Economic Outlook

Global Economy

The upward trend in the global economy, which began during the reporting year, is likely to continue in fiscal 2022. The spread of Omicron and other possible coronavirus variants remains a risk. Thanks to rising vaccination rates, lessening disruption of supply chains and closing of supply gaps, recovery potential in many different service sectors, and robust consumer demand, we expect positive growth rates for all regions, although, below the 2021 levels. This should amount to cumulative global economic growth of 4.2%.

**Economic growth**

<table>
<thead>
<tr>
<th>Region</th>
<th>Growth 2021</th>
<th>Growth forecast 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>+5.6%</td>
<td>+4.2%</td>
</tr>
<tr>
<td>Europe, Middle East, Latin America, Africa</td>
<td>+5.2%</td>
<td>+3.7%</td>
</tr>
<tr>
<td>of which Europe</td>
<td>+5.3%</td>
<td>+3.7%</td>
</tr>
<tr>
<td>of which Germany</td>
<td>+2.7%</td>
<td>+3.8%</td>
</tr>
<tr>
<td>of which Middle East</td>
<td>+4.7%</td>
<td>+4.9%</td>
</tr>
<tr>
<td>of which Latin America, Africa</td>
<td>+6.2%</td>
<td>+2.3%</td>
</tr>
<tr>
<td>of which Africa</td>
<td>+3.4%</td>
<td>+3.3%</td>
</tr>
<tr>
<td>North America, Canada, Mexico, United States</td>
<td>+5.6%</td>
<td>+4.0%</td>
</tr>
<tr>
<td>of which United States</td>
<td>+5.7%</td>
<td>+4.1%</td>
</tr>
<tr>
<td>Asia-Pacific, China</td>
<td>+6.0%</td>
<td>+4.8%</td>
</tr>
<tr>
<td></td>
<td>+8.1%</td>
<td>+5.4%</td>
</tr>
</tbody>
</table>

2. Latin America (excluding Mexico).
3. North America (Canada, Mexico, United States).

We believe growth in the EMLA region will slightly underperform the global pace. Strong order books indicate that positive economic growth is possible in Europe as soon as supply chain disruptions resolve. Germany’s export-oriented economy should see growth of 3.8%. In the Middle East, growth will likely outperform the global economy. The oil industry is expected to be a driver of this development, the stepped-up production resolved by OPEC will not be sufficient to meet rising demand, so high oil prices could initially persist. We anticipate that growth in Latin America will fall slightly below the global level, because low vaccination rates and political uncertainty have a negative effect on economic stability. Economies in Africa are unlikely to be able to expand quite as fast as in the EMLA region. In North Africa in particular, countries largely dependent on tourism remain under pressure.

For the NA region, we expect growth comparable to that of the global economy. Positive labor market developments, rising wages, and still-considerable surplus savings should generally give rise to robust consumer growth in the United States. Fiscal policy remains expansive, and the infrastructure package passed in the United States will result in expenditure totaling more than one trillion US dollars. Against this backdrop, we expect the United States to generate significant economic growth of 4.1% in the year 2022.

Economic growth in the APAC region will likely outperform the global economy. We continue to anticipate robust economic growth of 5.4% for China in fiscal 2022. The Chinese government’s economic stimulus efforts should ensure stable macroeconomic performance.
Main Customer Industries

We expect growth in the automotive industry worldwide to accelerate and generate a robust positive rate of 12.5% for the year 2022 – not quite back up to pre-pandemic levels. The EMLA and NA regions are expected to be vanguards with the highest growth rates, with the APAC region also generating strong positive growth.

We anticipate positive expansion of 3.6% in the global construction industry in the year 2022. This increase will likely extend to all regions, led by NA and APAC with the fastest pace. For the EMLA region, we forecast a slightly positive growth rate.

In the year 2022, we anticipate that the global electrical, electronics, and household appliances industry will grow further, by 4.5%. All regions are expected to increase economic output, driven by the significant expansion in the APAC region. The NA and EMLA regions are forecast to post slightly positive growth rates.

In 2022, we anticipate growth of 3.7% for the global furniture industry. We expect a strongly positive trend in all regions, with EMLA and APAC performing slightly better than the NA region.

Growth in main customer industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Growth 2021</th>
<th>Growth forecast 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive</td>
<td>+2.2%</td>
<td>+12.5%</td>
</tr>
<tr>
<td>Construction</td>
<td>+2.5%</td>
<td>+3.6%</td>
</tr>
<tr>
<td>Electrical, electronics and household appliances</td>
<td>+13.9%</td>
<td>+4.5%</td>
</tr>
<tr>
<td>Furniture</td>
<td>+8.6%</td>
<td>+3.7%</td>
</tr>
</tbody>
</table>

1 Covestro’s estimate, based on the following sources: LMC Automotive Limited, B+L, CSIL (Centre for Industrial Studies), Oxford Economics. We limited the economic data of our “automotive and transportation” and “furniture and wood processing” main customer industries to the automotive and furniture segments (excluding the transportation or wood processing segments). As of: January 2022.

Forecast for the Covestro Group and Covestro AG

Covestro Group

The following forecast for the 2022 fiscal year is based on the business development described in this Annual Report and takes into account the potential opportunities and risks.

Given the challenging economic conditions and a more competitive situation, the Board of Management of Covestro AG expects that overall performance in fiscal 2022 will be slightly down on the previous year. Despite that, we anticipate that demand for our products will continue to rise and we will generate a significant premium on the cost of capital.

From fiscal 2022 onward, Covestro’s management system will have four instead of the previous three components: Core volume growth, the previous key management indicator for growth, will be replaced with EBITDA. Liquidity is measured in terms of free operating cash flow (FOCF), and profitability in terms of return on capital employed (ROCE) above the weighted average cost of capital (WACC). In addition, a sustainability component has been added, which takes account of selected ESG (environmental, social, governance) criteria. In the year 2022, direct and indirect (Scope 1 and 2) GHG emissions will be relevant for this component.
### Forecast for key management indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2021</th>
<th>Forecast 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA (^1)</td>
<td>€3,085 million</td>
<td>Between €2,500 million and €3,000 million</td>
</tr>
<tr>
<td>Free operating cash flow (FOCF) (^2)</td>
<td>€1,429 million</td>
<td>Between €1,000 million and €1,500 million</td>
</tr>
<tr>
<td>ROCE (^3) above WACC (^4)</td>
<td>12.9% points</td>
<td>Between 5% points and 9% points</td>
</tr>
<tr>
<td>GHG emissions (^5) (CO₂ equivalents)</td>
<td>5.2 million</td>
<td>Between 5.6 million metric tons and 6.1 million metric tons</td>
</tr>
</tbody>
</table>

\(^1\) EBITDA: EBIT plus depreciation, amortization, and impairment losses; less impairment loss reversals on intangible assets and property, plant and equipment.

\(^2\) Free operating cash flow (FOCF): cash flows from operating activities less cash outflows for additions to property, plant, equipment and intangible assets.

\(^3\) ROCE: ratio of the adjusted operating result (EBIT) after imputed income taxes to capital employed.

\(^4\) WACC: weighted average cost of capital reflecting the expected return on the company’s equity and debt capital. A figure of 7.0% has been taken into account for the year 2022 (2021: 6.6%).

\(^5\) Greenhouse gas emissions (Scope 1 and 2, GHG Protocol) at main production sites (responsible for more than 95% of our energy usage).

For the Covestro Group’s EBITDA, we forecast a figure of between €2,500 million and €3,000 million. The Performance Materials segment’s EBITDA is expected to be significantly down on the amount for the year 2021. In contrast, we project EBITDA to be significantly higher than the figure recorded in the year 2021 in the Solutions & Specialties segment.

The Covestro Group’s FOCF is forecast to total between €1,000 million and €1,500 million. For the Performance Materials segment, we expect FOCF to fall significantly short of the figure for the year 2021. In the Solutions & Specialties segment, however, we project FOCF to be significantly higher than the amount of the year 2021.

We anticipate that ROCE above WACC will be between 5% points and 9% points. This reflects average capital employed that is higher than in the year 2021 because the acquired Resins & Functional Materials business was included for the full year.

We anticipate that the Covestro Group’s GHG emissions, measured in CO₂ equivalents, will be between 5.6 million metric tons and 6.1 million metric tons. This increase is mainly attributable to the composition of externally procured power, which is less favorable for us, and to the growth of the business.

### Covestro AG

The earnings of Covestro AG, as the parent company of the Covestro Group, largely comprise the earnings of that company’s subsidiaries. As a result of the profit and loss transfer agreement with Covestro Deutschland AG, net income of Covestro AG is particularly impacted by that company’s income from equity investments in Germany and abroad. Due to higher equity investment income expected in fiscal 2022, Covestro AG should generate net income significantly above the level of the year 2021.
Opportunities and Risks Report

As a company with global operations, Covestro is exposed to opportunities and risks on a daily basis. Addressing them is an integral part of our business operations. We regard an opportunity as an internal or external development or event that could cause a positive change in the Group’s forecasts or targets. Conversely, a development or event in or outside the company that could lead to a negative deviation from the Group’s forecasts or targets is considered a risk.

Currently, there are no discernible risks that could endanger the continued existence of the company.

Group-Wide Opportunities and Risk Management System

Conscientious management of opportunities and risks is part of responsible corporate governance and is the foundation of sustainable growth and financial success. This includes the ability to systematically identify and take advantage of opportunities while managing risks at the same time. The entrepreneurial decisions we make daily in the course of business processes are based on balancing opportunities and risks. We therefore regard the management of our opportunities and risks as an integral part of our overall business management system rather than as the task of a specific corporate function. Risk management at Covestro also includes nonfinancial risks, which are managed in our Group-wide risk management system.

Opportunities and risk management system

Our opportunity and risk management begins with strategy and planning processes, from which relevant external and internal opportunities and risks of an economic, ecological, or social nature are derived. Financial and nonfinancial opportunities and risks are identified by observing and analyzing trends along with macroeconomic, industry-specific, regional, and local developments.

The identified opportunities and risks are subsequently evaluated and incorporated into our strategic and operational processes. We aim to avoid or mitigate risks by taking appropriate countermeasures, or to transfer them to third parties (such as insurers) to the extent possible and economically acceptable. At the same time, we strive to take maximum advantage of opportunities by incorporating them into our entrepreneurial decisions. We consciously accept and bear manageable and controllable risks that are in reasonable proportion to the anticipated opportunities. Covestro regards these as the general risks of doing business. Opportunities and risks are continuously monitored so that, for example, changes in the economic or legal environment can be identified at an early stage and suitable countermeasures can be initiated, if necessary.
To enable the Board of Management and the Supervisory Board to monitor material business risks as legally required, the following systems are in place: an internal control system ensuring proper and effective financial reporting pursuant to Section 289, Paragraph 4 and Section 315, Paragraph 4 of the German Commercial Code (HGB); a compliance management system; and a risk early warning system pursuant to Section 91, Paragraph 2 of the German Stock Corporation Act (AktG).

The various management systems are based on different risk types, risk characteristics, and timelines. Different processes, methods, and IT systems are therefore applied to identify, evaluate, manage, and monitor risks. The principles underlying the various systems are documented in Group policies that are integrated into our central document control processes and are accessible to all employees via the intranet. Covestro's Board of Management is primarily responsible for supervising the Group's risk management. The Chief Financial Officer of Covestro AG is responsible for the effectiveness and appropriateness of the system as a whole in accordance with the areas of responsibilities.

The various systems are described below.

**Internal Control System for (Group) Accounting and Financial Reporting (Report pursuant to Section 289, Paragraph 4 and Section 315, Paragraph 4 of the German Commercial Code)**

The purpose of our internal control system (ICS) for the (Group) accounting and financial reporting process is to ensure proper and effective accounting and financial reporting in accordance with Section 289, Paragraph 4 and Section 315, Paragraph 4 of the German Commercial Code.

The ICS is designed to guarantee timely, uniform, and accurate accounting for all business processes and transactions based on applicable statutory regulations, accounting and financial reporting standards, and the internal Group regulations that are binding on all consolidated companies.

The ICS concept is based on two frameworks: the Internal Control – Integrated Framework (2013) of the Committee of the Sponsoring Organizations of the Treadway Commission (COSO) and the Control Objectives for Information and Related Technology (COBIT) framework. It is designed to address the risk of misreporting in the (consolidated) financial statements. Risks are identified and evaluated, and steps are taken to counter them. ICS standards mandatory throughout the Covestro Group, such as system-based and manual reconciliation processes and functional separation, have been derived from these frameworks and stipulated by the corporate Accounting function.

The management of each Covestro Group company is responsible for implementing the ICS standards at the local level.

The effectiveness of the ICS processes for accounting and financial reporting is evaluated on the basis of a cascaded self-assessment system that starts with the persons directly involved in the processes, then involves the principal managers responsible for accounting and financial reporting, and ends with Covestro AG’s Board of Management. The IT systems in use throughout the Covestro Group ensure the uniform and audit-proof documentation and transparent presentation of the risks, controls, and effectiveness evaluations associated with all ICS-relevant business processes. It should generally be noted that, however carefully designed, an internal control system cannot provide absolute assurance that material misstatements in the accounting will be avoided or identified in a timely manner.

Continually ensuring the effectiveness and suitability of our ICS considering process changes, new business models, acquisitions and divestitures, and technical specifications requires regular reviews and updating of the controls applied. To identify possible potential for improvement in the area of our nonfinancial performance indicators we analyzed our existing ICS in this regard in fiscal 2021.

In fulfillment of the Chief Financial Officer's responsibilities, the CFO of Covestro AG has confirmed the criteria and the effective functioning of the internal control system for accounting and financial reporting for fiscal 2021.
Internal Control System to Ensure Compliance

Compliance risks are systematically identified and assessed as part of Covestro’s Group-wide risk management. Risk owners assess the compliance risks that have been identified. A risk matrix is used to define focal points of compliance tasks at Covestro. The findings of a risk-based analysis enabled Covestro to identify four key topics: antitrust law, corruption, data protection, and foreign trade law. The General Counsel/Chief Compliance Officer is the risk owner responsible for breaches of antitrust law and corruption, while the Global Export Control Officer oversees the risk of breaches of foreign trade law, and the Group Data Protection Officer is assigned to handling the risk of loss and improper handling of personal data. With respect to corruption, areas including gifts and invitations, relationships with government officials, and relationships with certain business partners such as sales agents were identified as being especially risk-relevant. A corruption risk analysis was performed in the year 2020 for all companies in which Covestro holds a majority interest. In the reporting year, we focused on the operational implementation of the updated instructions on handling conflicts of interest.

Many controls have been implemented at both the global and local levels to reduce the number of compliance risks. To the extent possible, we integrate the compliance controls into our internal control system. The effectiveness of the compliance controls is evaluated on the basis of a cascaded self-assessment system, as are the ICS processes for accounting and financial reporting. The results of the effectiveness evaluations are documented in the global system for the ICS processes. The Corporate Audit function carries out dedicated compliance checks at regular intervals in the larger companies. In the smaller companies, compliance aspects are part of a general review.

Risk Early Warning System (Report Pursuant to Section 91, Paragraph 2 of the German Stock Corporation Act)

Covestro has implemented a structured process for the early identification of any potentially disadvantageous developments that could have a material impact on our business or endanger the continued existence of the company. This process satisfies the legal requirements regarding an early warning system for risks pursuant to Section 91, Paragraph 2 of the German Stock Corporation Act, and is aligned with the international risk management standard COSO II Enterprise Risk Management – Integrated Framework (2004). A central unit defines, coordinates, and monitors the framework and standards for this risk early warning system. In this context, our risk early warning system was modified in fiscal 2021 in line with the updates to the Auditing Standard 340 of the Institute of Public Auditors in Germany (IDW). Covestro now uses a software package that simplifies the aggregation of risks, provides displays of various interdependencies, and compares individual risks to the newly defined risk bearing capacity.

Throughout the year, various global subcommittees provide new and updated information about identified risks. The Covestro Corporate Risk Committee met three times in fiscal 2021 to review the risk landscape as well as the various risk management and monitoring mechanisms that are in place, and to take any necessary measures. Additionally, we conduct an ad-hoc process for newly identified risks throughout the year so that these are immediately incorporated into the risk management system. These ad-hoc risks are identified and their handling is determined based on risk assessments and depending on the defined thresholds.

Risks are evaluated using estimates of the potential impact after taking into account countermeasures, the likelihood of their occurrence, and their relevance for our external stakeholders. The potential economic losses are projected using the expected EBITDA loss. All material risks and their countermeasures are documented in a new Group-wide database that is at the heart of the new software. The risk early warning system is reviewed regularly over the course of the year. Significant changes must be promptly entered in the database and reported to the Board of Management. In addition, a report on the risk portfolio is submitted to the Audit Committee several times a year and to the Supervisory Board at least once a year.

The probabilities of occurrence revised in the previous year and the cumulative loss amounts (€50 million or more) were transferred to a new software.

See “Opportunities and Risks.”
The following matrix illustrates the direct financial and indirect financial criteria for rating a weighted risk as high, medium or low. The same applies to the classification of nonfinancial risks.

**Rating matrix**

<table>
<thead>
<tr>
<th>Indirect financial impact¹</th>
<th>Accumulated impact (€ million)</th>
<th>Likelihood of occurrence within 1 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical and/ or Significant</td>
<td>&gt;1,000</td>
<td>Very low</td>
</tr>
<tr>
<td>Significant and/ or High</td>
<td>&gt;300 - 1,000</td>
<td>Low</td>
</tr>
<tr>
<td>High and/ or Moderate</td>
<td>&gt;150 - 300</td>
<td>Medium</td>
</tr>
<tr>
<td>Moderate and/ or Low</td>
<td>≥50 - 150</td>
<td>High</td>
</tr>
<tr>
<td>Low</td>
<td>≤50</td>
<td>Very high</td>
</tr>
</tbody>
</table>

¹ An individual risk that could have both a direct financial and an indirect financial impact of different severities is always classified based on the higher level of risk.

**Criteria for the classification of indirect financial impact**

<table>
<thead>
<tr>
<th>Indirect financial impact</th>
<th>Moderate</th>
<th>High</th>
<th>Significant</th>
<th>Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate effect on achieving outcome objectives/national reporting</td>
<td>High effect on achieving outcome objectives/national reporting</td>
<td>Significant effect on achieving outcome objectives/international reporting in key sales markets</td>
<td>Critical effect on achieving outcome objectives/permanent international reporting in sales markets of major significance</td>
<td></td>
</tr>
</tbody>
</table>

**Process-Independent Monitoring**

The effectiveness of our management systems is evaluated at regular intervals by the Corporate Audit function, which performs an independent and objective audit focused on verifying compliance with laws and policies. Corporate Audit also supports the company in achieving its goals by systematically evaluating the efficiency and effectiveness of governance, risk management, and control processes and helping to improve them. The selection of audit targets follows a risk-based approach. Corporate Audit performs its duties according to internationally recognized standards. The Supervisory Board’s Audit Committee is regularly informed about the results of audits and also receives an annual report on the internal control system and its effectiveness.

Risks in the areas of occupational health and safety, plant safety, environmental protection, and product quality are assessed through specific health, safety, environment, energy, and quality (HSEQ) audits.

The external auditor assesses the early warning system for risks as part of its audit of the annual financial statements, focusing on whether the system is fundamentally suitable for identifying at an early stage any risks that could endanger the company’s continued existence so that suitable countermeasures can be taken. The auditor also reports at regular intervals to Covestro AG’s Board of Management and the Audit Committee as well as the Supervisory Board on the results of the audit and any weaknesses identified in the internal control system. Audit outcomes are also taken into account in the continuous improvement of our management processes.
Opportunities and Risks

Overall Assessment of Opportunities and Risks
The overall opportunity and risk position of the Group, has not changed significantly compared to the previous year. The financial and nonfinancial risks reported in the following do not endanger the company's continued existence, nor could we identify any risk interdependencies that could combine to endanger the company's continued existence.

Based on our product portfolio, our know-how, and our innovation capability, we are confident that we can use the opportunities resulting from our entrepreneurial activity and successfully master the challenges resulting from the risks stated below.

Opportunities and Risks in General and in the Company's Business Environment
The risks outlined below have material effects on EBITDA and, in individual cases, the FOCF of our Group. In this context, risks are deemed material if the potential loss to Covestro is estimated at €50 million or more, and/or they have at least a moderate potential indirect financial impact regardless of their likelihood of occurrence. The likelihood of occurrence of the risks is used for internal management purposes to define focus areas for the Corporate Risk Committee. The risks are more highly aggregated in this report than in our internal documentation. Various individual risks are combined into risk categories we have defined for this purpose. The following overview shows the levels of risk allocated to the individual risks within each category. A risk category can therefore include more than one weighted risk occurrence level. The order in which the risk categories are listed does not reflect their significance.

Risk categories by weighted risk occurrence

---

<table>
<thead>
<tr>
<th>Risk categories...</th>
<th>Weighted risk occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>...in the business environment</td>
<td></td>
</tr>
<tr>
<td>Market growth</td>
<td>●</td>
</tr>
<tr>
<td>Regulations/policies</td>
<td>●</td>
</tr>
<tr>
<td>Competition</td>
<td>●</td>
</tr>
<tr>
<td>...in the company-specific environment</td>
<td></td>
</tr>
<tr>
<td>Procurement</td>
<td>●</td>
</tr>
<tr>
<td>Information technology</td>
<td>●</td>
</tr>
<tr>
<td>Employees</td>
<td>●</td>
</tr>
<tr>
<td>Production/Value creation</td>
<td>●</td>
</tr>
<tr>
<td>Product stewardship</td>
<td>●</td>
</tr>
<tr>
<td>Law/compliance</td>
<td>●</td>
</tr>
</tbody>
</table>

● The risk category includes at least one individual risk with this weighted risk occurrence.

Business Environment
Market Growth
General economic conditions worldwide and, in particular, in the geographic regions in which Covestro operates are a significant factor affecting the company’s earnings, since their effect on the industries in which Covestro's direct and indirect customers operate affects demand for our company's products.

Negative economic developments triggered by a variety of events (e.g., worldwide pandemics) may have a negative impact on the global economy and international financial markets in general. As a rule, this also adversely affects the sales markets for our products, which then usually decreases Covestro’s sales volumes and earnings. However, the extent of the impact of economic developments on sales volumes and earnings also depends on capacity utilization rates in the industry, which in turn depend on the balance between supply and
demand for the industry's products. Downturns in demand lead to reduced sales volumes and, ultimately, to reduced capacity utilization, which negatively impacts margins. Conversely, a positive economic environment characterized by growth and upward trends normally leads to improved business success.

Historically, the markets for most of our products have experienced periods of tight supply, causing prices and profit margins to increase. Periods of significant capacity additions, however, resulted in oversupply and declining prices and profit margins. These shifting supply cycles are often caused by capacity additions of new production facilities or the expansion of existing production facilities, which are necessary to create or sustain economies of scale in the industry. These are followed by a decline of industry-wide utilization rates.

**Regulations and Policy**

The international nature of Covestro's business exposes it to substantial changes in economic, political, and social conditions and the resulting statutory requirements of the countries in which Covestro operates. The associated opportunities and risks can have both a positive and negative effect on the company's business and significantly influence its prospects.

**Competition**

An economic downturn, changes in competitor behavior, or the emergence of new competitors can lead to greater competition and, as a result, overcapacities in the market or increased pressure on prices. These risks are rated lower at the moment than in the previous year.

Further opportunities and risks may also arise if actual market developments vary from those we predict in the “Economic Outlook” section. Where macroeconomic developments deviate from forecasts, this may either positively or negatively impact our sales and earnings expectations. Continuous analysis of the economic environment and of economic forecasts enables us to utilize the identified opportunities and to mitigate risks by adjusting our business strategy.

**Company-Specific Environment**

**Procurement**

Our Supplier Code of Conduct sets forth our sustainability principles and explains what we expect from our partners along the value chain. 

See “Sustainability in the Supply Chain.”

The Code requires that our suppliers comply with environmental regulations as well as occupational health and safety rules, respect human rights and therefore, for example, avoid child labor in any form. Violations of the Code may harm our company's reputation. Through supplier assessments and audits, we verify whether our partners along the supply chain actually implement and adhere to our Code of Conduct. Covestro’s Supplier Code of Conduct is based on the principles of the United Nations Global Compact and our position on human rights.

Covestro requires significant quantities of different energy forms and petrochemical raw materials for production processes. Procurement prices for these forms of energy and raw materials may fluctuate significantly due to market conditions or legislation. Experience from the past has shown that higher production costs cannot always be passed on to our customers through price adjustments. Conversely, lower raw materials prices that do not directly reduce the selling price by the full amount can lead to improved margins.

We purchase important raw materials based on long-term supply agreements and pursue active supplier management to minimize procurement-related risks such as supply shortages or substantial price fluctuations.
Information Technology (IT)
Business and production processes as well as the internal and external communications of the Covestro Group are increasingly dependent on global IT systems. A significant technical disruption or failure of IT systems could severely impair our business and production processes. Technical precautions such as data recovery and continuity plans are defined and continuously updated in close cooperation with our internal IT organization.

Confidentiality during data processing is of fundamental importance for Covestro. A loss of data and information confidentiality, integrity, or authenticity could lead to manipulation and/or the uncontrolled outflow of data and expertise. We have measures in place to counter these risks, including a sophisticated authorization system.

Our Chief Information Technology Security Officer (CISO) and the department specially focused on this issue promote the IT security strategy and its implementation throughout the Group. These measures are designed to guarantee optimum protection based on state-of-the-art technology.

Innovation
We continually analyze global trends and develop innovative solutions to address them, thereby mastering the challenges and taking advantage of the opportunities that arise from these trends.

Customers are increasingly choosing sustainable products as a result of a growing environmental awareness and interest in environmental protection as well as increasing demands for fair working conditions. Our product portfolio offers such solutions for different areas of everyday life. We therefore see an opportunity here to expand our relevant market shares and to grow in these segments. A key focus of Covestro’s strategy is sustainability and efficient production with the goal of making Covestro fully circular. To this end, we are developing new technologies, products, and business models that reduce energy usage and carbon emissions to unlock opportunities for Covestro.

The finite nature of natural resources and efforts to protect the climate are boosting the demand for innovative products and technologies that reduce resource consumption and lead to lower emissions. This trend is being reinforced by increasingly stringent regulatory requirements and growing consumer awareness of the need to use resources sustainably. Covestro is therefore developing new materials that help to further increase energy efficiency and lower emissions. For example, the polyurethane we manufacture is used in the construction industry for thermal insulation, thus improving its positive energy balance, while our polycarbonate is used in the automotive industry to reduce vehicle weight and thus fuel consumption.

Ongoing technological advancements are changing the world we live in and the way we do business. The use of cutting-edge digital technologies will help us add value along the entire value chain by optimizing the supply chain, stimulating growth, and developing new business models.

Employees
Skilled and dedicated employees are essential for the company's success.

In countries with full employment, there is keen competition among companies for highly qualified personnel and employees in key positions in particular. If we are unable to recruit a sufficient number of employees in these countries and retain them within Covestro, this could have significant adverse consequences for the company's future development. The risk of not knowing precisely when employees could leave the organization can potentially result in there not being sufficient run-up time for finding suitable replacements. We currently consider this a low-level risk.

Covestro has introduced appropriate employee recruitment and development measures based on the analysis of future requirements. We aim to convince our target groups of the advantages of working for Covestro through comprehensive human resources marketing, including an employer branding campaign. Our human resources policies are based on the principles enshrined in our position on human rights, the Corporate Compliance Policy, and our corporate values. Essential elements include competitive compensation containing performance-related
components as well as an extensive range of training and development opportunities. In addition, our focus on diversity enables us to tap the full potential of the employment market.

Covestro cultivates good relationships with its employees, employee representatives, and unions so that all issues concerning HR policy, working conditions, and change processes can always be resolved by management and labor in a collaborative manner.

**Production and Value Creation**

We place great importance not only on product safety but also on protecting our employees and the environment.

See “Health and Safety.”

Risks associated with the production, filling, storage, or shipping of products are mitigated using an integrated health, safety, environmental, energy, and quality management system.


If these risks were to materialize, this could result in personal injury, property and environmental damage, production stoppages, business interruptions and liability for compensation payments.

Covestro uses large quantities of hazardous substances, generates hazardous wastes, and emits wastewater and air pollutants in its production operations.

See “Environmental Impact of Own Operations.”

Consequently, its operations are subject to extensive environmental, health, and safety (EHS) laws, regulations, rules, and ordinances at the international, national, and local levels in multiple jurisdictions. The company must dedicate substantial resources to complying with these EHS regulations and the additional voluntary commitments. Costs relating to the implementation of and compliance with EHS requirements are part of Covestro's operating costs and must therefore be covered by the prices at which the company is able to sell its products. Competitors of Covestro that are not affected by equally strict EHS requirements may have lower operating costs and, as a consequence, their products may be priced lower than those of Covestro.

Operations at our sites may be disrupted by external influences such as natural disasters, fires/explosions, sabotage, or supply shortages for our principal raw materials or intermediates. We mitigate this risk to the extent possible and economically feasible by distributing production of certain products among multiple sites and by building up safety stocks. Furthermore, a security and crisis management system has been implemented for all our production sites as a mandatory component of our HSEQ management activities. It is aimed at protecting employees, neighbors, the environment, and production facilities from the risks described. The “Corporate Security” and “Crisis Management” Group Regulations forms the foundation for this.

Covestro operates in markets in which the long-term trend is toward a balance between supply and demand. However, in the event of planned or unplanned closures, interruptions, or even the elimination of one of our competitors, Covestro may have the opportunity to capture more of the market in terms of profitability and growth in the short to medium term.

Increased ecological awareness creates opportunities for Covestro in two ways. On the one hand, the development of innovative materials for our customers opens up market potential. On the other hand, if we succeed in increasing the energy efficiency of our own production processes, we can mitigate environmental impacts and achieve cost savings at the same time. By developing new production technologies and applying internationally recognized energy management systems, we aim to help meet increasing environmental requirements, further reduce emissions and waste, and increase energy efficiency. In this way, we not only contribute to sustainable climate protection and the conservation of natural resources, but also achieve cost and competitive advantages.

Organic growth through investment projects may involve risks in relation to the overall project scope, location, and timing. These risks are addressed through established processes that involve a variety of internal and external stakeholders. A robust investment assessment process helps to ensure that we are capitalizing on
organic growth opportunities at the right time. These projects are reviewed throughout the project timeline so that any potential changes in the market situation are considered, enabling us to react in a timely manner, if necessary.

**Product Stewardship**

The Covestro Group is exposed to the risk of negative publicity, press speculation, and potential or actual legal proceedings in connection with its business, which may harm its reputation. The development of a negative social perception of the chemical industry in general or Covestro’s processes, products, or external communications in particular could additionally have a negative impact on the company. The incorrect use and handling of our products by third parties can also harm the company’s reputation.

In addition, concerns about product safety and environmental protection could influence public perceptions of Covestro’s products and operations, the viability of certain products, its reputation, and its ability to attract and retain employees. Due to the technical expertise required to fully understand the possible effects of the chemical constituents of our products, the company’s reputation may suffer due to claims that such compounds are of a harmful nature, even if these claims can be disproved by experts. Such statements may lead to changes in consumer preferences or additional governmental regulations even before any harm is scientifically substantiated and possibly despite scientific evidence to the contrary.

See “Product Stewardship.”

**Law and Compliance**

Ethical conduct is a matter of essential importance for society. Many stakeholders evaluate companies according to whether they conduct themselves not just “legally” but also “legitimately.” The Covestro Group is committed to sustainable development in all areas of its commercial activity. Any violations of this corporate commitment can result in adverse media reporting and thus lead to a negative public perception of the Covestro Group. We counter this risk through responsible corporate management that is geared toward generating not only economic but also ecological and societal benefit.

The Covestro Group is exposed to risks from legal disputes or proceedings to which we are currently a party or that could arise in the future, particularly in the areas of product liability, competition and antitrust law, patent law, tax law, and environmental protection.

Investigations of possible legal or regulatory violations, such as potential infringements of antitrust law or the use of certain marketing and/or sales methods, may result in the imposition of civil or criminal penalties – including substantial monetary fines – and/or other adverse financial consequences. They can also harm Covestro’s reputation and ultimately hamper our commercial success.

Legal proceedings currently considered to involve material risks are described in the Notes to the Consolidated Financial Statements.

See note 26 “Legal Risks” in the Notes to the Consolidated Financial Statements.
Financial Opportunities and Risks

The Covestro Group is exposed to liquidity risks, foreign currency and interest-rate opportunities and risks, credit risks, and risks resulting from obligations for pensions and other post-employment benefits. Appropriate processes to manage financial opportunities and risks have been established and documented. One component of this is financial planning, which serves as the basis for establishing liquidity needs and foreign currency risk. Financial planning comprises a planning horizon of 12 months and is regularly updated.

The section below and the Notes to the Consolidated Financial Statements present the financial opportunities and risks material to the Covestro Group – independent of their likelihood of occurrence.


Liquidity Risk

Liquidity risk is the risk of not being able to meet existing or future payment obligations. The liquidity status of all material Group companies is continuously planned and monitored. Liquidity is secured by cash pooling agreements as well as internal and external financing. A syndicated revolving credit facility totaling €2.5 billion renewed and increased in fiscal 2020 offers additional financial flexibility.

Foreign Currency Opportunities and Risks

For the Covestro Group, foreign currency opportunities and risks result from changes in exchange rates and the related changes in value.

Material foreign currency exposures from operating and financial activities are fully hedged through forward exchange contracts.

Anticipated foreign currency exposures were not hedged in the reporting year. These exposures are also hedged using forward exchange contracts if the foreign currency risk increases significantly.

Interest Rate Opportunities and Risks

Interest rate opportunities and risks for the Covestro Group result from changes in capital market interest rates, which could lead to changes in the fair value of fixed-rate financial instruments and in interest payments in the case of floating-rate instruments. To minimize adverse effects, interest rate risk is managed centrally based on an optimized debt maturity structure.

Credit Risks

Credit risks arise from the possibility that the value of receivables or other financial assets of the Covestro Group may be impaired because counterparties cannot meet their payment or other performance obligations. To manage credit risks from receivables, credit managers are appointed who regularly analyze customers’ creditworthiness and set credit limits.

Risk to Pension Obligations from Capital Market Developments

The Covestro Group has obligations to current and former employees related to pensions and other post-employment benefits. Changes in relevant measurement parameters such as interest rates, mortality rates, and salary increase rates may raise the present value of these obligations, resulting in increased costs for pension plans. A proportion of the Covestro Group’s pension obligations is covered by plan assets. Declining or even negative returns on the investment of the plan assets may adversely affect their future fair value. Both these effects may negatively impact the company's earnings and may necessitate additional payments by the company.

We address the risk of market-related fluctuations in the value of plan assets through balanced strategic investments and by constantly monitoring investment risks with regard to pension obligations. In addition, funding measures for pension obligations are regularly reviewed, taking into account country-specific regulatory requirements and liquidity to reduce funding gaps and thereby limit this risk.

See note 20 “Provisions for Pensions and Other Post-Employment Benefits” in the Notes to the Consolidated Financial Statements.