles into innovation projects – thus closing a gap in academic teaching. The program was launched with a group of doctoral students in the year 2022.

Covestro LLC, Pittsburgh, Pennsylvania (United States), and the Mattress Recycling Council, Alexandria, Virginia (United States), have entered into a long-term research agreement to improve and expand mattress recycling in the United States. The cooperation supports Covestro's vision of becoming fully circular and promotes innovation in end-of-life processes for mattresses, and in particular for polyurethane foam.

Climate Neutrality

Strategy, Management, and Implementation

Strategy

Covestro's business activities are energy-intensive. In addition to focusing on the circular economy, our strategic alignment toward sustainability in particular therefore also comprises a consistent commitment to climate neutrality. Our long-term corporate vision of becoming fully circular can only be successful if, at the same time, total greenhouse gas (GHG) emissions are continually reduced in order to contribute to achieving a climate-neutral economy.

In accordance with the Intergovernmental Panel on Climate Change (IPCC) and the United Nations Framework Convention on Climate Change (UNFCCC), we understand and support climate neutrality as society's collective goal of attaining net zero GHG emissions by the year 2050. This means that anthropogenic emissions can be removed by the planet through its natural ability to absorb them and as a result no longer impact on the climate.

For this reason, Covestro has set itself the goal of reaching net-zero GHG emissions* by the year 2035 in its own production activities and from the provision and use of energy produced outside the company at all environmentally relevant sites, while working on solutions to reduce emissions along the value chain. In addition to reducing emissions by implementing energy efficiency measures, steps to achieve this goal include the use of sustainable production processes and climate-neutral sources of energy in the supply of electricity from renewable sources and steam.

OUR CLIMATE NEUTRALITY GOAL

STATUS 2022
compared to 2020 levels

–11.8%

GHG emissions[1]
(–0.66 million metric tons)

2021: –2.8% (–0.16 million metric tons)

By the year 2035, we want to reach net-zero GHG emissions in our own production (Scope 1) and from the provision and use of energy produced outside the company (Scope 2) at all environmentally relevant sites.

[1] GHG emissions (Scope 1 and Scope 2), measured as millions of metric tons of CO_2 equivalents and portfolio-adjusted based on the GHG Protocol financial control approach; global warming potential (GWP) factors correspond to the IPCC's Fifth Assessment Report.

Against the political backdrop of the "Fit for 55" package currently being negotiated in the European Union and the Inflation Reduction Act passed into law in the United States in the reporting year, we are confident that the rapid creation of climate-neutral and circular business models in line with our goals can be expected and will receive the relevant support.

* Achievement of net-zero GHG emissions is defined as a balance between anthropogenic production of GHG emissions (caused by the company's own production activities and by the provision and use of energy produced outside the company) and anthropogenic reduction of GHG emissions.

Management

Covestro's climate ambition is strategically rooted in its climate program. Under this program, which is led by the corporate Sustainability & Public Affairs function, the measures for reaching net-zero emissions are formulated in the form of a CO_2 roadmap; progress is assessed and regularly reported to the Board of Management. Fiscal 2020 is used as the base year. The CO_2 roadmap was compiled in the year 2021 and approved by the Board of Management in the reporting year in order to align Covestro's existing target for reducing GHG emissions with the corporate vision and regulatory requirements. The CO_2 roadmap forms the basis for prioritizing specific GHG reduction measures and will fundamentally be used to address and analyze direct and indirect sources of emissions in accordance with the Greenhouse Gas Protocol (GHG Protocol). Measures to reduce emissions are identified in close collaboration between our sites and the relevant corporate functions.

Since the year 2022, a sustainability component, measured against selected ESG criteria, has been laid down in the management system to create incentives for meeting our climate neutrality goal. In the year 2022, the sustainability component was determined by direct and indirect GHG emissions (Scope 1 and Scope 2) of the main sites.

→ See "Management System."

Implementation

Since Covestro pursues a growth strategy, we expect Scope 1 and Scope 2 GHG emissions to increase by 1.0 million metric tons of CO_2 equivalents per year by the year 2035. This will be offset by external factors, which are anticipated to have a positive impact of 0.7 million metric tons of CO_2 equivalents per year on our climate neutrality. This includes, for example, Germany's target to reach a renewable energy share of 80% in the German power mix by the year 2030 and Germany's plans to phase out coal.

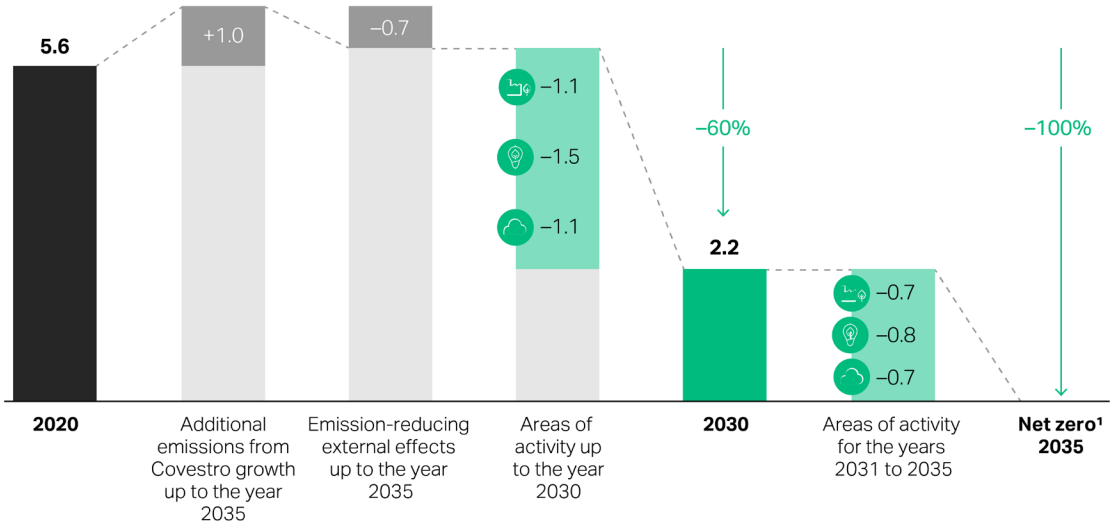
We have defined three action areas to reach our net-zero goal. We are planning to optimize our production processes to facilitate the sustainable and energy-efficient manufacture of our products. We also intend to raise significantly the proportion of electricity from renewable sources we procure and will in future make greater use of steam as a renewable source of energy. With a view to reducing the GHG emissions of purchased raw materials, measures such as transitioning to alternative raw materials are being investigated. In terms of possible residual emissions in the future, i.e., those that are technically unavoidable, the use of technical and natural CO_2 sinks, or compensatory measures to potentially balance all GHG emissions (Scope 1, Scope 2, and Scope 3) are currently being evaluated.

To enable the company to reach net-zero emissions, Covestro anticipates investments of between €250 million and €600 million by the year 2030. Greater energy efficiency is expected to cut operating expenses by €50 million to €100 million a year. Conversely, on the road to net-zero emissions, Covestro is anticipating higher annual operating costs in a low three-digit million euro amount. These cost assumptions are based on past experience that prices for fossil-based sources of energy are lower than for renewable energy. A matrix for assessing profitability of new investment projects and their effects on Scope 1 and Scope 2 GHG emissions is used to make decisions.

We are actively committed, in all regions in which Covestro operates, to driving political activities to accelerate the industrial transformation toward climate neutrality. On the basis of an analysis of the political support for transforming the chemical industry, we believe that the current political framework will not have any negative effect on reaching our reduction targets. The analysis was published in 2022 by the Low-Carbon Emitting Technologies initiative of the World Economic Forum (WEF), in which Covestro actively participates. The Russian war against Ukraine is not expected to have any impact on target attainment either.

Action areas toward reaching the net-zero goal

million metric tons of CO_2 equivalents per year; apart from the figures for the year 2020, all figures are expected values



Our areas of activity

- More sustainable manufacturing
- Renewable electricity
- Renewable steam

By the year 2030:
Capex of €250–600m; opex savings of around €50–100m p.a.

[1] Achievement of net-zero GHG emissions is defined as a balance between anthropogenic production of GHG emissions (caused by the company's own production activities and by the provision and use of energy produced outside the company) and anthropogenic reduction of GHG emissions.

Along with governments, nongovernmental organizations, and other private-sector companies, Covestro supports the implementation of the results of the 21st UN Climate Change Conference, which took place in Paris in the year 2015. For instance, Covestro participates in the German Chemical Industry Association's (Verband der Chemischen Industrie, VCI) NRW Energy4Climate and Chemistry4Climate initiatives to proactively develop solutions to master the challenges posed by climate change and bring about the industrial transformation necessary to do so.

More Sustainable Production Processes

We will continue to invest in expanding existing and building new production capacities in the future, while committing to using state-of-the-art climate-friendly technologies in accordance with our vision. At the same time, we make transparent the impact of our investment projects on our carbon footprint and also incorporate it into profitability analyses that are submitted to the Board of Management as a basis for decisions. The projects of our long-term investment planning have already been included in formulating the climate targets and the associated roadmap.

For example, we use innovative catalyst technologies in isocyanate production to reduce GHG emissions.

Alongside that, a separate capital expenditure (CapEx) category for emission reduction projects was established as part of capital allocation to ensure adequate prioritization. Proprietary Covestro software was integrated into our systems in the reporting year to allow us to predict our GHG emissions. This tool supplements our regular reporting under the GHG Protocol on Scope 1 and Scope 2 GHG emissions. In the year 2023, this function is to be expanded to include Scope 3 GHG emissions.

Electricity from Renewable Sources

In addition to more efficient energy usage in our production processes, the transition to renewable energy is an important lever on the road to climate neutrality. In the future, Covestro therefore intends to meet all of its energy needs with renewable energy. Actions we have taken toward this goal include developing new supply plans and signing purchase contracts for renewable energy, particularly electricity. Alongside existing agreements to procure electricity from renewable sources for our sites in Antwerp (Belgium) and in the German state of North Rhine-Westphalia, we entered into additional agreements worldwide in the reporting year. In fiscal 2022, Covestro purchased around 740 GWh of electricity from renewable sources, making use of special power purchase agreements and power certificates (e.g., certificates of origin in Europe) as a way to underpin our strategic alignment toward sustainability. Likewise, this is intended to contribute to shrinking the carbon footprint of production, our products, and our customers' applications.

Climate-Neutral Steam

To further drive the shift toward more sustainable sources of energy (in relation to Scope 2 emissions), we will above all apply innovative collaborative models and technologies. The signing of a joint declaration of intent with the operator of the production sites in the German state of North Rhine-Westphalia – Currenta GmbH & Co. OHG, Leverkusen (Germany) (Currenta) – in the reporting year marks the first step along this path. Currenta and Covestro want to complete a feasibility study by June 30, 2023 to investigate more closely two potential locations for installing heat pumps: the chlorine electrolysis facility, which was expanded in the year 2021, and the MDI facility at Covestro's Krefeld-Uerdingen (Germany) site. Both facilities make important precursors.

Furthermore, we are evaluating options for using biogenic and renewable sources of energy to supply process heat to our sites. These technologies can contribute substantially to reducing GHG emissions in the future, e.g., by using hydrogen and its derivatives for generating energy and as a production input in CO_2 conversion in the chemical industry.

Greenhouse Gas Emissions

Covestro calculates GHG emissions according to the internationally recognized standards of the GHG Protocol. Direct emissions, e.g., from burning fossil energy sources and from our production processes (Scope 1), as well as indirect emissions from the provision and use of energy produced outside the company (Scope 2) at all environmentally relevant sites, i.e., all production sites and relevant administrative sites with a significant impact on the environment, are included in the calculations. In addition to CO_2, Scope 1 emissions comprise all relevant GHGs, including nitrous oxide (N_2O), methane (CH_4), partly fluorinated hydrocarbons, and sulfur hexafluoride (SF_6).

Scope 2 emissions are reported using the location-based and market-based methods. Location-based emissions factors from generally accepted sources (e.g., International Energy Agency* [IEA] emissions factors) were used when calculating location-based Scope 2 GHG emissions. Market-based emissions factors were used when calculating market-based Scope 2 GHG emissions; where these were not available, location-based emissions factors were used. For Covestro, the market-based method is the leading calculation method for Scope 2 GHG emissions.

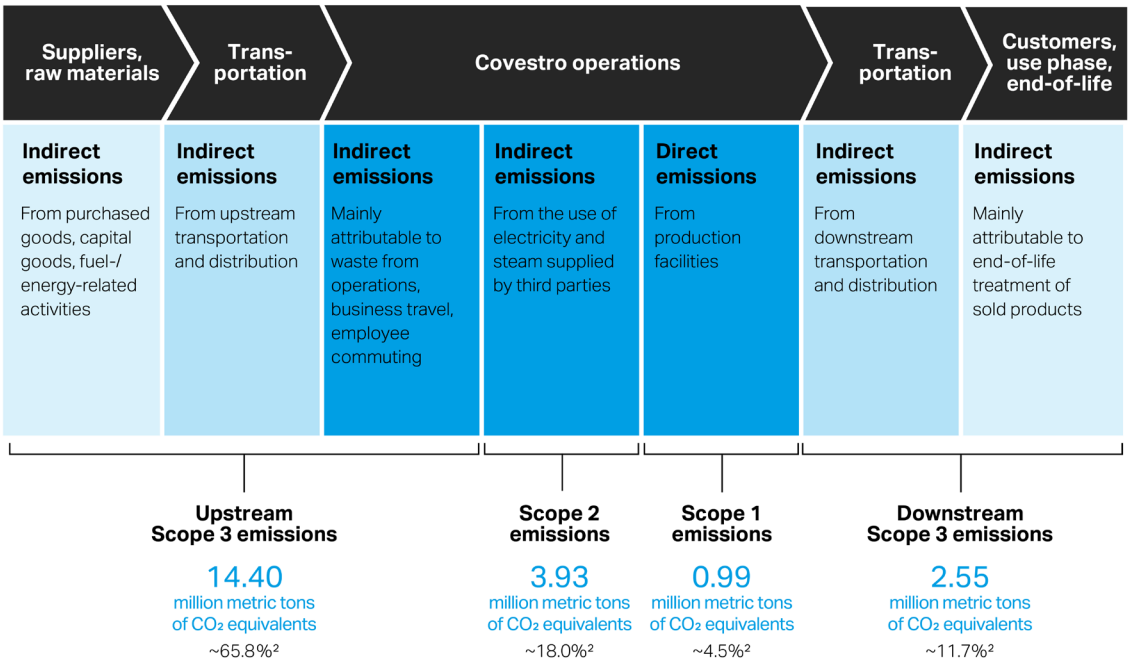
At Covestro, upstream and downstream GHG emissions data along the value chain (Scope 3 emissions) is determined for all sites and business activities that indirectly cause relevant GHG emissions according to the categories and methods of the GHG Protocol and the Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain by the World Business Council for Sustainable Development (WBCSD).

* International Energy Agency (IEA), document entitled "IEA Emission Factors 2022." All rights to this document reserved to the IEA.

Covestro has been able to reduce specific GHG emissions (Scope 1 and Scope 2) since the year 2005. In the year 2021, Covestro had already reduced its specific GHG emissions by 53.9% compared with the base year of 2005, thus outperforming the previous sustainability target of halving specific GHG emissions at its main production sites. For this reason, new absolute reduction targets were published in March 2022 for reducing our Scope 1 and Scope 2 emissions at all environmentally relevant sites. Net zero Scope 1 and Scope 2 GHG emissions are to be attained at all environmentally relevant sites by the year 2035. On the way to meeting this target, the company plans to reduce direct and indirect GHG emissions by 60% compared with the base year of 2020, to 2.2 million metric tons of CO_2 equivalents by the year 2030. In addition, indirect GHG emissions from upstream and downstream processes in the value chain (Scope 3) are to be reduced further. A Scope 3 reduction target will be published in the year 2023.

Total Scope 1, Scope 2, and Scope 3 emissions amounted to 21.87 million metric tons of CO_2 equivalents in the reporting year (previous year: 27.26 million metric tons of CO_2 equivalents).

Covestro's GHG emissions[1] along the value chain



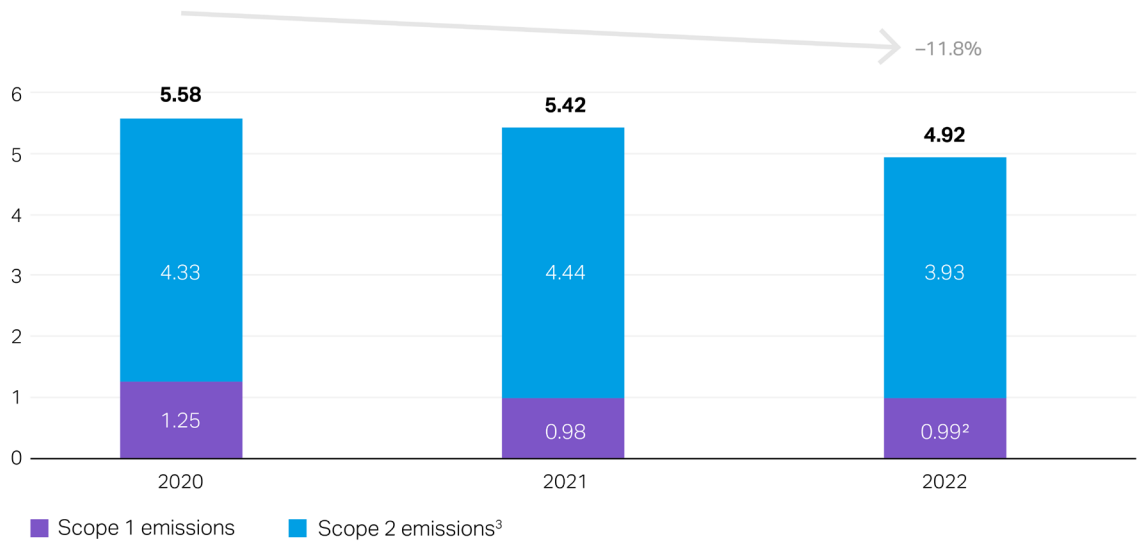
[1] Portfolio-adjusted based on the GHG Protocol; financial control approach; global warming potential (GWP) factors correspond to the IPCC's Fifth Assessment Report.

[2] Share of total GHG emissions (sum of Covestro's Scope 1, Scope 2, and Scope 3 emissions).

Scope 1 and Scope 2 GHG Emissions

Absolute Scope 1 and Scope 2 GHG emissions at all environmentally relevant sites declined by 9.2% compared with the previous year. Direct GHG emissions increased by 1.3% and indirect GHG emissions contracted by 11.5%. This was mainly caused by the reduction in production activity and the resulting drop in energy demand, especially for electricity and steam. The associated emissions were also affected by changes in local emissions factors and the purchase of electricity from renewable sources. For example, the Shanghai (China) site met over 30% of its electricity demand from renewable sources in the year 2022, thus reducing its Scope 2 emissions from electricity. In total, this led to decrease in the calculated GHG volumes.

Scope 1 and Scope 2 GHG emissions[1] in the Group



[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 2022, 78.6% of emissions were CO_2 emissions, 20.5% were N_2O emissions, 0.7% consisted of partly fluorinated hydrocarbons, and 0.1% each were attributable to CH_4 and SF_6.

[3] In combustion processes, CO_2 typically makes up more than 99% of all GHG emissions; this is why we restrict ourselves to CO_2 when calculating indirect emissions. Location-based emissions amounted to 3.82 million metric tons of CO_2 equivalents in the year 2022 (previous year: 4.40 million metric tons of CO_2 equivalents).

In addition to absolute GHG emissions, we also continue to monitor changes in specific emissions at our main production sites*. Specific emissions are determined on the basis of direct emissions of 0.93 million metric tons of CO_2 equivalents and indirect emissions of 3.79 million metric tons of CO_2 equivalents, as well as a production volume** of 14.13 million metric tons. This means that in the year 2022 specific emissions stood at 0.3342 million metric tons of CO_2 equivalents per metric ton of product (previous year: 0.3338 metric tons of CO_2 equivalents per metric ton of product), similar to the prior-year level.

Scope 3 GHG Emissions

Upstream and downstream GHG emission data along the entire value chain (Scope 3) has been collected and reported at Covestro since the year 2021. All categories as defined in the GHG Protocol were reviewed for relevance in order to quantify all emissions associated with Covestro's business activities as completely as possible. Out of the total of 15 categories, 9 are relevant for Covestro and we report the appropriate emission values for them. The basis for calculating the other indirect GHG emissions (Scope 3) are internal activity data and emission factors from commercially and publicly available sources, or sources recommended by the GHG Protocol. The emissions for each Scope 3 category are based on individual calculations, which are described in detail in our latest Carbon Disclosure Project (CDP) questionnaire. By continually improving the data basis and calculation methods used, we will further advance the accuracy of our Scope 3 emissions reporting on an ongoing basis.

The other indirect GHG emissions (Scope 3) represent 77.5% of the Group's total GHG emissions (previous year: 80.1%).

Scope 3 emissions calculated in fiscal 2022 amounted to 16.95 million metric tons of CO_2 equivalents (previous year: 21.84 million metric tons of CO_2 equivalents). Most of our Scope 3 emissions are attributable to categories upstream in our value chain. Categories 1 "Purchased goods and services," 12 "End-of-life treatment of sold products," and 3 "Fuel- and energy-related activities" are the main contributors to our other indirect GHG

* Our main production sites are those responsible for more than 95% of our energy usage.

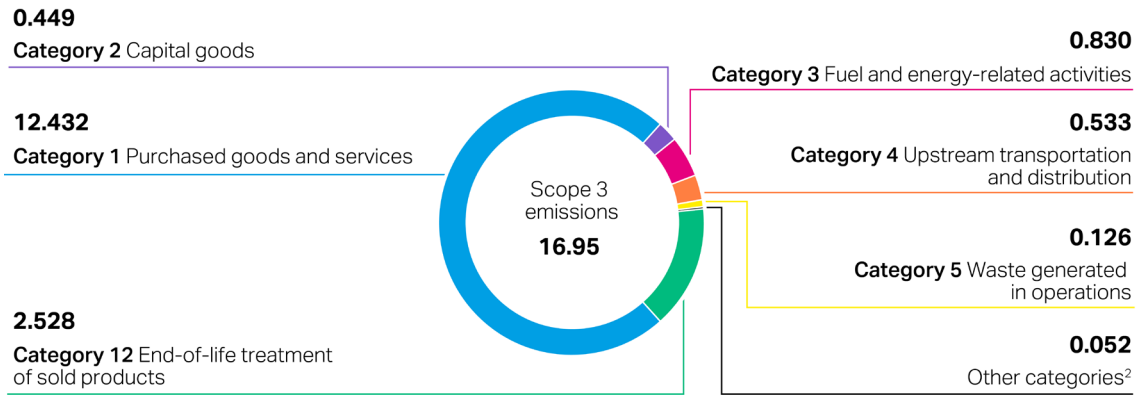
** All in-spec key products – which, in addition to our core products, also include precursors and by-products – manufactured at main production sites, which are responsible for more than 95% of our energy usage.

emissions. Biogenic CO_2 emission equivalents stemming indirectly from the value chain totaled 118,659 metric tons of CO_2 equivalents (previous year: 99,052 metric tons of CO_2 equivalents) in the reporting period in absolute terms and are disclosed separately from the total volume of Scope 3 emissions in accordance with the GHG Protocol and the WBCSD. The 20% year-over-year rise in climate-neutral balanced biogenic emissions reflects the increased use of biobased raw materials.

Compared with the previous year, total Scope 3 emissions declined by 22% in fiscal 2022. This change is primarily attributable to the lower production volume, which has a direct effect on the two largest Scope 3 categories, 1 "Purchased goods and services" and 12 "End-of-life treatment of sold products." Additional, sometimes opposing, effects were attributable to a further improvement in calculation methods, an adjustment to measures taken, and the increased use of supplier-specific emissions factors. The Scope 3 category 2, "Capital goods," rose by 31% year-over-year. In the context of the spend-based calculation method in this category, this is mainly due to the sharp increase in material prices and inflation effects.

Composition of Scope 3 emissions categories[1]

million metric tons of CO_2 equivalents



[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.

Nonrelevant emissions categories: 8 "Upstream leased assets"; 11 "Use of sold products"; 15 "Investments." Estimates indicate that these categories account for <1% of Covestro's total Scope 3 emissions. Their levels are therefore insignificant according to the definition in the GHG Protocol.

Nonapplicable emissions categories: 13 "Downstream leased assets"; 14 "Franchises." Covestro does not operate any plants that are leased to third parties and whose emissions are not already included in Scope 1 and Scope 2 emissions reporting. Moreover, Covestro does not own or operate any franchises.

Unreported emissions category: 10 "Processing of sold products." Since data could not always be obtained and there are numerous applications for Covestro's products, calculating these emissions would require disproportionate effort. In this case, Covestro refers to the WBCSD guidance, according to which a chemical company whose product portfolio contains a broad range of intermediates is not required to report Scope 3, category 10 "Processing of sold products."

The calculation of emissions categories 2 "Capital goods" and 1 "Purchased goods and services," in relation to the share that is not attributable to raw materials, is based on spend-based emissions factors of the Department of Energy & Climate Change (DECC) from the year 2014, which have been updated using inflation rates according to the German consumer price index.

[2] "Other categories" includes the following: 6 "Business travel"; 7 "Employee commuting"; 9 "Downstream transportation and distribution."

Energy Usage

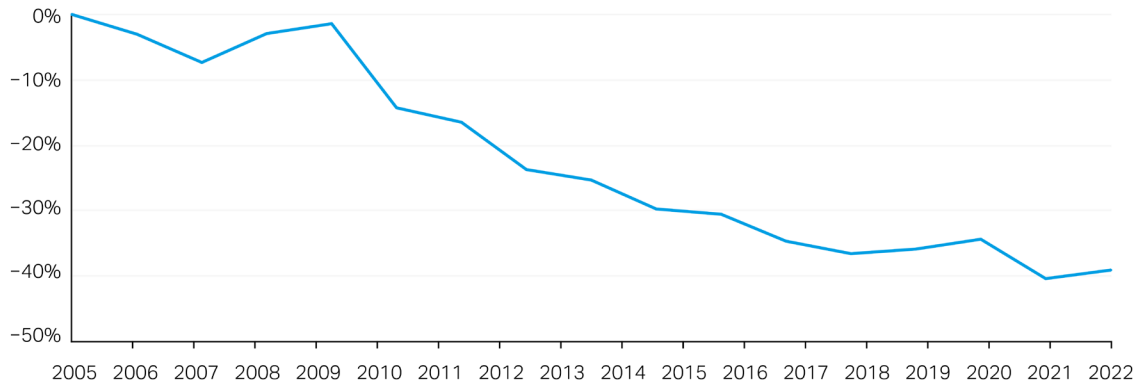
For an energy-intensive company like ours, the reduction in the amount of energy we use plays a key role in efforts to reduce our Scope 1 and Scope 2 emissions. Covestro's energy usage includes the primary energy used in production and during electricity and steam generation by the company as well as additionally acquired quantities of electricity, steam, refrigeration energy, and process heat (secondary energy). The secondary energy is calculated back to arrive at the equivalent primary energy usage required to generate them. This takes into account the energy lost while distributing these forms of energy. All told, these figures make up Covestro's equivalent primary energy consumption.

The use of energy and materials is closely related to our production volume. Unlike for GHG emissions, our target-setting process focuses in particular on the specific energy usage of the sites we define as main production sites. These are responsible for more than 95% of our total energy usage. In support of our climate neutrality goal, we want to halve specific energy usage at our production sites by the year 2030 compared with the 2005 base year and in this way make a contribution to our absolute GHG reduction target.

Our continued long-term positive trend indicates an overall 38.9% improvement in energy efficiency compared to the 2005 base year as shown in the following figure.

Changes in specific energy usage at main production sites

(annual change in specific primary energy usage per metric ton of product compared with the 2005 base year – presented in %)[1]



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

Compared to the previous year, equivalent primary energy usage at these sites decreased by 7.7% and the production volume by 9.6%. This means that the equivalent primary energy usage for a given production volume (energy efficiency) was up 2.3% from the previous year due to production utilization.

Energy usage in the Covestro Group at main production sites

		2021	2022
Equivalent primary energy usage[1]	Megawatt hours [MWh]	20,516,545	18,933,868
Production volume[2]	Million metric tons	15.63	14.13
Specific energy usage (energy efficiency)[3]	**MWh per metric ton**	**1.31**	**1.34**

[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; equivalent to 68,162 terajoule (TJ) in the reporting year (previous year: 73,860 TJ).

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

[3] Ratio of equivalent primary energy usage to production volume.

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 various 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 is already being used in many of our energy-intensive production facilities around the world and will be implemented in other facilities going forward.

For example, in the reporting year, we reused considerable volumes of low-pressure steam in our polyurethane production processes at the site in Baytown, Texas (United States). Primary energy usage was therefore cut by more than 64,600 MWh, which is the equivalent of reducing emissions by some 12,800 metric tons of CO_2.

Moreover, Covestro carried out various other projects in fiscal 2022, resulting in annual savings of 113,300 MWh of primary energy, or 29,900 metric tons of CO_2 emissions. In addition, pro-rated savings from projects completed in the previous year amounted to 32,300 MWh of primary energy, and 8,300 metric tons of CO_2 and were realized in fiscal 2022. Combined, all the projects implemented since the introduction of STRUCTese® have resulted in lasting reductions totaling 2.6 million MWh of primary energy and around 770,000 metric tons of CO_2 per year.

We also collect data on our total energy usage at all environmentally relevant production sites. In the year 2022, total energy usage in the Group was down 6.7% year-over-year.

Energy usage by energy type in the Group

	2021	2022
	in TJ	in TJ
Natural gas	9,059	8,885
Coal	–	–
Liquid fuels	165	186
Waste	750	32
Other energy sources[1]	(1,123)	(117)
Primary energy usage for the in-house generation of electricity and steam (net, TJ)	**8,851**	**8,986**
Electricity purchased	25,842	23,650
Less electricity sold to third parties	1,879	1,723
Electricity usage	23,963	21,927
of which renewable energies	–	2,667
Steam purchased	22,732	20,489
Less steam sold to third parties	574	529
Steam usage	22,158	19,960
Steam from waste heat (process heat) purchased	3,331	3,382
Less steam from waste heat (process heat) sold to third parties	1,856	1,484
Steam from waste heat (process heat) usage	1,475	1,898
Refrigeration energy purchased	526	400
Refrigeration energy sold to third parties	76	69
Refrigeration energy usage	450	331
Secondary energy usage (net, TJ)	**48,046**	**44,116**
Total energy usage (TJ)	**56,897**	**53,102**

[1] E.g., hydrogen.

Sustainable Products and Product Stewardship

Strategy, Management, and Implementation

A sustainable product portfolio plays a key role for us in implementing our Sustainable Future strategy. The continued expansion of such a portfolio is supported by our research- and development-based innovation portfolio. In accordance with our sustainability goals, 80% of project costs for research and development are to be allocated to areas that contribute to reaching the United Nations Sustainable Development Goals (SDGs) by the year 2025. Support will go particularly to product innovations whose contribution to the SDGs drives sustainable development, taking account of our circular and climate neutrality goals.

→ See "Sustainable R&D-Based Innovation Portfolio."

At the same time, we are revising our methodology to assess also the sustainability of our existing products, especially in relation to the circular economy and climate neutrality, and are aligning our product portfolio even more closely in this direction, while taking legal requirements into account. We also report on how and the extent to which our activities are associated with economic activities which qualify as environmentally sustainable economic activities under the European Union's Taxonomy Regulation.

→ See "EU Taxonomy."

It goes without saying that our products can only be sustainable if handling them is safe for people and the environment. For this reason, our sustainable product portfolio, too, reflects product stewardship requirements. We have an established management system for our activities in this area to ensure that our requirements and standards are met.

→ See "Product Stewardship."

While the business entities manage their product portfolios independently, the ESG Governance Body on environmental, social and governance (ESG) issues dealt with matters in the reporting year such as progress in revising the sustainability assessment methodology for our product portfolio.

→ See "Sustainability Management."

Sustainable Products

Our work is focused on aligning our product portfolio even more closely with sustainability and circular economy targets. Covestro is building a future-proof, innovative, and sustainable product portfolio using the Product Sustainability Assessment (PSA) based on the methodology developed by the World Business Council for Sustainable Development (WBCSD). This process entails identifying changes in the regulatory and market environment early on with the help of the PSA and considering these as part of the decision-making processes. The results of the PSA are to be integrated in decisions about the product portfolio and in relation to corporate governance. The findings of the pilot project on the evaluation method conducted in the year 2021 were used in the reporting year to review the method in collaboration with an external provider and, for example, to integrate more deeply aspects of the circular economy and climate neutrality. The review of the method is expected to be completed in the year 2023 and will be followed by another pilot using the updated method in the same year. The majority of our new products are already aligned with the SDGs. To drive the development of our circular product portfolio, we announced in the reporting year our long-term intention to offer all products in a climate-neutral version that pursues the principles of the circular economy. Our Circular Intelligence (CQ) solutions are based on alternative raw materials and sources of energy as well as chemical recycling; they contain at least 25% alternative or recycled raw materials.

→ See "Strategy," "Marketing and Sales," and "Labeling of Circular Solutions in the Product Portfolio."

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 our products to be safe throughout their entire life cycle – from research to production and marketing to their intended use by customers and all the way to disposal. Product stewardship is also a focus of our human rights due diligence activities.

→ See "Human Rights."

Monitoring the quality of our products and their suitability for particular applications is anchored in our corporate functions and segments. 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 legally required documentation, we also provide further information and offer training in line with the Global Product Strategy of the International Council of Chemical Associations (ICCA). Furthermore, specially trained employees 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 general risk management may be used in special situations 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 protective measures taken, an examination of the benefits and the disadvantages 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 (SVHCs) as classified in accordance with the European Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and substances covered by European regulation on GHGs. Substance compositions in all regions are checked with the help of IT systems against lists of regulated substances so that noncompliance with regulatory requirements would be 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 surveillance 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 2022, 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 a continuous 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 the International Council of Chemical Associations (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 (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 how to fulfill 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 EU in August 2020 is one example of a restriction. In this case, labeling of diisocyanates had to 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 part of the European chemical industry, we furthermore made a voluntary commitment to review and improve the REACH registration dossiers by the year 2026.

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 directive 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.covestro.com/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 countries and countries of the Global South, 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, e.g., polycarbonate. Critics, but also some authorities, are concerned that risks could result for people and the environment if traces of BPA are released from products.

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. 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 Plastics Europe 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.

Per- and polyfluoroalkyl substances (PFAS) are a subject of public discussion due to possible undesirable effects on people and the environment. PFAS are essential chemicals in a number of mainly industrial products, including many high-tech applications, often on account of their ability to resist heat and chemicals. PFAS are a challenge for all segments of industry, including chemicals, because various regulatory initiatives intend to limit the use of PFAS.

As a user of PFAS, we monitor the regulatory debate and support proportionate, implementable, and enforceable regulations based on robust scientific results and a reliable assessment of risks. We already include in our safety data sheets in the EU any PFAS that are classified as SVHC by REACH and are contained in our products at a concentration of more than 0.1% by weight.

Innovation

For Covestro, innovation as a driver of greater sustainability in line with our corporate vision of becoming fully circular 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 (R&D) 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 work at all levels in close partnership with the Chief Executive Officer (CEO), who is responsible for Innovation, to develop new products, refine established ones, and optimize manufacturing and processing procedures. Likewise, application areas, business models, and business processes are subject to ongoing review.

Covestro has split innovation activities into three core areas. For one, we conduct business-related R&D in the business entities, focusing on specific, short- and medium-term R&D issues. For the second area, the corporate Group Innovation function mainly deals with medium- and long-term sustainability, circular economy, and digital transformation issues. Issues of strategic importance, such as chemical recycling or applications of alternative raw materials for our product portfolio, are promoted on what we refer to as innovation platforms. Group Innovation is also responsible for providing a globally harmonized R&D infrastructure as well as providing the business entities with support for research and development. In addition, the corporate Process Technology function is responsible for short-, medium-, and long-term developments. It acts firstly by improving existing production processes with R&D projects that have a short or medium-term focus and secondly by promoting process developments related to sustainability, the circular economy, and digitalization, many of which are medium- to long-term in nature. Group-wide steering committees chaired by the CEO network and coordinate the three innovation areas. To ensure that innovation is coordinated with sustainability and digitalization issues, the head of the corporate Group Innovation function is a member of the relevant cross-functional steering committees, such as the ESG Governance Body (ESG GoB).

→ See “Product Innovations“ and “Process Technology Innovations.”

Innovation Management

By managing innovation across functions throughout the Group, we ensure that our ongoing and planned activities and our project pipeline always satisfy the needs of our user and consumer industries. Covestro uses a wide variety of tools to achieve this: For example, we use a standardized method to assess every R&D 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, an additional digital platform called “Covestro Ideenmanagement” (Idea Management) is available to employees in Germany and is used to manage all suggestions for improvement throughout the company. For example, at Innovation Celebrations (innovation events held in the regions), we recognize employee projects from around the world that reflect our broad understanding of innovation. The awards serve to recognize innovative ideas in the “Products and Applications,” “Process and Manufacturing,” “Business Model and Commercial,” “Business Processes,” and “Intellectual Property Strategy” categories. Furthermore, innovation management covers the systematic establishment and control of local and global alliances for acquiring skills that are strategically relevant and complementary to Covestro.

→ See “Strategic Partnerships and Collaborations.”

Sustainable R&D-Based Innovation Portfolio

Covestro already has many different sustainable solutions on the market and, going forward, aims to develop and market products even more closely aligned with the United Nations Sustainable Development Goals (SDGs). Attaining this goal means continually changing over our product range to sustainable solutions. For instance, in R&D we have already begun our pursuit of a much more sustainable project portfolio. This focus enables us to identify, research, and test unconventional and unique approaches early on, thus contributing to meeting the SDGs with our R&D products and technologies.

OUR INNOVATION GOAL

STATUS 2022

51%

of project expenditure

2021: 54%

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 are expected to be used in areas that contribute to reaching these goals.

We set high standards for evaluating our projects in line with our ambitious goal of committing 80% of R&D project expenditure to areas that contribute to meeting the SDGs and therefore only consider projects that make an additional contribution to the SDGs when measuring our progress. Since fiscal 2020, we have incorporated a Group-wide assessment process into the existing innovation process that measures our progress on projects to quantify this additional contribution. This involves subjecting all R&D projects to an assessment based on internal interviews with experts in which we ask specific questions to evaluate the impact of a project and its results on all 17 SDGs. Only projects adding specifically measurable value to the SDGs over and above that of solutions currently on the market are included. This assessment matrix was again applied to Covestro's R&D portfolio in the reporting year 2022. In this portfolio, 51% and therefore €39 million (previous year: 54% and €40 million) of R&D project expenditure now exceeds our defined threshold. A change in the project portfolio can be identified since more projects can be attributed to the indicator, although the costs they generated in fiscal 2022 were lower than in the previous year. Many of the R&D projects of the Resins & Functional Materials (RFM) business acquired from Koninklijke DSM N.V., Heerlen (Netherlands), in the year 2021 were already evaluated in accordance with the above assessment process in fiscal 2022. It was, however, not possible to capture the RFM-specific R&D project costs in the system for the full reporting year 2022, with the result that these projects were not yet included in determining target attainment for the reporting year.

In fiscal 2022, our total R&D expenditure amounted to €361 million (previous year: €341 million). This mainly went toward developing new application solutions for our products and refining products and process technologies. As of December 31, 2022, 1,477 employees* worked in research and development around the world (previous year: 1,477), most of them at the three major R&D sites in Leverkusen (Germany), Pittsburgh, Pennsylvania (United States), and Shanghai (China).

Strategic Partnerships and Collaborations

Research and Teaching

Covestro wants to increase the efficiency of its research with in-house activities and strategic collaboration with industrial and scientific partners. Alliances and collaboration in large, publicly funded consortia characterize our partnerships with research facilities and universities as well as with companies along the value chain.

* The number of permanent or temporary employees is stated in full-time equivalents (FTEs). Part-time employees are included on a pro-rated basis in line with their contractual working hours. The figures do not include employees in vocational training.

Covestro maintains long-standing and strategic partnerships with various universities. These include RWTH Aachen University (Germany), Tongji University in Shanghai (China), or the University of Pittsburgh, Pennsylvania (United States). On our path to becoming fully circular, we need cooperation partners that pursue this goal in terms of content and technology. RWTH Aachen University, for example, is above all known for its work in chemical process development. This benefits especially our collaboration in the CAT Catalytic Center, a cooperative research organization that allows us to combine catalysis and process research and use it as a basis to develop new chemical processes that can be implemented on an industrial scale. Our cooperation with Tongji University involves in particular materials for sustainable building and city planning. At the University of Pittsburgh, Covestro's involvement in the Covestro Circular Economy Program is in turn centered on (further) training on the circular economy. In addition, we are expanding our expertise in the chemical recycling of polymers. To this end, we cooperate with the Shanghai Institute for Organic Chemistry (SIOC) of the Chinese Academy of Sciences in Shanghai (China) and Tohoku University in Tokyo (Japan).

The QuinCAT – Quick Incubation in Catalysis incubator, which is subsidized by the German state of North Rhine-Westphalia and supported by Covestro, is under construction at RWTH Aachen University; it is expected to begin operating in the year 2023. The incubator will be a place for developing ideas involving chemicals to enable the founding of a start-up company as a second step. Covestro provides consulting on this process, and will be represented by our CEO on the steering committee when it convenes.

To establish the circular economy in the plastics industry, various recycling technologies have to be developed in parallel to make better processes available. Here, Covestro cooperates with RWTH Aachen University in the area of enzyme and biotechnology, focusing on three topics. The first is to develop enzymatic polymer recycling to convert plastics into usable monomers at the end of the lifecycle without effort or side effects. The second is to achieve a manageable breakdown of plastics released into the environment so that they decompose fully in a natural environment (programmed biodegradation). The third topic involves enzymatic methods for processing wastewater from plastics production to allow materials to be recovered and returned to the production cycle. For the next five years, the partnership will be subsidized by the German Federal Ministry of Education and Research.

Other Collaborative Projects

As part of the collaborative PUReSmart project, Covestro has developed an innovative process for chemical recycling of flexible polyurethane foam from used mattresses. This new technology can be used to make both recycling polyol, which allows reuse at the customer, and recycled toluylene diamine (TDA), which can in turn be processed into toluylene diisocyanate (TDI). Both materials are used to make flexible foams such as those in mattresses. In this way, we want to substitute fossil-based resources in production, reduce the carbon footprint of our materials, and create new solutions for handling plastic waste. Covestro operates a pilot plant in Leverkusen (Germany) for recycling flexible polyurethane foams to confirm laboratory results and gain findings to increase the scale further. These activities are taking place under the banner of Evocycle® CQ Mattress.

→ See "Furniture and Wood Processing Industry" and "Marketing and Sales."

Our alliances cover the entire value chain, linking the chemical and recycling industries. For example, we collaborate with environmental services provider Interzero Circular Solutions GmbH, Cologne (Germany), on innovative plastic waste recycling, and together with the French environmental organization Éco-mobilier – SAS, Paris (France), we are engaged in efforts to improve the recycling of waste from mattresses and upholstered furniture so that it can be reused in production.

Covestro is also working on ways to close the material loop for rigid polyurethane foams, which help to increase energy efficiency when used as insulation material in refrigerators and buildings. Along with 22 partners from nine countries, the collaborative CIRCULAR FOAM project was launched in fiscal 2021 with Covestro as its coordinator. In the next four years, experts from science, business, and society are expected to come up with comprehensive solutions for coordinated waste management and develop suitable methods for recycling these types of foams. The aim here is also to reclaim the raw materials used originally – polyols and an amine that is used as a precursor for diphenylmethane diisocyanate (MDI). Two official meetings were held in the reporting year already, giving all partners regular opportunities to discuss the research findings and project progress.

Covestro continued its cooperation with Circularise, The Hague (Netherlands), DOMO Chemicals, Leuna (Germany), and Asahi Kasei, Tokyo (Japan) in the reporting year to develop an open blockchain standard for establishing a data exchange protocol. The aim is to allow materials to be tracked along the value chain while protecting sensitive product information. Covestro expanded pilot projects in the reporting year to allow the traceability, determination of the origin of materials, and calculation of the carbon footprint and other sustainability metrics to be tested along the entire value chain. Covestro is currently working with the ISCC sustainability certification system and Circularise on rolling out ISCC PLUS certifications along complex supply chains. In addition to Covestro, other suppliers of materials, original equipment manufacturers (OEMs), and the trading company Itochu, Tokyo (Japan), are taking part in the ISCC pilot project.

→ See "Strategic Partnerships and Collaborations."

Digital Innovation

We are committed to pursuing digitalization along with the associated new opportunities for the entire chemical and plastics industry value chain. 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 R&D, in administrative functions, and at all points of contact with customers as well as in the development of new business models. One focus in the reporting year was on migrating all key applications to a cloud-based environment.

Cooperation with customers resulted in an example of how digital technologies can be used. By digitalizing the prototyping process for one of our business entities and using virtual copies of physical materials, the process from design to production can be accelerated at our customers. This also facilitates cooperation among members of cross-site teams. These digital components allow product designs to be realistically visualized at the early stages of development. They are also intended to make the existing product portfolio more accessible to customers.

Moreover, we use machine learning and artificial intelligence to obtain insights from data available in the company. Based on a Group-wide data analytics platform introduced in fiscal 2021, application cases are developed, operationalized, and scaled up. One example of successful application is the polyester production facility in Dormagen (Germany), where artificial intelligence was used in processing large volumes of process data of the facility, resulting in an estimated increase of 2% in the quantity of usable product.

Data science approaches used in the R&D departments of our business entities are also advancing our efforts to achieve full digitalization of these departments. Our high-performance computing cluster at the Leverkusen (Germany) site provides successful support to R&D in solving application cases. Computing capacity is also used, for example, to train complex machine learning models, develop algorithms and techniques in the area of quantum computing, and create photorealistic 3D renderings of materials made by Covestro. Here, we continued our cooperation with Google Ireland Ltd., Dublin (Ireland), as well as startups and universities. Covestro and its research partners have jointly published several important contributions on the development of quantum algorithms.

Computer simulations continue to be used on a comprehensive scale at all levels in R&D – from chemical quantum mechanics to the macroscopic level. A new digital simulation tool allows us to conduct large-scale analyses for different properties and scenarios, such as for catalyst performance, solvent-based properties, or polymer solubility. Examples include a newly developed digital tool that helps our customers detect the effects of changes in the formulation on foam properties or to obtain formulation suggestions that depend on the properties required. Initial application cases have also been conducted with the aim of becoming fully circular.

In an effort to fully digitalize the R&D processes in our laboratories we combine different complementary concepts. For example, the first fully digitalized research laboratories are already in use; they use a high degree of automation to generate detailed R&D data, which can in turn be stored on our global R&D knowledge platform. In this way, for example, properties and formulations can be forecast based on machine learning, which help our employees to develop products faster and more efficiently. In addition, we offer our R&D employees around the world digital collaboration opportunities as well as training programs that use augmented or virtual reality technology. By guiding them realistically through the scenarios to be taught, we can achieve higher safety standards in laboratories and production facilities.

In addition, a data-based centralized standard system (Covestro Monitoring Platform) was created to analyze on a permanent basis the condition of our production facilities and provide support, including for cost-efficient and predictive maintenance of machinery and plants. We moreover make large-scale use of our own process models, e.g., for the design of new plants and to train our employees with training simulators to ensure our plant operations are optimized.

Process Technology Innovations

Another key driver of innovation at Covestro is process technology. The designated corporate function is responsible for process technology in Covestro's production activities and supports operations in the segments. The key objectives are to optimize existing production processes, develop new process technologies, implement leading technologies in the process design for new production facilities, and take the production processes of newly developed products to industrial scale.

The optimization of existing production processes is a key element for meeting our sustainability target of becoming climate-neutral by the year 2035. For Covestro, this means reducing greenhouse gas (GHG) emissions in its own production (Scope 1) and from the provision and use of energy produced outside the company (Scope 2) and to reach net-zero GHG emissions* at all environmentally relevant sites by the year 2035. One focus is on reducing laughing gas emissions in the production of nitric acid by using innovative catalysts, which are currently being implemented in relevant projects at our sites in Baytown, Texas (United States), and Shanghai (China), with commissioning intended for fiscal 2024. In addition, the use of hot phosgene generation is intended to increase energy efficiency. Covestro already uses this technology, e.g., in isocyanate production in Shanghai (China), where it leads to a significant reduction in the amount of external steam required. Use of this process is also planned at other sites in Europe. At the new chlor-alkali production facility in Tarragona (Spain), Covestro's oxygen depolarized cathode technology is used on a large industrial scale for the first time; this plant's electricity needs are significantly lower than those of a conventional plant, thus making another contribution to reducing our CO_2 emissions.

At the same time, we are working on cutting emissions by increasing production output and reducing waste streams in the process. For example, waste volumes in TDI production in Dormagen (Germany) was reduced significantly by using new technology to process production residues. This technology is also in use at our site in Shanghai (China). We are simultaneously working on a process for reactivating a spent catalyst in making bisphenol A, which plays an important role as a basic building block for polycarbonate. The process is being tested at our site in Map Ta Phut (Thailand).

* Achievement of net-zero GHG emissions is defined as a balance between anthropogenic production of GHG emissions (caused by the company's own production activities and by the provision and use of energy produced outside the company) and anthropogenic reduction of GHG emissions.

On the road to climate neutrality by the year 2035, Covestro also aims to switch its production processes completely to renewable energy. A particular focus in this context is on the production of precursors and byproducts in the area of base chemicals (chlorine, caustic soda, hydrogen), which are the basic building blocks for many products in the chemical industry. To make them from saline solution using chlor-alkali electrolysis consumes a lot of energy. Covestro produces these three precursors and byproducts at its sites in Leverkusen, Krefeld-Uerdingen, and Dormagen in Germany. To switch these production processes to renewable energy, Leverkusen and Krefeld-Uerdingen have already been certified to the ISCC PLUS process* for producing chlorine as a precursor.

→ See "Climate Neutrality."

Thanks to digitalization, production facilities can be controlled more predictively, while processes can be optimized on an ongoing basis using digital simulations. In polycarbonate production in Antwerp (Belgium), the volume of rejects during the process was significantly reduced by returning them to the process, thus supporting circular production with maximum resource conservation.

→ See "Digital Innovation."

The development of new production processes to help us become fully circular also brought success in other respects. As a result, we managed for the first time in fiscal 2022 to produce bulk quantities of aminobenzoate, a biobased aniline precursor produced through fermentation. Covestro is currently working with other partners to take the process to commercial maturity as part of a publicly subsidized project. Success was also achieved in producing initial quantities of biobased hexamethylenediamine (HMDA), an important precursor for manufacturing coating raw materials. The project undertaken in cooperation with the US-based Genomatica, San Diego, California (United States), produced the compound on a pilot scale and thus achieved process development milestones.

→ See "Strategic Partnerships and Collaborations."

Product Innovations

In Covestro's two segments, Performance Materials and Solutions & Specialties, product innovations are under way for a number of industries, in particular our main customer industries.

Automotive and Transportation Industry

The automotive and transportation industry continues to transition to an electrified and autonomous future. We want to be actively involved in shaping and driving this transition with customer-centric innovations. We have developed our concepts for next-generation electric vehicles into technologies and solutions that can be made in standard production processes and presented them at K, the world's leading plastics trade fair, in Düsseldorf (Germany) in October 2022.

The exterior concept consists of a vehicle front into which functions, such as heat management, lighting, electronics, and new surface decoration, have been fully integrated and implemented on a modular basis. With our transparent near-infrared polycarbonate film from the Makrofol® product family, we additionally support the development of embedded sensors, which are indispensable for autonomous and assisted driving technologies. We therefore supply tinted film for optically measuring distance and speed (light detection and ranging, LiDAR, applications), e.g., for the front modules of electric vehicles. The interior concept is likewise built on modularity – with concealed, nonilluminated displays and seamless multi-material surfaces with touch-activated functions that are embedded in a scaled interior prototype. This allows the development of novel interior designs to meet the needs of passengers in autonomous vehicles. Based on full polycarbonate, both concepts are designed to have closed-loop potential; they are based on Makrolon® RE, a material with a reduced carbon footprint compared with conventional Makrolon®.

Polyurethane applications for the interiors of passenger and commercial vehicles are subjected to continuously increasing requirements to reduce the emissions of all materials used in the process. We drive the requisite improvements with continual enhancements in the different polyurethane product groups, Bayfill®, Bayfit®, Baynat®, and Baypreg®. Covestro provides other sustainable polyurethane products for this sales market as part

* While for mass-balanced raw materials (TDI and MDI), the use of raw materials is certified to the ISCC PLUS process, the certification in chorine production relates to the use of renewable energy.

of the Desmodur® product group, which are assessed according to the mass balance approach. We are moreover investigating the possibility of using chemical recycling on car seat foams to make the polyurethane precursors and their components reusable. Together with external partners, we have also started to look into the recyclability of seat upholstery as a way to obtain raw materials that can in turn be used to make polyurethane products.

The transition from combustion engines to electric drives is also opening up new sales opportunities for Covestro. The introduction of the portfolio of flame-retardant products, including the Makrolon®, Bayblend®, Makroblend®, and Apec® product groups, allows batteries to be charged quickly and safely as a result of versatile housing solutions for batteries.

With the new Dockit® capsule system, customers can manufacture two-component (2C) clearcoats for vehicle repairs within a matter of seconds. The capsule system contains clearcoat and hardener in the required proportions. It is ready for use at the press of a button and can be applied with a spray gun. Previously, car workshops first had to measure, weigh, and mix the raw ingredients for 2C clearcoats. The new system saves time, reduces the probability of error, and is easy and safe to use. What is more, for multi-layer paint protection films, our Desmopan® range provides weather resistance, transparency, and resistance to protect the car paint from environmental influences such as chippings, dust, scratches, and chemical substances. The life of these types of multi-layer films is extended by the physical properties and chemical resistance of our Desmopan® range. Conventionally produced films last one to two years, while Desmopan® can help extend their life to five to ten years. Another development is a new process for producing films with reduced thickness from the Makrofol® product group. These films are used in ultra-thin materials such as membranes, e.g., those found in laboratory diagnostics, at automotive and electronics suppliers, in ventilation systems in industry and the automotive sector, in interior and exterior vehicle lighting, in insulating films, or in loudspeakers.

Furniture and Wood Processing Industry

Our activities for the furniture and wood processing industry are also focused on sustainability. For example, as part of the publicly subsidized PUReSmart project of the European Union (EU), an innovative process is being developed for chemical recycling of flexible polyurethane foam from used mattresses.

→ See “Strategic Partnerships and Collaborations.”

The Desmodur® CQ product group already has products available that have been made with a proportion of alternative raw materials of at least 25%. These more sustainable TDI products, which are assessed according to the mass balance approach, reduce CO_2 emissions and the use of fossil-based resources; they are used, e.g., in upholstered furniture, mattresses, and thermal insulation.

→ See “Labeling of Circular Solutions in the Product Portfolio.”

Arfinio® injection molding technology combines liquid high-performance polymers with minerals, enabling manufacturers of solid surface and injection molding applications to produce extremely light yet durable materials. This combination allows the production of seamless shapes without requiring sheets, while achieving mechanical strength, light stability, reparability, as well as low product weight, rapid production, and improved freedom of design. The molded bodies can be used to make a number of different products, ranging from device housings through interior trims down to building facades.

Construction Industry

For the construction industry, our work is centered on our core application – rigid polyurethane foams. Used as an insulation material, it makes an important contribution to energy efficiency. To make the insulating material itself more sustainable, two climate-neutral* products have been added to the Desmodur® product range, each of which is a main component in the production of polyurethane insulating materials. Sustainable recycling solutions for rigid foams are being developed as part of the EU-subsidized CIRCULAR FOAM project, which develops above all chemical recycling to recover the raw materials for Covestro’s production processes.

→ See “Strategic Partnerships and Collaborations.”

* Climate-neutral (from cradle to Covestro’s gate) according to internal calculations in accordance with the methodology for ascertaining our ecological footprint, which has been critically reviewed by TÜV Rheinland based on ISO standards 14040 and 14044.

Another new solution developed in the reporting year allows mining sieves with inserts to be mechanically recycled rather than the previous practice of burning or taking them to landfill. Substitution with an insert made in a novel way allows the sieve to be mechanically recycled and turned into fine pellets in the process. In a plant developed by us, these pellets can then be processed in a second step and added to a formulation for making new sieves. Another benefit is that mass-balanced products can be used in these formulations.

Electrical, Electronics, and Household Appliances Industry

In our activities for the electrical, electronics and household appliances industry, new materials were developed in the reporting year, again with a focus on sustainability. For example, new compounding products with a high post-consumer recyclate (PCR) content have been developed, which supplement the PCR portfolio by adding a broad range of applications. A climate-neutral* portfolio has also been created with the Makrolon® RE product group, which provides solutions for all key areas of the electrical and electronics industry. In addition, a portfolio of products with improved flame retardance has been developed, combining improved properties in relation to rigidity and tenacity with easy processing. These products are used for low-voltage applications, such as circuit breakers for switching high currents and smart electricity meters. In the area of heat management solutions, the portfolio has been expanded by adding flame-retardant materials frequently deployed in home automation, power supply, and lighting applications.

Our range of offerings also includes more sustainable thermoplastic elastomers, e.g., for consumer electronics. These materials boast properties comparable to those of purely fossil-based thermoplastic elastomers, but have an improved environmental footprint. Since the introduction of partly biobased products in the Desmopan® CQ product group, we have combined alternative raw materials obtained directly from biomass with raw materials with a renewable share allocated via the mass balance approach. In the products made with renewable energy, the mass certified as sustainable accounts for up to 80%, while allowing CO_2 emissions to be reduced by up to 52%.

→ See “Labeling of Circular Solutions in the Product Portfolio.”

Other Industries

To further boost our offering for the wind industry, a new Wind Technology Center was established in Leverkusen (Germany). At this center, Covestro carries out research into material solutions for sustainable energy generation, such as developing new and optimizing existing polyurethane resins for manufacturing rotor blades for wind turbines. This is done in close cooperation with our customers to ensure that industry-relevant and robust solutions are developed. Another area of application for our products relating to wind energy involves cable protection solutions made of polyurethane elastomers for offshore wind turbines. To reduce the size of the cable protection, Covestro has developed a new formulation with which the material required can be reduced by up to 30% without impairing the properties of the application. This formulation will, moreover, be one of the first to be available in a mass-balanced version.

For the health industry, Covestro has developed an innovative concept for administering medicines, using the Makrolon® or Bayblend® product groups with different properties, such as low frictional resistance or glazing. This polycarbonate-based concept simplifies sorting for recycling compared to conventional devices for administering medicines. Another innovation is a material with a low carbon footprint in the Makrolon® product group for respiratory and medication applications. Since hospital-acquired infections present a problem in the health sector, we are developing materials that can withstand aggressive disinfectants. To this end, new flame-retardant Makrolon® and Makroblend® materials have been developed and introduced for use in durable medical equipment.

* Climate-neutral (from cradle to Covestro’s gate) according to internal calculations in accordance with the methodology for ascertaining our ecological footprint, which has been critically reviewed by TÜV Rheinland based on ISO standards 14040 and 14044.

Employees

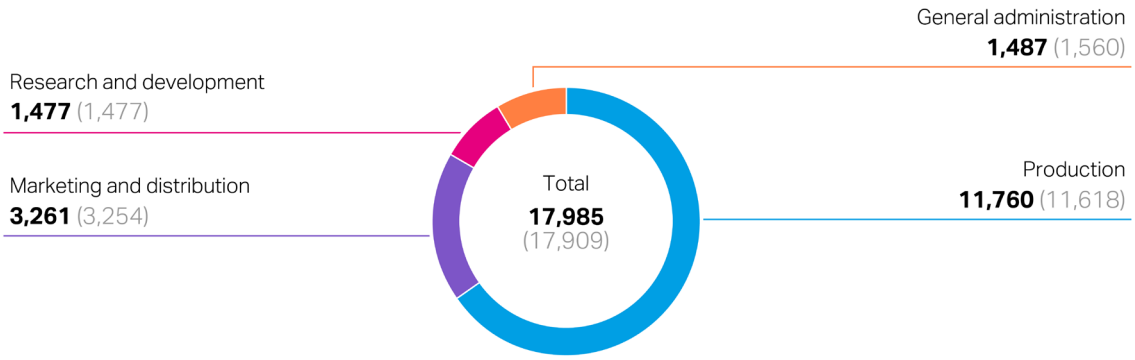
The multifaceted abilities and personal efforts of all employees contribute materially to Covestro's success. All employees have both the freedom and the mandate to act and contribute in line with the company's goals, values, and culture. Covestro thus promotes a working environment that is shaped by 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 and expand their expertise. Our managers are responsible for facilitating and supporting these goals in close collaboration with our employees. In this way, we can work together to make an ongoing contribution to the company's success. Our social responsibility as a company and an employer is based on our unreserved commitment to supporting and fostering human rights in our sphere of influence. In the interest of encouraging a transparent exchange of information within the company, e.g., employee questions and comments are collected – anonymous or not – and regularly addressed and answered by the Board of Management in video messages and virtual global meetings (e.g., WeAre1 talks and town halls meetings). Until June 2022, the questions were collated using the Slido software, which, from July 2022 onward, was replaced by the newly introduced Yammer networking platform.

Organizationally, the corporate Human Resources (HR) function reports to the Chief Executive Officer (CEO). All human resources activities are the responsibility of the management of the corporate HR function.

As of December 31, 2022, Covestro had 17,985 employees worldwide (previous year: 17,909). At the reporting date, the Group also had 575 employees in vocational training worldwide (previous year: 581), 566 of whom were based in Germany (previous year: 568).

→ See note 9 "Personnel Expenses and Employee Numbers" in the Notes to the Consolidated Financial Statements.

Employees by division[1]



[1] The number of permanent or temporary employees is stated in full-time equivalents (FTEs). Part-time employees are included on a pro-rated basis in line with their contractual working hours. The figures do not include employees in vocational training.

Corporate Values and Corporate Culture

Covestro is proud of its corporate values, summarized as C[3]: curious, courageous, and colorful. Curiosity drives us to think beyond the horizon 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 the Group's employees and are reflected in their daily thoughts and actions.

Our corporate "We Are 1" culture is based on Covestro's values and behaviors, and is an integral part of our strategy. Our employees influence and shape this corporate culture. A culture filled with life by our employees enables us to pursue our strategy and therefore contributes to Covestro's success now and far into the future. Our corporate culture empowers all employees to always act responsibly, to strive for continual improvement, to nurture collaborative teamwork, and to be outstanding leaders.

→ See "'Proud to Belong' Action Area."

Human Resources Guiding Principles and Strategy

The major trends, such as digital transformation, demographic change, or continuous transformation in all areas of life and work, and the trend toward individualization – freedom of choice and self-determination – are changing our work and the ways we do it. The corporate HR function therefore focuses on the development and implementation of initiatives that sustainably support our business success in view of these changes, while at the same time encouraging professional development and engagement across the board. In keeping with a holistic people strategy, Covestro's Board of Management is dedicated to promoting diversity, equity, and inclusion as well as ensuring our employees are appropriately qualified. Workplace health and safety is a fundamental requirement for our work.

These issues and the Group's Sustainable Future strategy are reflected in our people strategy, which provides guidance for all activities and priorities of the corporate HR function. It breaks down into five action areas: "Place to be," "committed to perform," "ready to grow," "enabled to perform," and "proud to belong."

Covestro's People Strategy and its Action Areas

"Place to Be" Action Area

The "place to be" action area of Covestro's people strategy guides the activities of the corporate HR function toward maintaining and enhancing Covestro's attractiveness as an employer through various initiatives and making our current and future employees passionate about their work and our company.

Work-Life Balance

We support work-life balance for our employees. For instance, partnerships with daycare 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 can differ, depending on the particular Covestro 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 personal reasons. Employees around the world take advantage of this offer.

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, stimulating working environment that promotes flexible ways of working.

Open-plan office environments combined with flexible work concepts encourage contact and the exchanges across team and departmental boundaries and thus encourage more communication and interdisciplinary cooperation. We call this work environment our C^3 way of working based on our C^3 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. Our philosophy applies particularly to cases such as moving into or creating new workspaces. An example of these new workspaces is the corporate headquarters in Leverkusen (Germany), which opened for business in the year 2020. Active change management prepared employees for and involved them in shaping new work environments. To achieve this, we provide not only the appropriate facilities, but also easy-to-use IT infrastructure and media technology. For the design of the corporate headquarters and the integration of our C^3 values into an architectural concept, Covestro received a design award, the German Brand Award in gold. The award is presented by the German Design Council, a nonprofit foundation based in Frankfurt am Main (Germany), and the German Brand Institute.

The mobile working concept, which allows working from home and on the move, gives employees, teams, and our organization a wide variety of new options. However, we continue to believe that personal interaction on site is very important for ensuring lasting collaboration and maintaining our innovation capability in line with our "We Are 1" culture. We have developed different measures at our sites around the world to assist managers and employees in returning to the office and successfully manage the transition to a hybrid form of working, i.e., the collaboration of employees from different locations, such as home, production, or the office. Our managers play a special role in this system. In addition to implementing established leadership standards and modern work methods, they increasingly collaborate with their employees to develop agile and customized solutions to support Covestro's efforts to exploit the potential of this new work environment.

Employer Attractiveness

Covestro aims to recruit qualified employees for the company, ensure their professional and personal development, and retain talent for the long term. We strive to be perceived as an attractive employer worldwide and to reinforce our employer brand, especially through diversity in the workforce, and raise awareness of our company among our target groups.

We take responsibility worldwide for students entering the workplace and maintain close contacts with leading universities like RWTH Aachen University (Germany), the University of Pittsburgh, Pennsylvania (United States), or Tongji University in Shanghai (China). We bring in university students to take part in professional internships worldwide each year. This gives them insight into our company's operations as well as personal experience with Covestro as an attractive employer. In fiscal 2022, we offered 394 internships around the globe.

In addition to opportunities to join the company after studying, Covestro offers alternative routes into working life. In Germany, for example, 183 young people were able to start their careers with Covestro in the year 2022. We offer vocational training in a number of scientific and technical professions. If the vocational training is completed successfully, trainees are guaranteed a position with the company. Our particular interest in schools is aimed at raising awareness of STEM professions and making them more attractive to young people. The abbreviation STEM stands for science, technology, engineering, and mathematics in paths of study and careers. For example, in the year 2022, we presented career opportunities available at Covestro to a number of different (partner) schools in Germany and invited interested learners on tours of the plant.

To help meet our need for qualified personnel, we engage in HR marketing campaigns around the world, in particular by maintaining a social media presence. In the United States, we actively use the LinkedIn platform to mark events such as the International Day of Women and Girls in Science. In Belgium and the Netherlands, we post videos on Facebook to give an insight into our plants and the work of our employees in production, while in China we use virtual reality technology to show off the company's premises in Shanghai (China). Alongside participation in traditional career fairs, the recruiting teams from Germany and China also explained our career opportunities at two trade fairs, the plastics trade fair K 2022 in Düsseldorf (Germany) and the China International Import Expo (CIIE) in Shanghai in the year 2022.

Covestro received several major employer awards and accreditations in the reporting period. The Top Employers Institute certified Covestro in Germany, the United States, and China. In Spain, the company received an award from Forbes Magazine, ranking us among the top 75 most attractive companies in the country. In Mexico, it was also ranked second among the country's top 100 companies with fewer than 500 employees.

Supplementary information >

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

In the reporting year, we hired a total of 1,330 new employees worldwide. The number of new hires was considerably lower than in the previous year, as in 2021 the new hires resulting from the acquisition of the RFM business were included in this key performance indicator (KPI).

New hires[1] by age group, gender, and region in fiscal 2022

	EMLA		NA		APAC		Total	
	FTE	%	FTE	%	FTE	%	FTE	%
Women	**192**	**14.4**	**41**	**3.1**	**120**	**9.0**	**353**	**26.5**
< 30 years	94	7.1	16	1.2	42	3.1	152	11.4
30 to 49 years	87	6.5	18	1.4	74	5.6	179	13.5
≥ 50 years	11	0.8	7	0.5	4	0.3	22	1.6
Men	**548**	**41.3**	**177**	**13.3**	**251**	**18.9**	**976**	**73.5**
< 30 years	272	20.5	70	5.2	92	6.9	434	32.6
30 to 49 years	249	18.8	90	6.8	153	11.5	492	37.1
≥ 50 years	27	2.0	17	1.3	6	0.5	50	3.8
Total	**740**	**55.7**	**218**	**16.4**	**371**	**27.9**	**1329**	**100.0**

[1] The number and percentage of permanent or temporary employees is stated in full-time equivalents (FTEs). Part-time employees are included on a pro-rated basis in line with their contractual working hours. Percentages represent the distribution of new hires. The figures do not include employees in vocational training.
One newly hired individual did not state their gender. This information was not included in the presentation above for data protection reasons.

A total of 1,192 employees worldwide left the Group in fiscal 2022. Employee attritions in the different regions and age groups varied widely in some cases.

Attritions[1] by age group, gender, and region in fiscal 2022

	EMLA		NA		APAC		Total	
	FTE	%	FTE	%	FTE	%	FTE	%
Women	**103**	**4.7**	**55**	**8.9**	**130**	**9.5**	**288**	**6.9**
< 30 years	28	9.1	11	18.0	14	12.5	53	11.0
30 to 49 years	43	3.6	22	6.9	100	8.9	165	6.3
≥ 50 years	32	4.5	22	9.1	16	11.9	70	6.5
Men	**408**	**5.1**	**216**	**9.7**	**280**	**7.9**	**904**	**6.5**
< 30 years	62	6.3	23	10.3	32	9.2	117	7.5
30 to 49 years	118	3.3	74	7.1	203	7.7	395	5.4
≥ 50 years	228	6.5	119	12.6	45	8.2	392	7.8
Total	**511**	**5.0**	**271**	**9.5**	**410**	**8.3**	**1,192**	**6.6**

[1] The number and percentage of employees are calculated on the basis of full-time equivalents (FTEs). 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). The figures do not include employees in vocational training. There were no attritions of employees who did not provide gender information.

< Supplementary information

Employee Engagement

A key aspect of attaining our goal of becoming a place to be is to get a better understanding of the factors that our existing employees consider important to increase their engagement. To identify these factors and keep track of trends, we use the global ENGAGE survey to measure and improve employee engagement; the survey was continued in the year 2022. All employees worldwide can provide feedback several times a year by filling out a voluntary, anonymous online survey on key issues in their work environment. The results are then shared transparently with the employees and appropriate improvement measures are agreed jointly by employees and line managers. Three survey rounds were conducted in the year 2022, each with a participation rate of around 70%, similar to the previous year.

"Committed to Perform" Action Area

We offer competitive and fair working conditions, compensation, and additional benefits in accordance with market conditions and our social responsibility. This is an essential prerequisite for recruiting, retaining, and motivating qualified employees. This is what our people strategy efforts in the "committed to perform" action area are aimed at. Covestro 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. For management functions, a standardized 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.

In accordance with our corporate "We Are 1" culture, the compensation structure is standardized for all Covestro employees The variable compensation is based on a uniform system with identical criteria; differences exist only in the target percentages related to fixed compensation. The Covestro Profit Sharing Plan (Covestro PSP), a short-term variable compensation program in force throughout the Group, applies – with few exceptions, essentially due to collective bargaining arrangements – for all Covestro employees worldwide, including the Board of Management. It makes it possible for our employees to participate in the company's performance each year with a uniformly calculated bonus payment. Since the year 2022, the four areas of profitability, liquidity, profitable growth, and sustainability have each accounted for one quarter of the calculation formula used to measure target attainment. In addition, employees in management functions, as well as members of the Board of Management, participate in Prisma, the global stock-based compensation program for long-term variable compensation. Payments are based on the Covestro share price, including comparisons with our competitors, and in this way the program rewards the long-term changes in the company's share price. Since the tranche launched in the year 2021, this program has included a sustainability component comprising a reduction target for carbon emissions and other greenhouse gases such as nitrous oxide.

→ See Compensation Report, section "Short-Term Variable Compensation" and section "Long-Term Variable Compensation."

Furthermore, a global budget is available from which management-level staff 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 21 "Other Provisions" in the Notes to the Consolidated Financial Statements.

As in previous years, the Covestment share participation program was offered once again in fiscal 2022 and provided employees with the opportunity to purchase Covestro shares at a discount. In the year 2022, 99% of Covestro's global workforce was thus able to purchase Covestro shares at discounted prices. Around 38% of all eligible employees worldwide took advantage of this offer.

→ See note 21 "Other Provisions" in the Notes to the Consolidated Financial Statements.

Supplementary information >

In the year under review, 69% of our employees worldwide (mainly in Central Europe, Brazil and most of our employees in China) were subject to collective bargaining or works 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 managerial decisions affecting the workforce.

As of December 31, 2022, 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 support to pursue alternative career paths. 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

"Ready to Grow" Action Area

Well educated and trained staff is crucial for our company's continuing development and success. This is reflected in the "ready to grow" action area of Covestro's people strategy. We want to promote talent and encourage employees to try out new possibilities for personal development.

We believe in lifelong learning and therefore continued to support in particular self-directed leaning in fiscal 2022. To this end, we expanded our digital content and optimized the personal and professional further training options for management, innovation, project management, and digitalization. A new program for learning languages was also introduced, which is available to employees wishing to develop their linguistic skills in nine languages. To assist our internal training staff, we have implemented a learning toolbox, which covers all key elements of the learning process, from analysis to quality control. For new internal training staff, this concept includes the appropriate qualifications for conceptualizing, designing, and implementing internal training. These measures are intended to provide optimal support to our employees for personal and professional development in all phases of their careers.

Our people development activities include working on an updated, more agile approach to performance, development, careers, and our talent portfolio. For instance, we intend to introduce new initiatives in line with our "We Are 1" culture that are streamlined, transparent, and intuitive. The aim is for management staff, other employees, and the company to grow, deliver high performance, develop, and be successful now and in the future. This requires all of our employees, especially our management staff, to approach their work from a development perspective and be ready to learn new skills and approaches.

"Enabled to Transform" Action Area

We continually lead, inspire, and train our employees to enable them to master future challenges.

In the year 2022, a new HR information portal (InfoHub) was created; it provides information on the return to the office following the pandemic and on hybrid working. Specific information events were held initially to support management staff in dealing with these new circumstances. The events addressed specific issues affecting shared understanding of the framework of mobile and hybrid working. Moreover, the corporate HR function collated information and developed training content to make the transition easier for employees. This was supplemented by training events, examples of best practice of how to deal with challenges, educational videos, and specific materials for managers. In addition, recommendations were given on IT and media issues and on how to choose and use the available technology and facilities most efficiently. All this is to harness the opportunities of a generally mobile and flexible way of working.

Digital inclusion and transparency in communications are critical success factors in the new normal of working. Regardless of whether or not they work simultaneously from the same location, all employees have to have the same information and possibilities available to them. This applies in particular to access to information and prompt exchanges with line managers and other team members. This is how we integrate Covestro's "We Are 1" culture into the world of hybrid working.

"Proud to Belong" Action Area

The "proud to belong" action area of Covestro's people strategy is centered around our corporate values and our corporate culture, with a focus on diversity, equity, and inclusion, as well as safe and healthy working conditions for our employees.

→ See "Corporate Values and Corporate Culture."

Constructive cooperation with the employee representative body on a basis of trust is an integral part of our corporate culture. It allows us jointly to come to important decisions, some of which can be difficult for the company, after considering all perspectives and to put them on a broad foundation. The interests of employees and the company can in this way be balanced, even in difficult situations. Employees at all sites around the world have the right to elect their own employee representatives. Matters affecting several European countries are dealt with in the Covestro European Forum.

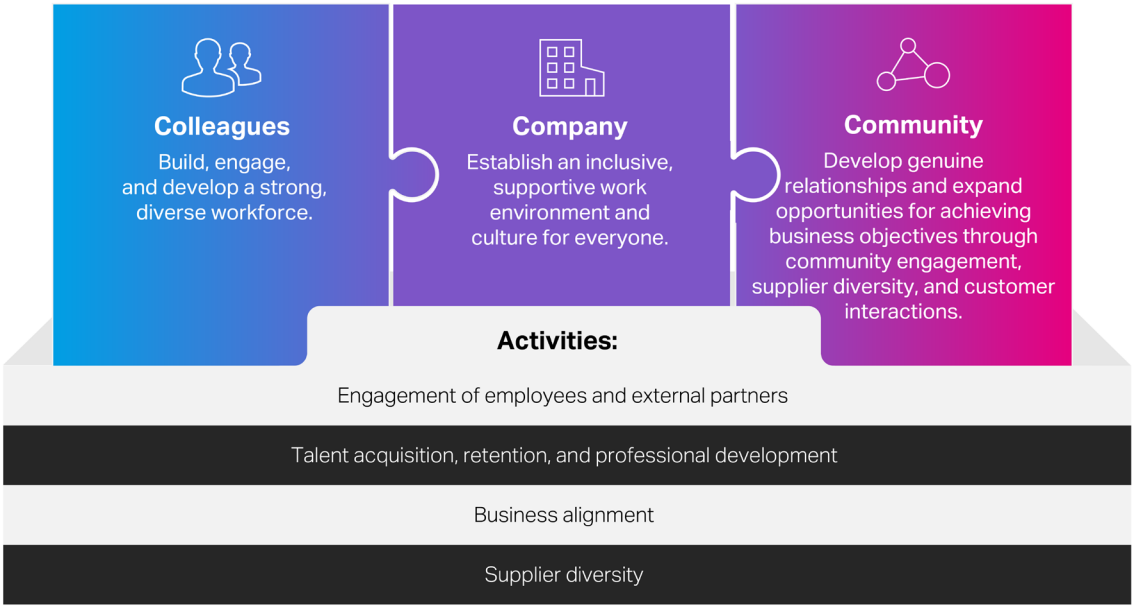
Promoting Diversity, Equity, and Inclusion

We work to make the world a brighter place. Diversity, equity, and inclusion (DEI) are key components of our corporate culture. We advocate for an 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. We also believe that a diverse workforce and inclusive environment are important drivers of innovation, sustainability, employee engagement, and business success. Our goal is to create an environment at Covestro in which all employees can give their best each and every day.

+ More information can be found in our Diversity & Inclusion Report, which was published in 2021, at:
www.covestro.com/en/company/strategy/people-and-culture

Covestro's DEI strategy is derived from our values and based on three core principles: Colleagues, Company, and Community. These are three essential factors for building a strong, diverse, equitable, inclusive, and innovative work culture at our sites. Our corporate objectives and the culture we need for diversity, equity, and inclusion are driven by our employee networks and councils and supported by management and all members of Covestro's Board of Management.

Our diversity, equity, and inclusion strategy



The first principle, "Colleagues – build, engage and develop a strong, diverse workforce" of our DEI strategy encompasses all activities that aim to make Covestro's workforce more diverse. Employee networks are a key factor in involving our staff even more in driving diversity. We want to bring people together in these networks, and promote an exchange of inspiration and ideas. Covestro has many global and regional employee networks with different focus areas worldwide. The global UNITE network focuses on all issues of concern to the LGBTIQ (lesbian, gay, bi, trans, intersex, queer) community, and the Compass network is for employees interested in gender equity. These networks organized activities around the world in the year 2022. As part of a gender equity campaign in Germany, Compass discussed actions that each individual can establish under their own initiative to promote equity in day-to-day operations. During Pride Month, our LGBTIQ networks took part in Christopher Street Day Parades in Mexico City (Mexico), Houston, Texas (United States), and Pittsburgh, Pennsylvania (United States). In addition to the employee networks, some sites also have DEI Councils, which provide support for implementing the strategy and for the activities of the employee networks.

Under the "Company – establish an inclusive, supportive work environment and culture for everyone" principle, we have bundled all efforts and initiatives aimed at promoting inclusion. Covestro is aware that companies are more successful it they encourage diversity in their workforce. We strive to promote diversity and equity for all employees at all levels. For example, Covestro is committed to gender equity worldwide and the Board of Management has therefore undertaken to reach a proportion of 40% women in Covestro's total workforce by the year 2029. At the end of the reporting year, women made up 23.4% of our worldwide headcount (previous year: 23.1%).

→ See "Promotion of Equal Participation of Women and Men in Leadership Positions."

To mark the 10th German Diversity Day, we addressed the issue of people with disabilities and presented our inclusion agreement, which was entered into with the Representative Body for Severely Disabled Employees in the year 2022. Moreover, our Chief Commercial Officer, Sucheta Govil, together with female Board members of other industrial companies, took part in a panel discussion on how employers can contribute to a supportive environment for women that offers equal opportunities and is free from prejudice. The first themed week was also held in the APAC region in June 2022 during which various events on diversity issues were presented.

As part of the "Menstruation is everyone's issue" initiative in Mexico, Covestro provides female hygiene articles free of charge in restrooms in all plants and offices and grants paid leave in cases of severe menstrual pain. In an information campaign conducted alongside this initiative, Covestro provides guidance on when women with menstrual problems should consult the company doctor.

In the United States, our CEO Dr. Markus Steilemann chaired an expert panel discussion organized by our employee network to mark Black History Month. Black History Month originated to recognize the contribution of people with Afro-American roots in the United States. It honors all people of color from all periods of US history, from the first slaves who arrived from Africa in the early 17th century to the people with Afro-American roots living in the United States today.

Our efforts are showing success: Particularly notable is our participation in the Disability Equality Index, a US benchmark supporting inclusion and equality for people with disabilities. Covestro was recognized as one of the best employers for people with disabilities in this rating. In Germany, Covestro was ranked 12th in the German Diversity Index in 2022, which measures the diversity commitment of DAX-listed companies. In China, we received the DEI Best Practice Award.

The "Community – achieving business objectives through community engagement, supplier diversity, and customer interaction" principle summarizes how we, together with our partners, intend to create the basis for greater diversity in society. Covestro actively promotes diversity, equity, and inclusion in pursuing its own activities and by working shoulder-to-shoulder with outside parties. This is the only way these objectives will be permanently integrated into the company as well as society. For this reason, we are further expanding our cooperation with various partners.

In a joint campaign with our logistics service provider Maersk during Pride Month in June 2022, we installed a rainbow container outside our corporate headquarters in Leverkusen (Germany) and started discussions on LGBTIQ issues with neighbors and employees. In the year 2022, Covestro entered into a partnership with the World Organization for Sustainability Leadership (WOSL) in China and launched the Covestro Cup 2022 "I Speak, I Act, I Impact – China Student Orator and Illustrator Contest." Together with the WOSL, we focus on promoting the development of fair and inclusive quality education, raise awareness of goals and create a sense of responsibility among the young generation, and inspire young people to shape a sustainable future together.

Supplementary information >

Employee Metrics on Diversity and Internationality

As of December 31, 2022, Covestro had 17,985 employees worldwide comprising 88 different nationalities, 76.6% of whom were male and 23.4% were female. Members of the Board of Management and of the Executive Leadership Team (executives at the two highest contract levels below the Board of Management) represented eight different nationalities.

The majority of Covestro's employees (57.1%) worked in the EMLA region. The APAC region accounted for 27.2% of our employees, while 15.7% of the workforce was based in the NA region.

Employees[1] by employment status, region, and gender in fiscal 2022

	EMLA		NA		APAC		
	Women	Men	Women	Men	Women	Men	Total
	FTE	FTE	FTE	FTE	in FTE	FTE	FTE
Employees with permanent contracts	2,162	7,955	621	2,187	1,347	3,503	17,780
Employees with temporary contracts	50	104	1	7	24	19	205
Total	**2,212**	**8,059**	**622**	**2,194**	**1,371**	**3,522**	**17,985**

[1] The number of permanent or temporary employees is stated in full-time equivalents (FTEs). Part-time employees are included on a pro-rated basis in line with their contractual working hours. The figures do not include employees in vocational training. Five employees worldwide did not state their gender. This information was not included in the presentation above, which results in deviations in the total number of employees.

Permanent employees[1] by type of employment and gender in fiscal 2022

	Women	Men	Total
Part-time	854	2,312	3,167
Full-time	3,486	11,584	15,074
Total	**4,340**	**13,896**	**18,241**

[1] The number of employees (headcount) is stated irrespective of their degree of employment. The figures do not include employees in vocational training. Five employees worldwide did not state their gender. In the presentation above, this information was included only in the total; as a result, the total number of employees differs from the sum of the individual numbers by gender.

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

Employees[1] by employee group and gender in fiscal 2022

	Women	Men	Total
	%	%	%
Board of Management and Executive Leadership Team	0.1	0.2	0.3
Middle management	2.7	8.9	11.6
Junior management	7.0	17.1	21.1
Skilled workers	13.6	50.4	64.0
Total	**23.4**	**76.6**	**100.0**
Employees in vocational training	21.7	77.7	100.0

[1] The information was determined from the number of permanent or temporary employees, stated in full-time equivalents (FTEs). Part-time employees were included on a pro-rated basis in line with their contractual working hours. Employees in vocational training are disclosed separately in this KPI. Five employees and three trainees worldwide did not state their gender. In the presentation above, this information was included only in the total; as a result, the total number of employees differs from the sum of the individual numbers by gender.

Employees[1] by employee group and age group in fiscal 2022

	< 30 years	30 to 49 years	≥ 50 years	Total
	%	%	%	%
Board of Management and Executive Leadership Team	0.0	0.1	0.2	0.3
Middle management	0.0	5.5	6.1	11.6
Junior management	0.8	15.5	7.8	24.1
Skilled workers	10.4	34.0	19.6	64.0
Total	**11.2**	**55.1**	**33.7**	**100.0**

[1] The information was determined from the number of permanent or temporary employees, stated in full-time equivalents (FTEs). Part-time employees were included on a pro-rated basis in line with their contractual working hours. The figures do not include employees in vocational training.

< Supplementary information

Designing Healthy Working Conditions and Work Models

Covestro is aware that the company's future depends on the health and performance of its employees. For this reason, preventive healthcare is a key component of our corporate "We Are 1" culture and also forms part of our people strategy. Workplace health management is primarily aimed at enabling health-appropriate and health-promoting working (environmental prevention) and at strengthening the health resources and potential of individuals (behavioral prevention). This is intended to improve the work environment and health and wellbeing in the workplace and to prevent risks to health at work.

Health objectives and actions are derived by identifying needs relevant to Covestro, at corporate or division level as well as for the employees. Concrete health objectives are formulated on the basis of information, obtained through health surveys, on the health situation relating to the requirements imposed on employees and their ability to meet them (resources). The focus here is on those indicators for which the analysis has identified a clear need for action. They relate for example to an improved ability to switch off, adequate support by managers, or a reduction in the perceived high workload and responsibility. Targeted measures are offered to improve the health situation, such as attending the "Healthy management" seminar for managers, workshops for analyzing the causes of high workloads, or stress management courses. All measures are therefore tailored to the prevention requirement identified on the basis of health data; they are organized holistically as required by environmental and behavioral prevention. Our basic principles include the constant improvement of working and organizational conditions and the identification of factors that either promote or are detrimental to health.

→ See "Health and Safety."

Our management staff has a significant influence on the performance and wellbeing of our employees. Against this backdrop, we ensure that our managers are qualified to the best possible extent for healthy management at Covestro and receive advice on how to discharge their duties.

The corporate HR function is aided in all its work by the corporate Group Health, Safety and Environment, Law, Intellectual Property & Compliance, and Corporate Audit functions. They ensure that all internal guidelines and all relevant standards and labor law requirements are met.

→ See "Integrated Management System for Health, Safety, Environment, Energy, and Quality."

We continually strive to create working conditions that take account of any burdens on individuals in a continually changing working environment. 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. Direct dialogue with our employees is particularly important to us. In this regard, we take into account national and international notification duties. The nature and scope of our health promotion programs differ around the world with regard to the respective country-specific need for development and access to national health systems.

At Covestro, our social responsibility as a company and employer also includes creating fair working conditions that are based on mutual respect and appreciation among employees and particularly ensure safety, health, and wellbeing in the workplace. Our personnel policy also features a strong social safety net for our employees.

→ See "Human Rights" and "Compliance."

Health and Safety

For Covestro, safety is an essential foundation of our business activities. The continuous improvement of a safe work environment is a key component of our corporate responsibility and a topical focus of our human rights due diligence activities. Covestro adheres to the applicable standards, domestic regulations, and laws. These regulations aim to prevent injuries, equipment breakdowns, and transportation incidents, as well as preserve 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.

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 treated similarly to events that have actually occurred and require detailed root cause analysis and communication. Promoting safety awareness among employees is essential for minimizing dangerous situations during day-to-day operations. For this reason, Team Resource Management training to further increase safety awareness and safe conduct among our staff continued in the year 2022.

In the year under review, our employees were encouraged for the 14th time to take part in the CEO Safety & Health Award and submit suggestions for improving occupational health and safety. Due to a serious workplace accident at our site in Shanghai (China), the Board of Management decided not to make an award this year.

Occupational Health and Safety

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. In support of our Toward Zero goal, the health and safety of our employees in their day-to-day work are the focus of our safety management system, This also includes 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 Health, Safety, Environment, Energy, and Quality (HSEQ) management system is a major contributor to fulfilling this vision.

→ See “Safety and Accident Prevention.”

An integrated information management system (IIMS) implemented throughout the Group exists for reporting and processing work-related accidents and incidents, as well as potential hazards. 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. The company’s safety experts, supported by external expertise if needed, analyze the background circumstances and the impact. 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. The health and safety challenges arising from the coronavirus pandemic in the year under review were significantly less impactful than in previous years. Given the lower infection rates, many sites were able to hold the global Safety & Health Day again as a physical event in September 2022.

Safety and Accident Prevention

Over the long term, we want to prevent all workplace accidents and work-related occupational diseases. 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 2022

	Movement (stumbling/ falling)	Mechanical work	Chemical contact	Traffic and transportation	Other	Total
Employees	19	31	10	2	7	69
Contractors	13	15	3	1	4	36
Total	**32**	**46**	**13**	**3**	**11**	**105**

In the year 2022, one third of all recordable accidents were attributable to movement. Another high-incidence type of accident in the year 2022 was mechanical work, especially accidents involving the hands. To counter this trend, we rolled out "hand safety" throughout the Group as a particular focus area during an HSE campaign in the third quarter of 2022.

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 2022, seven contacts with chemicals, four mechanical work injuries, two burn incidents, and one traffic accident were classified as serious. In one of the mechanical work accidents, one employee was injured so seriously that he subsequently died in hospital. Five of the seven contacts with chemicals reported were caused by an incident outside our direct control. At one of our sites, a cloud of cleaning steam containing hazardous substances was released during cleaning work performed by a company based in the Chemical Park. The five employees received paramedical treatment as a precaution and were admitted to the local hospital for one night for observation.

We process recordable workplace accidents and illnesses involving employees and contractors as part of the recordable incident rate (RIR) and lost time recordable incident rate (LTRIR), as per Standard 1904 issued by the U.S. Occupational Safety and Health Administration (OSHA). The RIR is calculated as a ratio of the total number of recordable 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) or the International Labour Organization (ILO). If no OECD or ILO data is available, then we use the average number of hours worked at Group level.

The number of hours worked by our contractors' employees 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.

In the fiscal 2022, we documented 33.1 million total hours worked (THW) for our employees (previous year: 31.8 million THW). For contractors, 17.5 million THW (previous year: 15.6 million THW) were reported. This results in the following data according to OSHA:

Work-related accidents[1]

	2021	2022
Recordable incidents		
in relation to Covestro employees	53	69
in relation to contractor employees[2]	21	36
Recordable incident rate (RIR)		
in relation to Covestro employees	0.33	0.42
in relation to contractor employees[2]	0.27	0.41
Recordable incidents in connection with days lost		
in relation to Covestro employees	33	37
in relation to contractor employees[2]	15	20
Lost time recordable incident rate (LTRIR)		
in relation to Covestro employees	0.23	0.22
in relation to contractor employees[2]	0.19	0.23
Fatal injuries		
in relation to Covestro employees	0	1
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.

In the reporting year, the number of workplace accidents involving our employees went up by 16 to 69 (previous year: 53), increasing our employees' RIR by 0.09 points. The number of accidents involving employees of our contractors increased by 15 to 36 (previous year: 21), raising the RIR of our contractors' employees by 0.14 points.

The increase in manual work also led to a rise in the number of workplace accidents in the year 2022. A risk in this context is posed by the human factors of "skills" and "decisions." Based on analysis of the accidents, they contributed more than 70% to the rise in accident rates.

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 to the measures and safe work performance.

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 information is exchanged on tried-and-tested approaches.

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 assessments at regular intervals. Loss of Primary Containment (LoPC) is an early indicator for all Covestro plants, which is reported consistently throughout the world and is integrated into the Group's safety reporting.

Covestro applies the German Chemical Industry Association's (Verband der Chemischen Industrie, VCI) guidelines on documenting plant safety performance indicators. The reporting criteria are thus aligned with the updated and globally harmonized definition by the International Council of Chemical Associations (ICCA). An 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 a Covestro employee or a contractor employee 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. The volume thresholds defined by the ICCA for recording incidents are binding on its members and are therefore also applied at Covestro. We applied these volume thresholds at Covestro so that our statistics would be comparable within the chemical industry and the benchmark. Very low volume thresholds mean that seven less significant incidents are systematically documented and investigated as LoPC events. For instance, the volume threshold for chlorine is one kilogram. In the reporting year, our LoPC IR was 0.57 (previous year: 0.69).

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., lower thresholds or nonhazardous 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.

Information Security

In addition to the safety and security of employees and plants, information security and uninterrupted workflows and processes are particularly important to Covestro. This is why our safety strategy systematically focuses on meeting these targets. Covestro has established a central information security committee to ensure close consultation among the relevant departments (Corporate Security, Information & Operational Technology Security, including Cyber Security) and production. Security is already taken into account during system and software development (security by design) and Covestro's security requirements are based on international standards such as ISO 27001 and IEC 62443.

We use modern IT tools in continuous security monitoring processes to detect any attempts to attack our IT systems, and continually improve these tools. Monitoring is carried out by an internal team of security experts in our Security Operation Center (SOC) with the aim of detecting in real time any irregularities and suspicious events in our IT infrastructure that could also point to cyberattacks. We carefully analyze and assess such indications and, if necessary, appropriate countermeasures are taken promptly.

Further decision-making and management bodies focusing on risk, compliance, and crisis management as well as on information security management are firmly established at Covestro. A central anchor point of our security architecture is to raise awareness among employees and train them by conducting global campaigns and compulsory web-based training on topics such as phishing or the secure use of web browsers. In the context of migrating to a cloud environment, the underlying system design was audited by a recognized external consulting firm. Other risk-based security tests are carried out on a continual basis, as are unannounced security gap reviews (using techniques such as red teaming).

Covestro gets information on the general security situation, e.g., from security experts and by using the consultancy services of appropriate external providers, for example with regard to potential cyber threats (threat intelligence).

Data protection is a topic of key importance for Covestro; it is coordinated throughout the Group under the responsibility of the corporate Law, Intellectual Property & Compliance function.

→ See “Compliance Management System.“

Environmental Impact of Own Operations

It goes without saying that, in line with our commitment to sustainable development, we always keep an eye on the environmental impact of our own operations. In accordance with our vision of becoming fully circular, we try to close material cycles. To this end, we also consider, for example, our own waste, which in turn plays a role in our efforts to reduce Scope 3 greenhouse gas (GHG) emissions.

→ See "Circular Economy" and "Climate Neutrality."

The emissions into the air, waste, and wastewater associated with our business activities are an integral part of our integrated Health, Safety, Environment, Energy and Quality (HSEQ) management system. Responsibility for this has been assigned to the head of the corporate Group Health, Safety and Environment (HSE) function, who reports directly to the Board of Management.

→ See "Integrated Management System for Health, Safety, Environment, Energy, and Quality."

Opportunities and risks associated with our operations are considered as part of Group-wide risk management.

→ See "Opportunities and Risks Report."

Supplementary information >

Air Quality

In addition to GHGs, Covestro's business activities result in other emissions into the air.

→ See "Circular Economy", "Climate Neutrality" and "Production, Value Creation, and Safety."

These other emissions into the air stem mainly from burning fossil fuels in order to generate electricity and steam. Emissions into the air are also recorded and analyzed as part of determining the Group's environmental impact, which is assessed annually in the environmental management process with the Chief Technology Officer (CTO).

Other important direct air emissions

	2021	2022
	1,000 metric tons p.a.	1,000 metric tons p.a.
CO	0.31	0.35
NO_X	0.62	0.55
SO_X	0.04	0.05
Dust	0.10	0.10
NMVOC[1]	0.16	0.17
ODS[2]	0.0002	0.0002

[1] Non-methane volatile organic compounds (NMVOC).
[2] Ozone-depleting substances (ODS).

< Supplementary information

Water and Wastewater

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 the reporting year, we again assessed risk at 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.

Supplementary information >

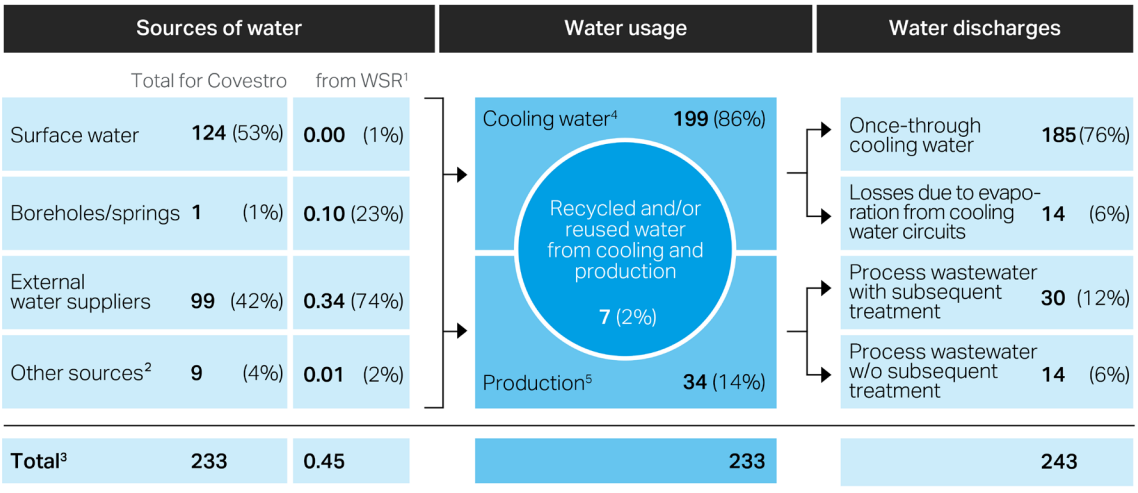
Water Usage

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.

The method for assessing areas with water stress was revised in the year under review. As recommended by the Global Reporting Initiative (GRI), areas with water stress were determined using the Aqueduct Water Risk Atlas of the World Resource Institute, based in Washington, D.C., (United States). In addition to physical risks such as water stress, our water risk assessment also includes potential regulatory risks at our production sites. Regulatory risks comprise, for example, access to drinking water or the Drinking Water Directives and other legal requirements. We also use other recognized tools to this end, such as the Water Risk Filter of the World Wide Fund for Nature (WWF). Sites in current areas with water stress account for 0.2% of our total water consumption.

In order to establish a suitable format to enhance understanding of the local and future water situation, a water dashboard, which also covers physical water risks, was created in the reporting year and shared with our production sites. By analyzing the local water management at the sites, risks can be spotted at an early stage and potential for improvement can be identified. To drive water management and water protection, we have also set up a platform for regularly exchanging information and sharing best practice.

Use of water in the year 2022 (million cubic meters)



[1] Areas with water stress taking into account overall physical risks such as water shortages, and water scarcity.
[2] E.g., rainwater used.
[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, condensate from the use of steam as a source of energy, and unused rainwater.
[4] Also includes water for irrigation purposes.
[5] Total from production processes, sanitary wastewater, and rinsing and purification in production.

At 233 million cubic meters, overall water usage in the Group is below the previous year's figure. One reason for the decline is a reduction in the amount of water used in the plants along the Lower Rhine due to scaled-back production activity. The majority of the total volume of water used by Covestro (76%) is once-through cooling water. 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 185 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 7 million cubic meters (previous year: 6 million cubic meters).

We calculate our total water consumption according to GRI Standard 303-5 (2018), which involves determining the difference between total water used and total water discharged. This resulted in calculated consumption (including, e.g., evaporation losses) of 4 million cubic meters.

The volume of process wastewater saw a year-over-year increase of 15%. The proportion of process wastewater purified or otherwise treated (e.g., incinerated) at a wastewater treatment plant operated by Covestro or a third party amounted to 68% worldwide. Following an analysis, another 32% was categorized as environmentally safe and returned to the water cycle. Evaporation losses went up 26% in the reporting year to 14 million cubic meters.

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

Emissions into water

	2021	2022
	1,000 metric tons p.a.	1,000 metric tons p.a.
Phosphor	0.03	0.03
Nitrogen	0.29	0.18
TOC[1]	0.55	0.56
Heavy metals	0.0056	0.0036
Inorganic salts	737	781

[1] Chemical oxygen demand (COD), calculated based on total organic carbon (TOC) values: 1.68 (TOC × 3 = COD).

Since the year 2021, Covestro has been involved in the collaborative "RIKovery" project, which is sponsored by the German Federal Ministry of Education and Research (BMBF) and drives salt water recycling activities. Over the three-year project term, Covestro is working with additional industrial, plant engineering, and research partners to achieve goals including taking the next technological step to increase the circular usage of process wastewater. The goal is to further increase concentrations and reduce the amount of energy required so that even more salt and water can be recovered. On the back of initial positive result, pilots of the technologies are now being prepared and are expected to be launched next year.

< Supplementary information

Waste

From an economic considerations perspective, Covestro's manufacturing processes apply a maximum of efficiency when it comes to the use of materials; compared with other chemical companies, these result in relatively small volumes of waste. 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. In fiscal 2022, the total volume of waste we generated decreased, mainly due to the general decline in production and the resulting drop in the volume of production-related waste. 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 toluylene

diisocyanate (TDI) product, our Dormagen site began testing a new procedure that significantly reduces the resulting process waste volumes in the year 2019. The insights gained from this project can be transferred to additional plants at other production sites. Our large-scale TDI production facility in Shanghai (China) is currently being equipped with this technology after a pandemic-related break.

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.

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 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) that focus 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. Following the integration of the Resins & Functional Materials (RFM) business acquired from Koninklijke DSM N.V., Heerlen (Netherlands), the next step now is to evaluate the potential relevance for OCS and implement any measures accordingly.

The Plastics Europe association is in the process of enhancing the OCS program. All member companies are now required to take part in Operation Clean Sweep. Covestro started work on a proposal for an external certification system for the entire plastics value chain in cooperation with Plastics Europe and other members in the fiscal year 2019. The initial test runs were held in the year 2021, and the system is being rolled out to Plastics Europe members starting in fiscal 2022. Certification of the relevant sites is now also mandatory for all member companies.

Covestro had already added the topic of OCS to its HSEQ certifications in the year 2020. The next step will be to review and assess the measures, which were previously voluntary, and adapt them to the new certification requirements.

Supplementary information >

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. In fiscal 2022, we continued to harmonize our global waste data reporting. We aim to keep comparable the waste volumes generated at our sites around the world, but due to local legislation, this is not always possible. In particular the disposal of hazardous waste is subject to local definitions and regulations. Based on this information, we prepare and evaluate our annual waste report.

Waste generated

	2021	2022
	1,000 metric tons p.a.	1,000 metric tons p.a.
Total waste generated	**264**	**254**
Non-hazardous waste generated	75	74
Hazardous waste generated[1]	189	180
of which hazardous waste from production	184	174

[1] Definition of hazardous waste in accordance with local laws.

Waste by means of disposal

	2021	2022
	1,000 metric tons p.a.	1,000 metric tons p.a.
Total volume of waste treated[1]	**264**	**256**
Recovery	**205**	**189**
recycled waste	61	57
thermally recycled waste (with energy recovery)	144	132
Disposal	**48**	**55**
incinerated waste (without energy recovery)	33	31
hazardous waste removed to landfill	3	5
nonhazardous waste removed to landfill	12	19
Other[2]	**11**	**12**

[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] Disposal method cannot be unambiguously allocated to the above disposal/recovery methods, e.g., chemical-physical waste treatment.

< 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. Both current and new Covestro suppliers must meet not only economic standards but also social, ethical, and environmental standards as well as those related to corporate responsibility. Our expectations are defined in Covestro's Supplier Code of Conduct, the basis for our collaboration with suppliers; the Code is available online in 13 languages. 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. Working conditions and health effects on people working in the supply chain are particularly important to us, which is why they are a key topic of our cross-functional Human Rights Task Force. Although the risk analysis conducted there as part of human rights due diligence focuses on direct suppliers, it also considers the upstream supply chain, especially if there are specific allegations. Conflict minerals are one area relevant to human rights that we prioritize. They include, e.g., tin, tungsten, tantalum, and gold (3TG) from conflict or high-risk regions. Conflict minerals can enter our company's products through the upstream supply chain. To minimize the risk of including conflict minerals in our production processes, our requirements in this regard are communicated in our Supplier Code of Conduct.

→ See "Human Rights."

+ Additional information is available at: www.covestro.com/en/company/profile/procurement/sustainability-in-procurement/supplier-code-of-conduct

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 with a regular purchasing value exceeding €1 million per year are assessed. In the year under review, 90% (previous year: 93%) of our total purchasing value was attributable to these target-relevant suppliers. They comply with Covestro's sustainability requirements by meeting the minimum result as defined by us in the supplier evaluations described below. 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. In the reporting year, we added a risk-based approach to our goals. A risk analysis considers all suppliers, irrespective of purchasing value, on the basis of industry and country risks. Additional measures can be taken for any high-risk suppliers identified.

Evaluation Methods and Processes of the Together for Sustainability (TfS) Initiative

Covestro is a member of Together for Sustainability AISBL, Brussels (Belgium), a joint initiative undertaken by the chemical industry that now includes 40 companies. This industry-led initiative 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, labor & 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. Since April 2022, the head of the corporate Group Procurement function has also co-chaired TfS workstream 5, which focuses on Scope 3 emissions. This working group has published a chemical-sector-specific guideline for calculating product carbon footprints. This guideline harmonizes the methods for calculating product carbon footprints and can be applied to the vast majority of chemical products, allowing companies to compare and effectively manage Scope 3 greenhouse gas (GHG) emissions from the upstream value chain. Suppliers are also encouraged to take measures to reduce their GHG emissions to make the industry more sustainable.

In order to avoid duplication of audits, increase acceptance by suppliers, and save resources, TfS and the European Chemical Industry Council (Cefic) have entered into a partnership aiming to work jointly on audits of logistics service providers in particular. Cefic uses the SQAS (Safety & Quality Assessment for Sustainability) system for this purpose, a standardized assessment process for European logistics service providers and chemicals distributors that covers quality, safety, environmental, Responsible Care™, and corporate social responsibility criteria. The SQAS reports prepared by Cefic are recognized by TfS as equivalent to a TfS audit report.

Using a standardized TfS assessment process, Covestro evaluates whether the suppliers maintain the required sustainability standards. A structured prioritization process is then carried out to select the suppliers to be evaluated and either an online assessment or an on-site audit initiated for these suppliers – provided that there are no current results. In prioritizing the suppliers for these evaluations, Covestro considers a combination of country and commodity 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), Paris (France), 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 or Cefic conduct on-site audits of selected companies – and follow-up audits, if necessary, based on defined 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 Chief Technology Officer. 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.

Despite the continuing coronavirus pandemic and its effects on our suppliers, the number of supplier evaluations conducted was up from the previous year, totaling 969 in the reporting year (previous year: 807).

Key data from the sustainability evaluations of Covestro's suppliers[1]

	2021	2022
Supplier evaluations conducted in the reporting year	**807**	**969**
through online assessments	788	954
through on-site audits	19	15
Total supplier evaluations conducted	**1,690**	**1,628**
through online assessments	1,585	1,544
through on-site audits	105	84

[1] Online assessments (conducted by external, independent, TfS-accredited provider EcoVadis) and on-site audits (conducted by external, independent, TfS- or Cefic-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 2022, the number of supplier evaluations whose results met our sustainability requirements amounted to 1,236 (previous year: 1,211). Of these supplier assessments, 304 involved our target-relevant suppliers, who account for 80% (previous year: 80%) of our target-relevant purchasing value. Furthermore, 61% of our target-relevant suppliers who underwent a repeat assessment in fiscal 2022 have improved compared with their previous results.

OUR SUPPLIER MANAGEMENT GOAL

STATUS 2022

80%

of suppliers

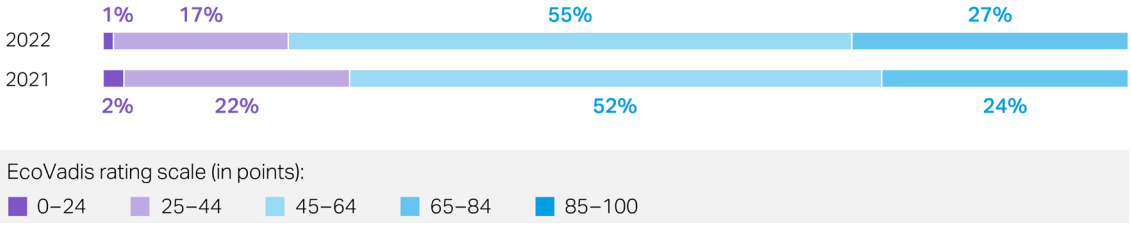
2021: 80%
2020: 79%

All of our suppliers with regular purchasing volumes of more than €1 million per year are expected to comply with our sustainability requirements by the year 2025.

In the year 2022, assessment results considered critical by Covestro were identified for one target-relevant supplier (previous year: seven); that is, this supplier 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 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 82% for the online assessments conducted in the year under review (previous year: 77%). Thanks to our joint efforts toward continually improving our sustainability performance as well as training opportunities offered, the results of the online assessments improved year over year.

Overall results of the online assessments completed in the reporting year



* The results provided by the external providers EcoVadis SAS, Together for Sustainability AISBL, and the European Chemical Industry Council (Cefic) were not subject to the audit by KPMG AG Wirtschaftsprüfungsgesellschaft, Düsseldorf (Germany).

The share of on-site audits in which suppliers met the minimum result we defined (45 out of 100 possible points) was 93% for the on-site 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.

Supplementary information >

Worldwide Supplier Evaluations through the TfS Initiative*

In the year 2022, the now 40 members of TfS evaluated the sustainability performance of a total of 8,386 suppliers through online assessments and performed 378 on-site supplier audits.

All 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 from various (potential) customers.

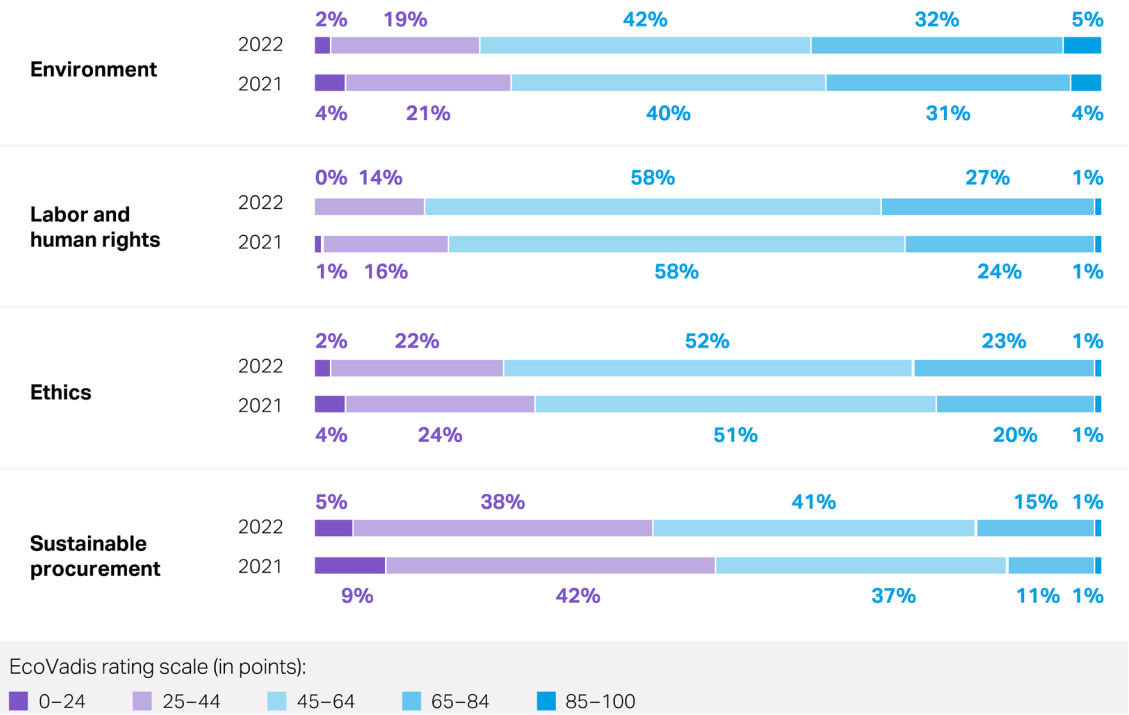
In October 2022, Covestro hosted a TfS North America Committee meeting in Pittsburgh, Pennsylvania (United States), which focused on issues such as corporate governance, sustainability evaluations and audits, developments in the working group, communications, and GHG emissions.

+ Additional information is available at: www.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, Together for Sustainability AISBL, and the European Chemical Industry Council (Cefic) were not subject to the audit by KPMG AG Wirtschaftsprüfungsgesellschaft, Düsseldorf (Germany).

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

In analyzing the supplier evaluations for the year 2022, 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, water, and environmental management as well as a lack of occupational safety measures such as insufficient or no signage installed at emergency exits or exceeding the weekly working hours according to the TfS standard.

< Supplementary information

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 2022 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 management in the EMLA, NA, and APAC regions is 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. The TfS Academy was launched in April 2022, a platform for buyers in the chemical industry and their suppliers on which they can expand and deepen their knowledge, keep up to date with trends, and make their contribution to creating more sustainable, more innovative, and more resilient supply chains. The TfS Academy currently provides access to more than 335 courses in ten languages.

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

Social Responsibility

Human Rights

Human rights are the foundation of Covestro's social responsibility efforts. We are committed to respecting and safeguarding human rights on the basis of the United Nations (UN) Guiding Principles on Business and Human Rights and the Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy of the International Labour Organization (ILO). In various working groups in industry associations, Covestro advocates for compliance with various national action plans and laws on corporate human rights due diligence. As a company, we clearly take responsibility for respecting human rights in all of the Covestro Group's activities and throughout global supply chains and value chains.

In the year under review, the Board of Management appointed the Chief Sustainability Officer (CSO), who also heads the corporate Sustainability and Public Affairs function, as Group Human Rights Officer. In their function, the Group Human Rights Officer, who will report directly to the Board of Management, will be responsible for monitoring Covestro's risk management processes related to human rights. Established in the year 2020, our cross-functional Human Rights Task Force supports the Group Human Rights Officer in fully integrating human rights requirements into our company's activities. To ensure that we pursue a harmonized approach to managing human rights across the Group as a whole, in the reporting year designated individuals were nominated as caretakers in the business entities. They serve as points of contact for our employees on issues relating to human rights in connection with our activities.

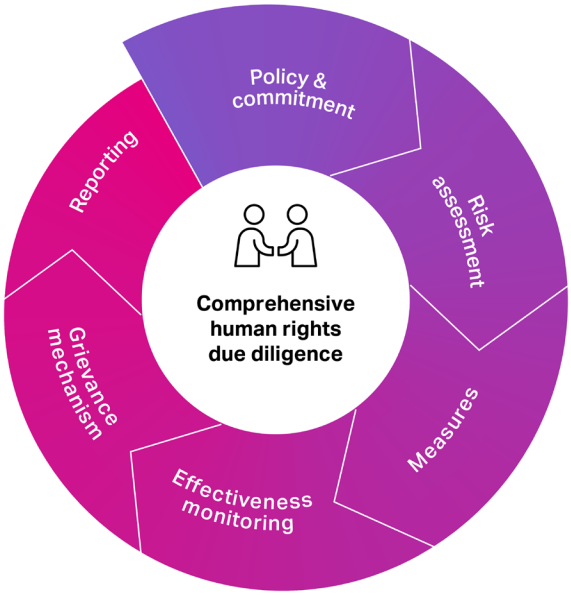
The Task Force, under the leadership of the Group Human Rights Officer, has permanent members from the following corporate functions: Sustainability and Public Affairs, Group Health, Safety and Environment, Group Procurement, Human Resources, Law, and Intellectual Property & Compliance. A broader group of professionals from Quality Management, individual business entities, along with Risk Management employees also participate. The responsibilities of the Task Force include developing and implementing the comprehensive management approach, systematically assessing risks, prioritizing and monitoring the implementation of individual measures, planning and conducting trainings, preparing reports for the Board of Management, and communicating about this issue in general. The individual corporate functions are responsible for, among other things, identifying and assessing risks and developing measures. These measures are designed and implemented in the segments and corporate functions in consultation with the Task Force.

Comprehensive Human Rights Due Diligence Process

Covestro has established a comprehensive due diligence process to safeguard human rights in our business activities. The overarching management approach is based on the UN's Guiding Principles on Business and Human Rights, the core elements of the German Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains, which will enter into force in 2023, and the French law on human rights due diligence. We regularly monitor other national and international laws and legislative initiatives such as the proposed European Union (EU) Corporate Due Diligence Directive.

This overarching management approach is a continual process comprising the six core elements described below.

Human rights due diligence process



Policy and Commitment

The principles of our human rights due diligence are delineated in various Corporate Commitments, Group 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. A key component of our commitment is zero tolerance toward child labor, forced labor, modern slavery, 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. Our corporate commitment to safeguarding human rights is an integral part of our operating policies and procedures and is published on our website. By publishing this commitment, we state our clear expectation that our employees and business partners around the world conduct themselves in accordance with these principles.

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

Risk Analysis

The starting point for our human rights due diligence is a risk analysis that identifies and assesses actual or potential negative impacts on human rights that Covestro could cause, either directly or indirectly, as a result of its business activities. Potentially affected persons could include Covestro's own employees, contractors, suppliers, customers, consumers, or even neighboring communities. Covestro conducts a comprehensive risk analysis every three to four years. The last one was in the year 2019. Between those analyses, relevant information obtained from internal and external sources, such as from Covestro's grievance mechanism, is taken into account by the Human Rights Task Force. No grievances were reported in the year 2021 that could have been analyzed in the human rights-related risks analysis conducted in the year 2022. The comprehensive and ongoing risk analysis covers all of Covestro's own sites, the supply chain, as well as the use phase and end-of-life of our products.

The comprehensive risk analysis first identifies all potential human rights risks. The potential risks are then discussed with selected business entities and corporate functions and prioritized for further management, depending on the severity of the potential human rights violation. In this process, potential human rights violations assigned the highest degree of severity, based on the scale, scope, and irremediability of the potential violation, always take top priority for us. The human rights focal areas we have identified primarily relate to working conditions and health effects on workers and contractors at Covestro's sites and in the supply chain. Other identified focal areas include the possible effects of our operations on the communities surrounding our sites, the potential impact of collecting and processing waste from our products, and the use of Covestro products in sensitive applications.

In the reporting year, the human rights risk owners at Covestro, who assumed responsibility for the human rights-related focal areas in the year 2021, prioritized the human rights-related risks for further management in the human rights management system.

Measures

In accordance with the risk-based approach recommended in the UN Guiding Principles, Covestro's human rights risk owners assess the suitability of existing preventive measures where Covestro may cause, contribute to, or is directly linked to negative impacts on human rights. Many measures in the areas of health and safety, product stewardship, compliance, human resources, and sustainable supplier management have long been integrated at Covestro.

→ See "Employees," "Health and Safety," "Product Stewardship," "Compliance," and "Sustainability in the Supply Chain."

The cross-functional Human Rights Task Force provides regular information about human rights in the company and advises corporate functions on how to fully integrate the human rights requirements. In the year under review, the human rights requirements and Covestro's human rights management approach were presented to, among others, the management bodies of all Covestro's business entities. In addition, human rights-related training was given to the human rights caretakers in the business entities.

Effectiveness Monitoring

Appropriate qualitative and quantitative indicators along with internal and external sources are used to assess Covestro's human rights measures and to review their effectiveness in preventing negative impacts on human rights. In the year 2022, the selected corporate functions reported on a monthly basis to the Human Rights Task Force on the implemented measures and their effectiveness. The effectiveness of measures and indicators was assessed in the reporting year.

Grievance Mechanism

Covestro expressly encourages reporting of suspected human rights violations in the Group as well as at suppliers' companies. We use a whistleblower tool for reporting violations in the supply chain, which consists of a worldwide hotline and an online tool. Covestro therefore enables employees and third parties to anonymously inform us of potential violations at our suppliers. We investigate potential cases of suspected human rights violations by following a defined process based on the involvement of potentially affected stakeholders. No confirmed cases of human rights violations were reported through the Group-wide grievance mechanism in fiscal 2022.

→ See "Compliance."

Reporting

Every year, Covestro communicates its human rights activities to the public in its Group Management Report. Moreover, the Group Human Rights Officer and the Human Rights Task Force report regularly (no less than once a year) to the Board of Management on the status of human rights due diligence and the systematic integration of these requirements into Covestro's management systems. The Sustainability Committee of the Supervisory Board was also updated on the management system in the year under review.

Inclusive Business

Our Inclusive Business activities are another aspect of our sustainability management. This business model focuses specifically on unmet needs of communities in underserved markets. Our collaborative approach offers scalable solutions to reach as many people as possible in these markets. We collaborate with our customers as well as governmental and nongovernmental organizations to develop affordable solutions based on our technologies and products to benefit underserved communities and regions by improving living conditions. Our employees concentrate on three regions – the Indian subcontinent, Southeast Asia, and Eastern and Southern Africa – with the main goal of implementing innovative solutions in the fields of food security, drinking water management, and biosolids management.

In terms of food security, one of the areas we are actively engaged in is to fight against post-harvest losses, which are all losses that occur after the harvest (e.g., as a result of improper storage). They are an economic challenge particularly for smallholding farms. Solar greenhouse dryers and cold storage, which are developed with industry partners within Inclusive Business, contribute substantially toward improving the financial situation of these farms by reducing post-harvest losses. In addition, these innovative solutions help develop new sales markets – for instance, in Ethiopia or Tanzania – for Covestro. We define drinking water management as the use of solar-powered water treatment plants that are able to turn any source of water into drinking water. Biosolids management is another key action area. Biosolids are defined as human feces processed in drying facilities, which can then be used as organic fertilizer in agriculture. The solar drier technology used in our work on food security is also deployed in this process.

OUR INCLUSIVE BUSINESS GOAL

STATUS 2022

5.6 million

people

2021: 3.2 million people
2020: 1.1 million people

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.

We want our solutions to improve the lives of 10 million people in underserved markets by the year 2025. Covestro defines this figure by including people who potentially benefit from our activities as part of their work or daily life. These individuals include people working on smallholdings and their families, school children, and other people who are positively impacted by completion of our projects or installation of our solutions.

Participating governmental and nongovernmental organizations helped us collect the data. The data collected as part of a defined process is reviewed at local and global level, and the processes are continuously refined. In fiscal 2021, the methodology for calculating the number of people reached was optimized. Instead of calculating the number of persons reached once, immediately after implementing our Inclusive Business solutions, we have since the year 2021 determined the cumulative number of all people reached over the years since the solution was installed. Covestro's Board of Management is informed annually about these global activities.

By the end of the reporting year, we reached 5.6 million people with inclusive business solutions (previous year: 3.2 million people). This trend is attributable to the year-on-year rise in the number of new drying facilities installed in the area of biosolids management.

In the year 2022, 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 nongovernmental 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 profit from the jointly developed end products.

Indian Subcontinent

In the Indian Subcontinent, our Inclusive Business activities concentrated on biosolids management in the reporting year. Under the Clean India Mission, an initiative of the Indian government, we installed 11 solar dryers for treating human feces in the Indian states of Andhra Pradesh, Tamil Nadu, and Karnataka. Studies undertaken jointly with the Consortium for DEWATS Dissemination (CDD) Society, a nongovernmental organization based in Bangalore (India), on the drying kinetics of feces and with Tamil Nadu Agricultural University on processing biosolids and their subsequent use as an organic fertilizer made it possible to harness the food cycle holistically – from production to the reuse of human biosolids. At the same time, this is an important step in the fight against rapidly increasing water pollution with human feces. A joint study planned with the Administrative Staff College of India (ASCI) is intended to capture the data required from biosolids processing. This data is intended to assist in drafting statutory regulations on biosolids treatment. For its work on the safe treatment of human feces, ASCI also honored Covestro with the WASH Stewardship Award.

We continued our food security activities with increased intensity, including the establishment of a new digital platform. Once the platform has gone live, which is planned for the second quarter of 2023, it will provide information on innovation, potential partnerships, financing opportunities, and agricultural products. The platform is intended to enable all people involved in the post-harvest value chain to support Indian farms in optimizing food security efforts.

As part of our partnership with CEPT University in Gujarat (India), Covestro installed a solar dryer in Satara, Maharashtra (India) for the treatment of biosolids. Another partnership with the state government of Telangana led to the installation of further drying equipment in the cities of Nizamabad and Nirmal.

Southeast Asia

Our Inclusive Business activities continued in Southeast Asia as follows in the reporting year: Specifically, our initiative in Vietnam launched in previous years under the GREAT program by the Australian Department of Foreign Affairs and Trade remained active. With the help of the Vietnamese government, five more solar dryers were installed in Son La province in the reporting year. By the end of the year 2022, the program had benefited more than 2,500 people, mainly women from Thai minorities in northwest Vietnam.

Covestro is engaged in promoting food security projects in the region, for instance by giving support to our partners in securing financing. The project finance granted by the Agri Innovation Fund of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Bonn (Germany), to our project partners in Cambodia, and Vietnam in the previous year was used successfully for the installation of solar dryers. The use of solar dryers in coffee cultivation in the Vietnamese province of Son La reduced drying times for coffee beans while enhancing drying efficiency.

Eastern and Southern Africa

As in the previous year, the main focus in Africa was on food security in 2022. In the reporting year, we were able to continue our partnership with Tshwane University of Technology in Pretoria (South Africa). The students at the university are working on various research projects that use solar greenhouse dryers with a focus on alternative methods for drying traditional African fruits. Furthermore, our collaboration with Community Forest International and the installation of the solar dryer system financed by the European Union in Mtambwe Dayaauf (Tanzania) also continued. Following the successful commissioning of the dryer supplied, two additional dryers were delivered in the reporting year, whose use is intended to benefit other local spice growers and their families. The planned installation is expected to be completed in the first quarter of 2023. As announced in the Group Management Report 2021, the agreement with GIZ under the BMZ's develoPPP program was signed in the year 2022 and its operational implementation started as contractually agreed. After initial drying units are successfully deployed in various regions of Ethiopia, this program will support craft-based businesses with technology transfer so that they can manufacture dryers themselves. The first six dryers have already been imported into Ethiopia. Once they have been installed and commissioned as planned in the first quarter of 2023, the use of imported facilities will not just be for demonstration purposes: It is intended to help coffee growers demonstrably improve their harvest by increasing the quality of the coffee beans. Training of the local population in production and use of the facilities are part of the project.