

# SUSTAIN ABILITY

# REPORT

Improve!

2022

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**GRI INDICATORS**

The indicators used in our sustainability reporting correspond to the Global Reporting Initiative (GRI) and are marked with the symbol .

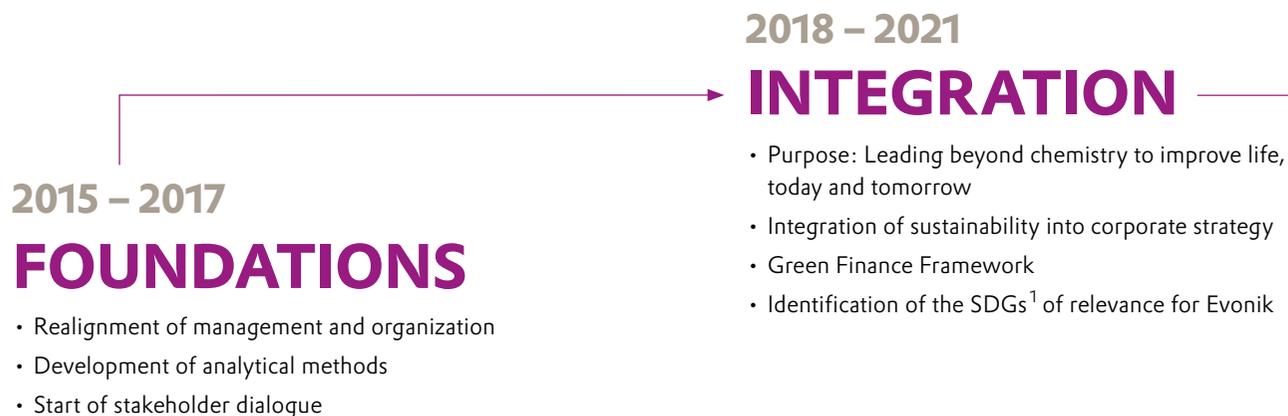


You can find supplementary videos in our **ONLINE REPORT**

→ [sustainability-report.evonik.com](https://sustainability-report.evonik.com)

## How we drive forward sustainability

Evonik is one of the world's leading specialty chemicals companies, with operations in more than 100 countries. We do not make car tires or mattresses, tablets or animal feed. Yet there is a bit of Evonik in all these products—and many more as well. Often it is the small amounts of our products that make a real difference. Because Evonik makes tires more fuel-efficient, mattresses more elastic, tablets more effective, and animal feed more healthy.



<sup>1</sup> SDGs = UN Sustainable Development Goals.

<sup>2</sup> Increase the proportion of sales generated with Next Generation Solutions, i.e., products with a strong sustainability profile that is above or well above the market reference level.

<sup>3</sup> Science Based Targets initiative. Validation of the targets by SBTi not yet completed.

<sup>4</sup> EAGER = Evonik Assessment of Greenhouse Gas Emission Reduction.

<sup>5</sup> Technologies for the ongoing development of production processes and infrastructure with the aim of reducing scope 1 and 2 emissions.

# Foreword 2-14, 2-22

## Ladies and gentlemen:

Leading beyond chemistry is at the heart of our aspiration to make life better—both now and for future generations. The customer industries and end-markets where we do that vary enormously. What does not vary is how we fulfill our promise: driven by the desire not to be satisfied with the status quo but to carry on researching, probe more deeply, and broaden our understanding.

Continuous improvement is the hallmark of the chemical industry. And it is particularly important at a time when our business is confronted simultaneously with challenges from geopolitical, ecological, and social crises. Consequently, reducing energy consumption and saving resources are continuing to gain in significance. Sustainability is becoming a yardstick of corporate resilience, precisely because a sustainability-focused management approach is increasingly important for economic as well as ecological reasons. That includes massive efforts to increase the availability of green energies, transforming existing production chains into circular processes, and working to future-proof the products and solutions we provide.

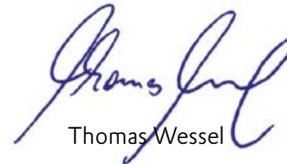
Those are also the top topics identified in our most recent materiality analysis. We see that as valuable confirmation of everything we initiated in the reporting period under the motto Next Generation Evonik. We use our innovative capability and the growth of our Next Generation Solutions to address changing customer and market requirements. Our goal is to increase the proportion of particularly sustainable products and solutions in our portfolio from 43 percent at present to over 50 percent by

2030. To achieve that, we are investing around €3 billion. A further €700 million is earmarked for the transformation of our production plants and processes: by investing in Next Generation Technologies, which will help us achieve our ambitious climate and environmental targets. For example, by reducing our scope 1 and 2 greenhouse gas emissions by 25 percent by 2030. That is consistent with the commitment we made to the Science Based Targets initiative (SBTi)<sup>1</sup> in the reporting period.

Realizing this ambitious agenda begins in the hearts and minds of our global workforce of more than 30,000 employees. Therefore, it is very important to keep a clear focus on the human resources side of the transformation as well in the coming years. Consequently, Next Generation Culture is the third element we are using to anchor sustainability in Evonik's core processes—from our attractiveness as a strong employer through recruitment, training, and continuing professional development to contemporary performance incentives and remuneration models. We made good headway with this in 2022. In this report, we aim to give you extensive insight into how we translate leading beyond chemistry into our day-to-day business. Today. Tomorrow. And always better.



Christian Kullmann



Thomas Wessel



**Christian Kullmann**  
Chairman  
of the Executive Board

**Thomas Wessel**  
Chief Human Resources Officer and executive  
board member responsible for sustainability

<sup>1</sup> Validation of the targets by SBTi not yet completed.

# Evonik in 2022

We continued to put our sustainability strategy into practice in 2022.

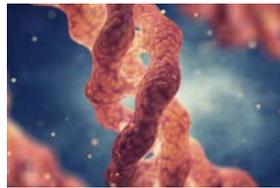
These three examples reflect our three most important material topics: green energy, portfolio transformation, and circular economy.



Q3/2022

## Green hydrogen—The revolution is beginning

Evonik is committed to driving forward the transition from today's conventional energy supply to tomorrow's sustainable gas economy—with green hydrogen as one of the main elements. [More](#)



Q3/2022

## Platform for medical applications

Evonik now offers the recombinant collagen platform Vecollan® on a commercial scale. The collagen is produced without animal-derived starting products, and many of its properties are similar to human collagen. Vecollan® can therefore be used in medical, pharmaceutical, and cell and tissue culture applications. [More](#)



Q1/2022

## First production plant for rhamnolipids

Evonik is investing triple-digit millions in a new production facility for fully biodegradable, bio-based rhamnolipids. The sustainable aspect of this innovation is that it uses fermentation of sugar instead of petrochemical feedstocks. [More](#)



Q1/2022

## Center for circular plastics solutions

Evonik has a global circular plastics program as part of the transition to circularity, so it can offer customers solutions for the entire plastics value chain. [More](#)



Q2/2022

## New production plant for lipids

Evonik, a world leader in drug delivery technologies, is building a new, highly flexible world-scale production facility for pharmaceutical lipids in the USA. This investment creates more than 80 highly skilled jobs. [More](#)



Q2/2022

## Evonik invests in sustainability funds

Evonik Venture Capital is investing in two sustainability funds, Azolla Ventures I and Chrysalix Venture Capital's Carbon Neutrality Fund. Both concentrate on technologies to reduce CO<sub>2</sub>. [More](#)



Q2/2022

## Renewed platinum rating

The EcoVadis rating agency has again awarded Evonik platinum status for its sustainability performance, positioning it among the best companies evaluated by EcoVadis. [More](#)



Q3/2022

## Better recycling

Evonik wants to make the recycling of lithium from batteries for electric cars simpler, more economical, and more environment-friendly. This metal is essential for millions of electric cars, but presently 95 percent ends up in landfills after use. [More](#)



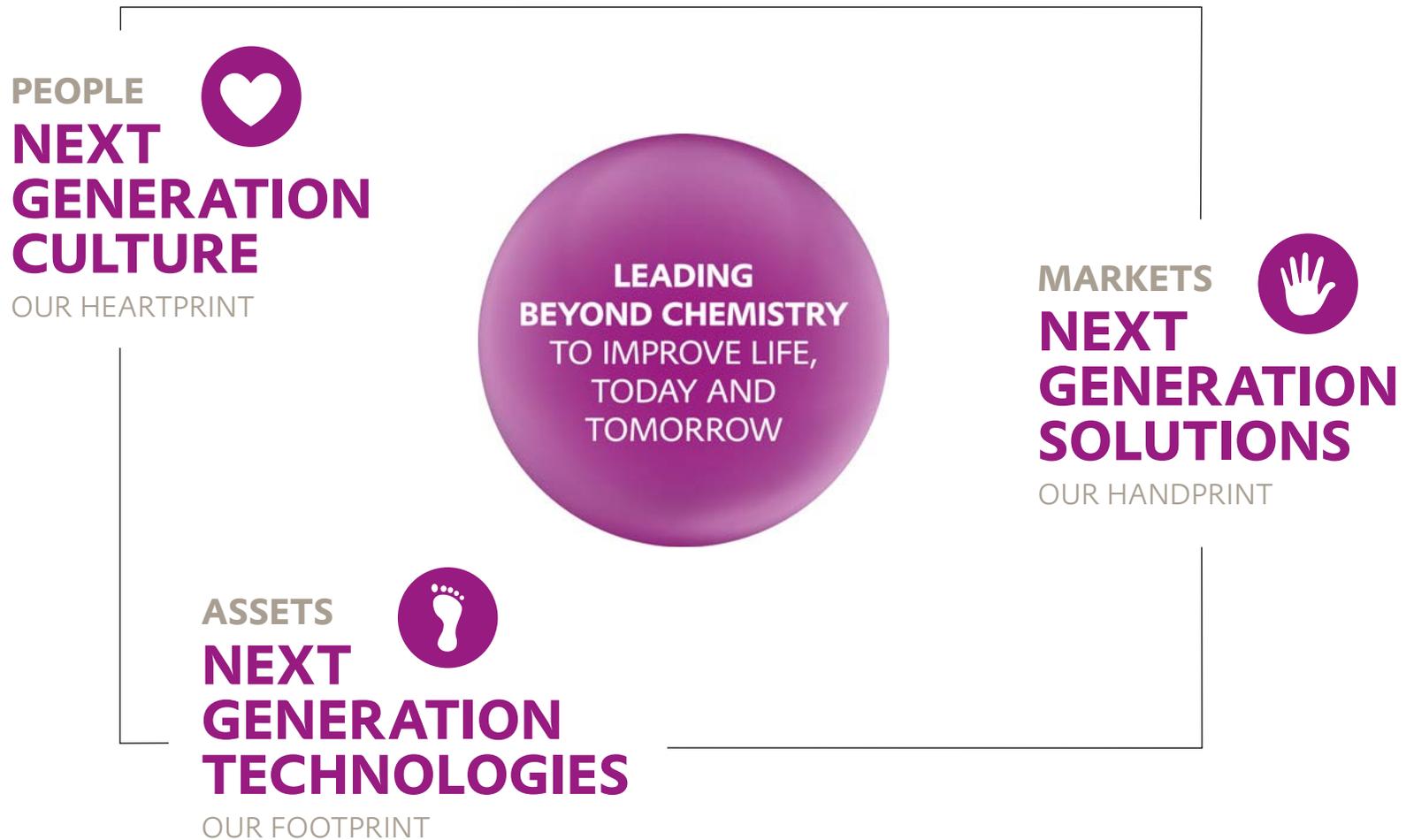
Q4/2022

## Circularity for toothbrushes

A genuine circular economy needs products that can be recycled efficiently. Many everyday objects are made from multiple plastics that cannot be separated. Together with its project partners, Evonik has developed a toothbrush made from a single material. [More](#)

# Sustainability is the backbone of our purpose and our strategy

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# Ten key messages on sustainability at Evonik

What sustainability means for our company and our stakeholders.

## 1 Our purpose

We aspire to create sustainable, value-added solutions for our customers. That promise is expressed in our purpose: Leading beyond chemistry to improve life, today and tomorrow. We lead beyond chemistry by networking competencies, perspectives, and partners [p.7](#).

## 2 Intensive dialogue with stakeholders

We engage in constant dialogue with our stakeholders on relevant developments, expectations, and transformation requirements. We use this extensive feedback to address future trends at an early stage and respond with agility to global developments and changing market requirements [p.123](#).

## 3 Next Generation Evonik

We have integrated sustainability comprehensively into our corporate strategy—from research & development through portfolio management to our corporate culture. The core process is the sustainability analysis of our business. Research & development play a key role in the ongoing transformation of our portfolio. In 2022, Evonik generated additional sales of over €600 million with innovative solutions for health, cosmetics, and membranes (reference base 2015) [p.48](#).

## 4 Next Generation Solutions (handprint)

We already generate 43 percent of our sales with products and solutions that have a strongly positive sustainability profile. We aim to increase the proportion of sales generated with these Next Generation Solutions to over 50 percent by 2030 [p.22](#).

## 5 Next Generation Technologies (footprint)

Evonik supports the objectives of the Paris Agreement on Climate Change. This is underscored by our commitment to the Science Based Targets initiative (SBTi). Between 2021 and 2030, we aim to reduce our scope 1 and 2 emissions by 25 percent. For the reduction in our scope 3 emissions, we are committed to a target of 11 percent<sup>1</sup>. Our targets are aligned to the SBTi target level of “well below 2 °C”<sup>2</sup> [p.16](#).

## 6 Next Generation Culture (heartprint)

We integrate sustainability into our human resources processes at all levels, from recruitment through vocational training and continuing professional development to engagement programs and remuneration [p.16](#).

## 7 SDGs of relevance to Evonik

Evonik supports the United Nations Sustainable Development Goals (SDGs) and intensively examines its own contributions to achieving them. We have identified the four most important SDGs for the Evonik Group and pay special attention to them (SDG 3, SDG 6, SDG 12, SDG 13) [p.19](#).

## 8 Sustainability Focus Area

Our contributions to achieving the UN SDGs are pooled in four Sustainability Focus Areas: fight climate change, drive circularity, safeguard ecosystems, and ensure health & well-being. For each of these SFAs, we show how Evonik reduces its own ecological footprint and highlight the handprint resulting from the use of our products and solutions in the relevant markets [p.24](#).

## 9 Impact of our business activities

We systematically address the positive and negative effects of our business activities along the value chain (inside-out) and the external influences on Evonik (outside-in). Early identification of future opportunities and risks makes our business model more resilient and sharpens our understanding of the long-term value that our activities create for society [p.128](#).

## 10 Sustainable finance

We achieve our transparency aspirations by continuously improving our sustainability reporting. The capital markets notice and value our strategic and operational progress towards greater sustainability. Evonik is positioned among the leaders in renowned sustainability ratings and rankings. In May 2022, we successfully issued our second green bond [p.18](#).

<sup>1</sup> Exact target: 11.07 percent.

<sup>2</sup> Validation of the targets by SBTi not yet completed.

## Evonik in figures

€18.5 billion sales → 43% from Next Generation Solutions

### NEXTGEN Solutions

Outstanding Evonik products that ...

- ... deliver **above-average growth**
- ... meet **rising customer demand** for sustainable solutions
- ... offer our customers **above-average sustainability benefits**

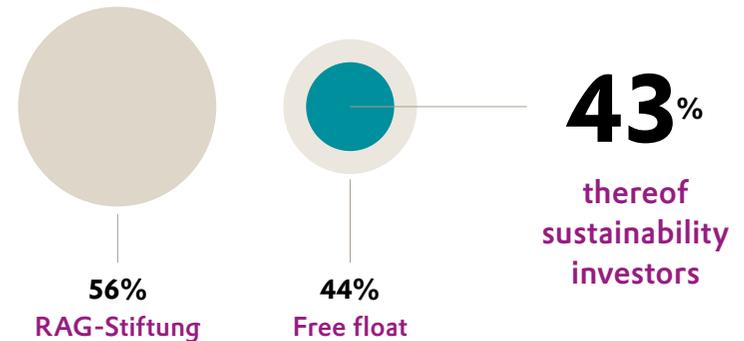
You can find further information in "Strategy and growth"  p.22 and on our website [evonik.com/Sustainability](https://www.evonik.com/Sustainability)

€2.5 billion adjusted EBITDA | 108 nationalities

### Shareholder structure 2-1

C01

approx. 34 thousand employees | 26% female employees



Top 10 sustainability targets 2-22

C02

▼ Sustainability areas of action

▼ Top 10 strategic targets 2023 and beyond

▼ KPIs for each area of action

▼ Status 2021

▼ Status 2022

**Strategy and growth** p. 14



- Portfolio transformation:
  - Increase the proportion of sales generated with Next Generation Solutions to >50 percent by 2030
  - Proportion of sales from challenged products should be permanently <5 percent

- Percentage of sales generated with Next Generation Solutions/percentage of sales generated with challenged products

41%/2%

**43%/2%**

**Governance and compliance** p. 25



- 100 percent of all raw materials suppliers where annual procurement volume is >€100 thousand to be covered by Tfs assessments by year-end 2025

- Percentage of suppliers of raw materials<sup>a</sup> covered by Tfs assessments

69%

**66%**

**Value chain and products** p. 47



- >€350 million additional sales from solutions for the circular plastics economy from 2030

- Sales growth in € million

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**The environment** p. 79



- Reduce absolute greenhouse gas emissions
  - Scope 1 and 2 by 25 percent between 2021 and 2030
  - Scope 3<sup>b</sup> by 11 percent<sup>c</sup> between 2021 and 2030
- Reduce both absolute and specific energy consumption<sup>d</sup> by 5 percent between 2020 and 2025
- Reduce specific freshwater intake by 3 percent<sup>d</sup> between 2021 and 2030
- Reduce specific volume of production waste by 10 percent<sup>d</sup> between 2021 and 2030

- Reduction in greenhouse gas emissions (scope 1 and 2/scope 3)

--<sup>e</sup>

**-6%/-7%**

- Reduction in energy consumption

--

**-1% abs.;  
+/- 0 spec.**

- Reduction in specific freshwater intake

--<sup>f</sup>

**+6%**

- Reduction in specific volume of production waste

--<sup>g</sup>

**+2%**

**Employees** p. 98



- Proportion of women in top/senior management should be 23 percent at each level by 2023
- Intercultural mix<sup>h</sup> at executive level should be 20 percent by 2023

- Percentage of women

17.7%/17.6%

**20.3%/17.1%**

- Intercultural mix in top management

14.6%

**15.8%**

**Safety** p. 114



- Occupational and plant safety:
  - Lost time injury rate (LTI-R) ≤ 0.26
  - Process safety incident rate (PSI-R) ≤ 0.40

- Lost time injury rate (LTI-R)/ Process safety incident rate (PSI-R)

0.19/0.48

**0.25%/0.49%**

You can find a full overview of the status of our sustainability targets for 2022 on p. 131. | You can find an overview of the main sustainability indicators used for the Evonik Group on p. 130.

<sup>a</sup> Annual procurement volume >€100 thousand. | <sup>b</sup> Scope 3 emissions from all upstream categories and the category "Downstream transportation and distribution." | <sup>c</sup> Exact target: 11.07 percent. | <sup>d</sup> Relative to production volume. | <sup>e</sup> New climate targets set in 2022, see "The environment" p. 81. | <sup>f</sup> New water target set in 2022, see "The environment" p. 90. | <sup>g</sup> New waste target set in 2022, see "The environment" p. 93. | <sup>h</sup> Employees whose nationality is not German.

## Business model

Evonik is one of the world’s leading specialty chemicals companies. Our strengths include the balanced spectrum of our business activities, end-markets, and regions. Around 80 percent of sales generated by our growth divisions come from market-leading positions<sup>2</sup>, which we are systematically expanding. This strong competitive position is based on collaboration with customers, innovative capability, and integrated technology platforms.

Our specialty chemicals products make an indispensable contribution to the benefits of our customers’ products, which generate their success in global competition. Close cooperation with customers enables us to build up a deep knowledge of their business, so we can offer products tailored to their specifications and extensive technical service. Technology centers and customer competence centers play an important role in this around the world. Market-oriented research and development is an important driver of profitable, resource-efficient growth.

Sustainability is integrated into our strategic management process. Our goal for the future is to substantially increase the proportion of sales from attractive growth businesses with a clear focus on sustainability (Next Generation Solutions). Evonik supports the objectives of the Paris Agreement on Climate Change. That is underscored by our commitment to the Science Based Targets initiative (SBTi)<sup>3</sup>. We aspire to be climate-neutral by 2050.

Our employees are a key success factor. They drive forward Evonik on a daily basis through their hard work and identification with the company. We have therefore developed a wide range of activities to gain and develop talented and qualified employees and to position Evonik as a preferred employer in order to retain them.

We systematically examine the positive and negative effects of business activities along the value chain. Early identification of future opportunities and risks makes our business model more resilient and sharpens our understanding of the long-term value that our activities create for society.

### Market-oriented corporate structure

Our specialty chemicals operations are divided into four chemical manufacturing divisions, which operate close to their markets and customers. The chemicals divisions—Specialty Additives, Nutrition & Care, Smart Materials, and Performance Materials—are clearly aligned to our technology platforms to allow more selective management. They are supported by the Technology & Infrastructure division.

The Specialty Additives, Nutrition & Care, and Smart Materials growth divisions offer their customers customized, innovation-driven solutions. The aim is to achieve above-average, profitable growth in attractive markets through innovations, investments, and acquisitions. The Performance Materials division is characterized by processes that make intensive use of energy and raw materials. It therefore concentrates on integrated, cost-optimized technology platforms, efficient workflows, and economies of scale. In keeping with our concentration on specialty chemicals, we are preparing to sell all three businesses in the Performance Materials division—Superabsorbents, Functional Solutions, and Performance Intermediates. Evonik is looking for new owners or partners for each of these three businesses.

### Broadly diversified end-customer markets

Most of our customers are industrial companies that use our products for further processing. The range of markets in which they operate is diverse and balanced. None of these end-markets accounts for more than 20 percent of our sales. In view of its focus on a broad spectrum of applications and its worldwide presence, Evonik operates in a business environment with many global and regional competitors.

### Corporate structure

C03

Divisions	Specialty Additives	Nutrition & Care	Smart Materials	Performance Materials	Technology & Infrastructure	Evonik Group <sup>a</sup>
Sales (in € million)	4,184	4,237	4,833	3,660	1,508	18,488
Employees	3,824	5,690	7,921	2,041	8,367	34,029

<sup>a</sup> Including enabling functions, other activities, consolidation.

<sup>1</sup> Limited assurance engagement by external auditor.

<sup>2</sup> We define these as ranking 1st, 2nd, or 3rd in the relevant market for the product, based on sales.

Source: internal evaluations based on 2021. See the overview “Market positions 2022,” see financial report p.221 (outside the scope of the auditor’s limited assurance engagement). [More !\[\]\(1acbcef31f64c72302232f67a5249232\_img.jpg\)](#)

<sup>3</sup> Validation of the targets by SBTi not yet completed.

### Integrated technology platforms give us a competitive advantage

Our products are manufactured using highly developed technologies that we are constantly refining. Evonik has many integrated production complexes where key precursors are produced in adjacent production facilities. In this way, we offer our customers maximum reliability of supply. At the same time, integrated world-scale production facilities combined with technologically demanding production processes act as entry barriers.

### Global production

Evonik has a presence in more than 100 countries, and 84 percent of sales are generated outside Germany. We have production facilities at 104 locations in 27 countries on six continents and are therefore close to our markets and our customers. Our largest production sites, for example, in Marl, Wesseling, and Rheinfelden (Germany), Antwerp (Belgium), Mobile (Alabama, USA), Shanghai (China), and Singapore, have integrated technology platforms, most of which are used by several operating units.

### Fiscal 2022 ✓

We successfully drove forward Evonik’s **strategic** development in 2022 and embarked on the next phase of the transformation with Next Generation Evonik. The year was dominated by general inflationary pressure and the sharp rise in raw material and energy prices, which had a considerable impact on supply

chains, including bottlenecks in the supply of some materials that are dependent on natural gas. **Operationally**, the Evonik Group performed well overall, despite the challenging conditions. The sharp rise in raw material and energy costs was more than offset by raising selling prices, although volumes declined over the year. Despite the difficult operating environment, we basically fulfilled our forecast.

**Group sales** grew by 24 percent to €18,488 million thanks to higher selling prices and positive currency effects. **Adjusted EBITDA** improved 4 percent to €2,490 million. The **adjusted EBITDA margin** declined to 13.5 percent (2021: 15.9 percent) and was therefore significantly below our target mid-term range of between 18 percent and 20 percent. **ROCE** dropped to 8.3 percent as a result of higher capital employed. It was therefore below the cost of capital and our mid-term target of 11 percent. In view of the poorer business outlook for the Performance Materials division, an impairment loss of €301 million was recognized on this division’s goodwill as of December 31, 2022. As a consequence, the Evonik Group’s **net income** was 28 percent below the prior-year level at €540 million. After adjustment for special items, net income, continuing operations, was 7 percent higher at €1,054 million. At the annual shareholders’ meeting, the executive board and supervisory board will propose payment of an unchanged dividend of €1.17 per share. We generated a **free cash flow** of €785 million. The cash conversion rate of 32 percent shows the proportion of adjusted EBITDA that was converted into cash. That was below our target of around 40 percent. Evonik has had a solid **investment grade rating** for many years. Our net financial debt remains moderate. In addition to a

comfortable liquidity position, we have sufficient unutilized credit lines.

We are continuing our efforts to make our structures leaner and improve efficiency in production and administration. Our goal for 2023 is short-term savings of €250 million to offset the effects of the challenging economic situation.

### Total value added

Value added is calculated from sales and other revenues less the cost of materials, depreciation, amortization, and other expenses. Evonik’s total value added decreased by 2 percent to €4,609 million in 2022. The largest share of value added—76 percent (2021: 73 percent)—went to employees. 10 percent (2021: 8 percent) was paid to the state in income and other taxes. A further 2 percent (2021: 3 percent) went on interest payments. Shareholders of Evonik Industries AG received 12 percent of the value added (2021: 16 percent).

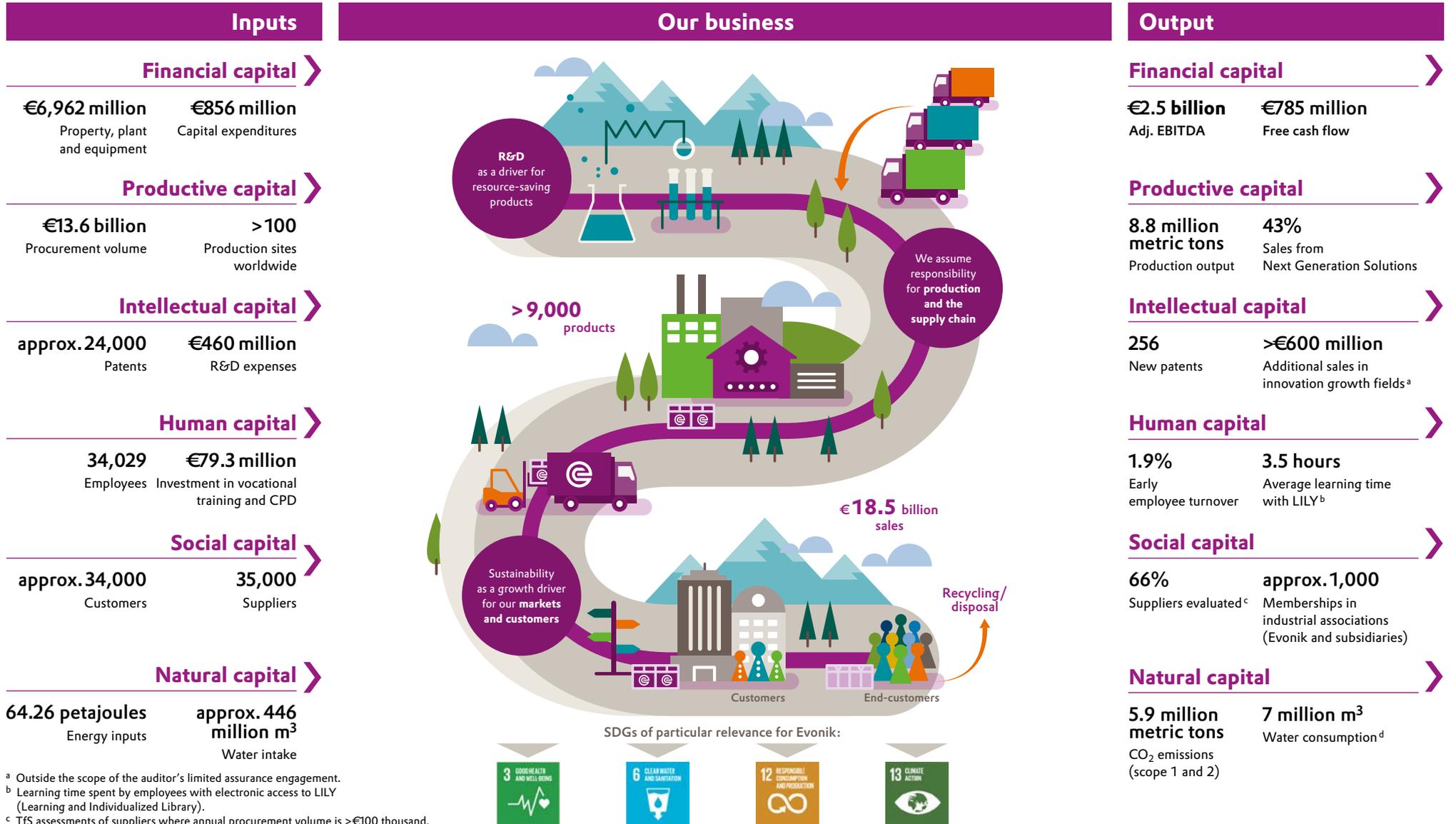
### Breakdown of value added

T01

in € million	2021	2022
Total value added	4,688	4,609
<b>Split</b>		
Employees	3,408	3,487
State	384	445
Creditors	129	122
Non-controlling interests	21	15
<b>Net income</b>	<b>746</b>	<b>540</b>

How we create value for society: Resources and value contributed by Evonik in 2022 203-1, 203-2

C04



<sup>a</sup> Outside the scope of the auditor's limited assurance engagement.  
<sup>b</sup> Learning time spent by employees with electronic access to LILY (Learning and Individualized Library).  
<sup>c</sup> TFS assessments of suppliers where annual procurement volume is >€100 thousand.  
<sup>d</sup> For further water data, see chart C29.

# Strategy and growth

*Evonik aims to be a best-in-class specialty chemicals company. Our sustainability strategy is an expression of this aspiration, including ambitious environmental targets and an understanding of how to translate sustainability into profitability.*

## MATERIAL TOPIC

- Portfolio transformation

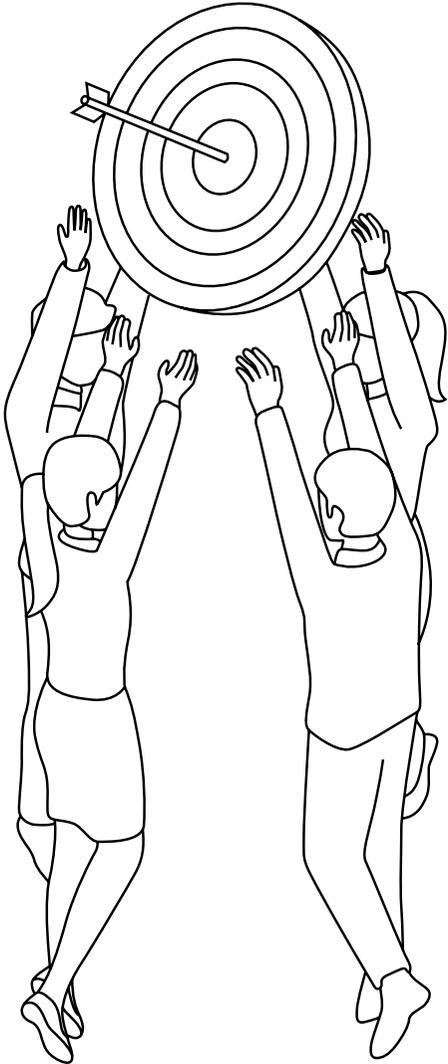
## SDGS OF PARTICULAR RELEVANCE FOR EVONIK



**43%**  
of sales from  
Next Generation  
Solutions

**1%**  
Platinum status from  
EcoVadis. Evonik is  
in the top 1 percent of  
companies evaluated

**15**  
material topics  
for Evonik



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### 24 Our targets



## Strategy and growth

- Next phase in our strategic transformation has started
- Ambitious new sustainability targets
- Systematic alignment of the portfolio to sustainability, transformation, and core processes

## Transformation and core processes

Evonik embarked on the next phase of its strategic business transformation in 2022. As part of **Next Generation Evonik**, sustainability is becoming an integral element of important core processes such as portfolio and innovation management, production and technology, and human resources work. This strategic integration paves the way for us to meet our promise to be an enabler of sustainability in a wide range of markets and areas of life. Therefore, we set ourselves ambitious new sustainability targets in the reporting period. These relate, for example, to the transformation of our portfolio and the continuation of our climate strategy for the period 2021 through 2030, in keeping with our commitment to the Science Based Targets initiative (SBTi)<sup>1</sup>.

We do not see the multiple crises surrounding us—from Russia’s invasion of Ukraine through rising energy and raw material costs to the ongoing effects of the coronavirus pandemic and deglobalization trends—as a reason to reduce our commitment to greater sustainability. On the contrary, we see our sustainability management as an important basis to safeguard and extend

Evonik’s long-term resilience and market success. The focus areas of our transformation in the reporting period are outlined in detail in the special magazine section on pages 📄 p. 62–78.

Through our sustainability strategy, we address the UN Sustainable Development Goals (SDGs) of particular relevance for Evonik. This strategy comprises the following elements:

- Giving sustainability a firm place in our market proposition and purpose
- Integrating sustainability into our strategic management process
- Increasing the proportion of attractive growth businesses in our portfolio with a clear focus on sustainability, 📄 p. 22, “Portfolio transformation”
- Foresighted resource management with ambitious environmental targets, including systematically considering the impact of our business along the value chain and on the SDGs
- Selective improvement of our sustainability reporting

In view of the transformation requirements made on our business activities, we draw a distinction between market-driven, location-based, and human resources influences. In line with this, our sustainability strategy is focused on three core processes:

<sup>1</sup> Validation of the targets by SBTi not yet completed.

**Next Generation Solutions** (market perspective), **Next Generation Technologies** (asset perspective), and **Next Generation Culture** (human resources perspective) (C05). Between 2021 and 2030, we aim to invest more than €3 billion in the growth of our Next Generation Solutions, in other words, products and solutions whose sustainability profile is above or even significantly above the market reference level. In the same period, we intend to invest €700 million in Next Generation Technologies. These are, in particular, measures at production plants and infrastructure that are geared to our goal of further reducing our CO<sub>2</sub> emissions. The aim of Next Generation Culture is to establish sustainability firmly at all levels of the human resources process—from recruiting through training and continuing professional development to incentive systems and ideas management. The cultural dimension of successful transformation is also reflected in the results of our latest materiality analysis: Four of the 15 topics identified as material are HR-related. Through these three elements of Next Generation Evonik, we are employing our full agility to achieve a business model that balances economic, ecological, and social aspects and thus strengthens our resilience.

[2-22, 2-23](#)

### New materiality analysis

Our sustainability management is aligned with materiality. In the reporting period, we performed a completely new materiality analysis. Based on the concept of double materiality, 15 material sustainability topics were identified for Evonik (C06 [p.17](#)). Our analytical approach takes into account the requirements of the revised GRI Sustainability Reporting Standards as well as the EFRAG<sup>1</sup> working papers ESRG<sup>2</sup> 1<sup>2</sup> of January 2022 (Double

### Transformation requirements and core processes

C05

Transformation perspective	Our response	Core processes
Market	Next Generation Solutions	Sustainability analysis of our business
Assets	Next Generation Technologies	Evonik Carbon Footprint
Human resources	Next Generation Culture	All levels of HR work

materiality conceptual guidelines for standard-setting) and ESRS 4<sup>3</sup> (Sustainability material impacts, risks and opportunities). In individual cases, we also took into consideration the requirements of the EFRAG exposure draft<sup>4</sup> of April 2022. A full overview of the conduct of the materiality analysis can be found in the chapter headed “Basis of reporting” [p.130](#).

The top three materiality topics identified for Evonik are green energy, portfolio transformation, and circular economy. New topics compared with our materiality analysis 2018 are green energy, cybersecurity, and employee satisfaction. Other changes are outlined in “About this report” [p.132](#). The results of our materiality analysis are grouped in six areas of action, which also provide the basic structure for this report. [2-4, 3-1, 3-2](#)

For the sustainability topics identified in our materiality analysis, there is an anonymous complaints mechanism for both employees

and external stakeholders. One important tool in this context is our whistleblower hotline (see “Governance and compliance” [p.34](#)).

In the context of our new materiality analysis, we also revised our stakeholder management concept. [More](#) [p.34](#).

Our ongoing project work in 2022 focused on the topics identified as material. Examples are the conclusion of a long-term supply agreement for wind energy, investment in our first industrial-scale production plant for bio-based rhamnolipids, and expansion of our portfolio of additives for mechanical and chemical recycling.

### Progress with our transformation in 2022

Evonik has integrated sustainability into the strategic management process (SMP). Quantifiable effects are included in the SMP through the sustainability analysis of our business [p.20](#). In this way, sustainability aspects play a direct and effective part in the management of our operating businesses. In our growth divisions—Specialty Additives, Nutrition & Care, and Smart Materials—we are extending our product portfolio and specifically increasing sales with Next Generation Solutions. For example, the Coating Additives business line (Specialty Additives division) launched its new TEGO® Therm technology in November 2022. Thermal insulation coatings based on TEGO® Therm significantly reduce energy loss from complex, non-insulated surfaces. At the same time, they protect against moisture penetration and thus corrosion. This significantly increases the service lives of, for example, pipes and tanks.

<sup>1</sup> EFRAG = European Financial Reporting Advisory Group.

<sup>2</sup> ESRG = European Sustainability Reporting Guidelines.

<sup>3</sup> ESRS = European Sustainability Reporting Standards.

<sup>4</sup> ESRS 1: General principles (exposure draft), April 2022; ESRS 2: General, strategy, governance and materiality assessment (exposure draft), April 2022.

Our contributions to improved sustainability are allocated to four **Sustainability Focus Areas (SFAs)**: fight climate change, drive circularity, safeguard ecosystems, and ensure health & wellbeing [p.24](#). For each SFA, we show how Evonik reduces its own ecological footprint and the handprint<sup>1</sup> resulting from the use of our products and solutions in the relevant markets. In 2022, we drove forward the quantification of positive and negative environmental influences. This showed both an improvement in our handprint and a further reduction in our footprint.

Sustainability is closely integrated into the management of our innovation portfolio. Our innovative contributions to the trans-

formation of many areas of application include novel membrane technologies and our formulating expertise. Evonik also gains access to innovative technology and new business options through its corporate venture capital activities (see “Value chain and products” [p.49](#)).

In line with our commitment to SBTi, in 2022, we set new targets for reducing direct and indirect greenhouse gas emissions in our production and processing<sup>2</sup>. Selective investment in Next Generation Technologies will help reduce our scope 1 and 2 emissions by 25 percent between 2021 and 2030. The corresponding measures were identified by a cross-functional team as part of the

global project “Evonik Assessment of GHG Emission Reduction” (EAGER) (see “The environment” [p.83](#) and the special section “Focus projects of our transformation” [p.67](#)).

In the second half of 2022, we began to structure Evonik’s cultural transformation in the sense of a Next Generation Culture, building on a broadly based campaign to strengthen our employer brand. In addition, we started to compile an inventory of present and future sustainability requirements in various occupations. This topic was also taken up in a wide range of events and employee information media.

**Materiality analysis 2022: 15 material topics for Evonik** [2-4, 3-1, 3-2, 3-3](#)

C06



<sup>1</sup> We define handprint as positive impacts of our products along the value chain compared with other established products and applications on the market, especially in customers’ applications.

<sup>2</sup> Validation of the targets by SBTi not yet completed.

Given the increasing relevance of sustainability for corporate management, we integrated further sustainability aspects into our governance framework in the reporting period. That includes ongoing development of our sustainability council (see “Further elements of our sustainability management” [p. 123](#)) and greater alignment between sustainability risks and conventional risk management (see “Governance and compliance” [p. 31](#)). Moreover, from 2023 we will be integrating sustainability more closely into the remuneration of the executive board and other executives. This was approved for the executive board remuneration at the annual shareholders’ meeting in 2022. As well as including occupational safety in short-term remuneration as in the past, we will be introducing sustainability targets such as reducing scope 1 and 2 emissions, increasing the proportion of sales from Next Generation Solutions, and employee engagement as an additional component of long-term remuneration. [2-20](#)

In 2022, we also specifically enhanced our sustainability reporting, including addressing elements of the upcoming EU reporting standard at an early stage. For instance, the process used for our new materiality analysis already includes the content of the EFRAG working papers and exposure drafts and the GRI Sustainability Reporting Standards, which were revised in 2021 (see “About this report” [p. 132](#)). Furthermore, our reporting is aligned with the SASB<sup>1</sup> and TCFD<sup>2</sup> (“Basis of reporting” [p. 134](#)). We therefore consider that we are well-prepared for future European and international sustainability reporting requirements.

In order to manage Evonik’s business development with a view to non-financial indicators, we need high-quality sustainability data. In this way, we also tackle the lack of transparency in external reporting. Our **sustainability data management** project plays an important part in this. The aim is to make sustainability-related data available on one platform as a “single point of truth.” Having successfully completed the preliminary project in 2021, in the reporting period, we continued with our work on automating the sustainability analysis of our business and on the greenhouse gas emission management module. In the coming years, we want to successively add further sustainability-related management and reporting data to this platform. [2-19](#)

### Sustainable finance

The transformation of our portfolio and the sustainability alignment of our products and processes are becoming increasingly important for the long-term financing of our business activities. Products and solutions from Evonik play a part in the sustainable transformation of many end-markets. Examples are the focus on circularity and climate neutrality for the future. The capital markets recognize our strategic and operational progress towards greater sustainability. For some years now, Evonik has been established among the leaders in renowned sustainability ratings and rankings (“Ratings and indices” [p. 152](#)). In May 2022, the EcoVadis rating agency once again awarded us platinum status for our sustainability performance. That puts Evonik among the top 1 percent of the companies evaluated by EcoVadis in both the chemical industry and in other sectors.

In May 2022, Evonik successfully issued its second green bond—a senior bond with a nominal value of €750 million.

“Green” funding is based on our Green Finance Framework<sup>3</sup>. The proceeds of this bond issue will be used principally to extend our Next Generation Solutions.

Sustainability also has a firm place in the management and investment of our pension assets. Since 2014, we have developed ESG criteria for the pension assets held by Evonik Industries AG, which are therefore directly under the control of the company (contractual trust agreement). Since 2019, the Degussa VVaG pension fund has had its own strategy for addressing sustainability risks. We regard sustainability in the investment process as a holistic and evolutionary process. It is applied to both liquid and illiquid investments and fine-tuned as required. Within the organization of the investment vehicle itself, the focus is on governance requirements such as risk management, compliance, and fighting corruption, as well as cybersecurity and diversity. 50 percent of the members of the executive board at the Degussa VVaG pension fund are women.

### EU taxonomy—little focus on specialty chemicals at present

As part of the Green Deal, the EU taxonomy is designed to direct financing towards sustainable investments. The EU taxonomy covers six environmental objectives:

- climate change mitigation,
- climate change adaptation,
- sustainable use and protection of water and marine resources,
- transition to a circular economy,
- pollution prevention and control,
- protection and restoration of biodiversity and ecosystems.

<sup>1</sup> SASB = Sustainability Accounting Standards Board.

<sup>2</sup> TCFD = Task Force on Climate-related Financial Disclosures.

<sup>3</sup> Evonik Green Bond Allocation Report 2021 and Evonik Green Bond Impact Report 2021. [More](#)

For 2022, there is a reporting obligation for the first two environmental objectives. Their main focus is on economic activities that currently result in high carbon dioxide emissions, where a reduction in emissions would make the biggest contribution to achieving the EU's climate targets. The chemical products mainly affected by the delegated acts for these two environmental objectives are commodity chemicals. At present, only a few categories of precursors are affected.<sup>1</sup>

Evonik's portfolio of specialty chemicals is therefore affected only to a small extent by the EU taxonomy's climate change mitigation objective at present. In other words, only a few of our activities are taxonomy-eligible<sup>2</sup>. In 2022, these taxonomy-eligible activities accounted for just 15 percent of turnover, 17 percent of CapEx<sup>3</sup>, and 13 percent of OpEx<sup>3</sup>. None of Evonik's activities are taxonomy-eligible with regard to the climate change adaptation objective.

For 2022, we examined the taxonomy alignment<sup>4</sup> of the taxonomy-eligible activities for the climate change mitigation objective for the first time. As expected, this is less than 1 percent of turnover, CapEx, and OpEx. The background to these low ratios is that for the climate change mitigation objective for chemical products, the EU taxonomy mainly addresses the carbon footprint of the products and especially their raw materials. By

contrast, it disregards the positive impacts (handprint) of many products. In view of the rising use of non-fossil raw materials and greater certification, we assume that we can increase this percentage in the coming years.

Unlike the EU taxonomy, the sustainability analysis of our business (p.20) covers the footprint, handprint, and further signals and market requirements. Many Evonik products are differentiated from competing products principally through their handprint. Our sustainability analysis, with its holistic approach, therefore remains the key tool for the strategic management and ongoing development of our portfolio.

### UN Sustainable Development Goals of relevance for Evonik

The Sustainable Development Goals (SDGs) provide guidance on actively aligning our current business activities to overarching development paths. Evonik supports the realization of the SDGs and has intensively examined its own positive and negative contributions for a number of years. Examples of the positive contributions made by our products and solutions to implementing the SDGs can be found on our website. [More](#). We have also developed a methodology to identify the SDGs that are especially relevant for the Evonik Group. This approach includes the 169 sub-targets of the 17 SDGs.

An SDG is especially relevant for us if there is a significant positive or negative influence on or by Evonik. To this end, we use a multi-step process to examine and weight key criteria such as sales, earnings contribution, and inclusion in our growth engines or innovation growth fields. The evaluation also includes the expectations of internal and external stakeholders and the results of our materiality analysis. The SDGs of particular relevance for Evonik are:



In 2022, 52 percent of sales from our chemicals businesses (2021: approx. 50 percent) contributed to SDGs 3, 6, 12, and 13, which are of particular relevance from the viewpoint of the Evonik Group.

Throughout this report, you can find information on how our activities relate to the SDGs of relevance to Evonik (Sustainability Focus Areas [p.24](#), the SDG index [p.137](#), and mapping of the 17 SDGs to the GRI content index [p.138](#)).

<sup>1</sup> You can find further information in the financial report 2022, combined management report, section 5.5.3. "Disclosures on the EU taxonomy" p. 68. [More](#).

<sup>2</sup> Taxonomy-eligible economic activities are those activities of a company that fall within the scope of the EU taxonomy and are listed in annexes 1 and 2 to the delegated acts supplementing Regulation (EU) 2020/852 for the first two environmental objectives.

<sup>3</sup> Definition based on the EU taxonomy, see financial report. [More](#).

<sup>4</sup> Taxonomy-aligned activities are taxonomy-eligible activities that meet the stringent technical screening criteria set out in the delegated acts on the EU taxonomy and meet minimum social safeguards.

## Measurability and management

Extensive transparency and soundly based analyses are our response to the growing interest shown by our stakeholders in sustainability. We take into account ecological, social, and economic effects to arrive at a holistic assessment of our sustainability performance. Alongside potential future opportunities and risks for our business, we highlight the cost/benefit effects of Evonik’s activities for society. We see this as an important contribution to the acceptance by society of new technologies and industrial production.

### Sustainability analysis of our business

The sustainability analysis of our business is the key tool for the strategic management and ongoing development of our portfolio. The methodology is based on the chemical industry standard for portfolio analysis. The extensive evaluation of these sustainability signals in all three dimensions of sustainability—economic, ecological, and social—gives us insights for the foresighted management of individual products and entire business areas. The results of the analysis are used in our strategic management process.

### Methodology

The market signals identified as being significant for Evonik form the heart of our sustainability analysis. These include, for example, anticipated regulatory trends, for instance on chemical safety along the value chain, ecological and social performance compared to alternative solutions, and major sustainability ambitions in our markets. The evaluation is based on the frame-

### Analysis of the measurability of sustainability

T02

Type of analysis	Questions addressed
Sustainability analysis of our business	What are the strengths and weaknesses of the products in our portfolio with regard to sustainability requirements? What economically viable measures help us reduce the carbon footprint of our products? (Inside-out perspective)
Evonik Carbon Footprint	What is the annual carbon footprint of the entire Evonik Group? (Inside-out perspective)
Life cycle assessments	What are the environmental impacts resulting from the production of our products (cradle-to-gate), including their application by our customers (cradle-to-grave)? (Inside-out perspective)
Analysis to determine which Sustainable Development Goals are relevant for Evonik	Which products and solutions for our customers address the challenges facing society? How do we contribute to meeting the 17 SDGs? (Outside-in perspective)
Impact valuation	What positive and negative impacts do our business activities have on the environment and society? (Outside-in perspective)
Supply chain analysis	From the perspective of our stakeholders, what opportunities and risks are associated with our products in their respective value chains? (Outside-in perspective)

work for Portfolio Sustainability Assessment (PSA) developed by the World Business Council for Sustainable Development (WBCSD). This enables us to take account of different market signals in the various end-markets for our business. The unit of evaluation is defined through a differentiated assessment of the

relevant products in specific product-application-region combinations (PARCs). For each PARC, we identify the benefits of using the product and will gradually be quantifying these in greater detail. We dynamically extend the PARC approach to include new requirements, for example, in the area of circularity. In the reporting period, we therefore analyzed our entire chemical business from the perspective of the circular economy.

 2-7, 201-2, 203-1, 203-2

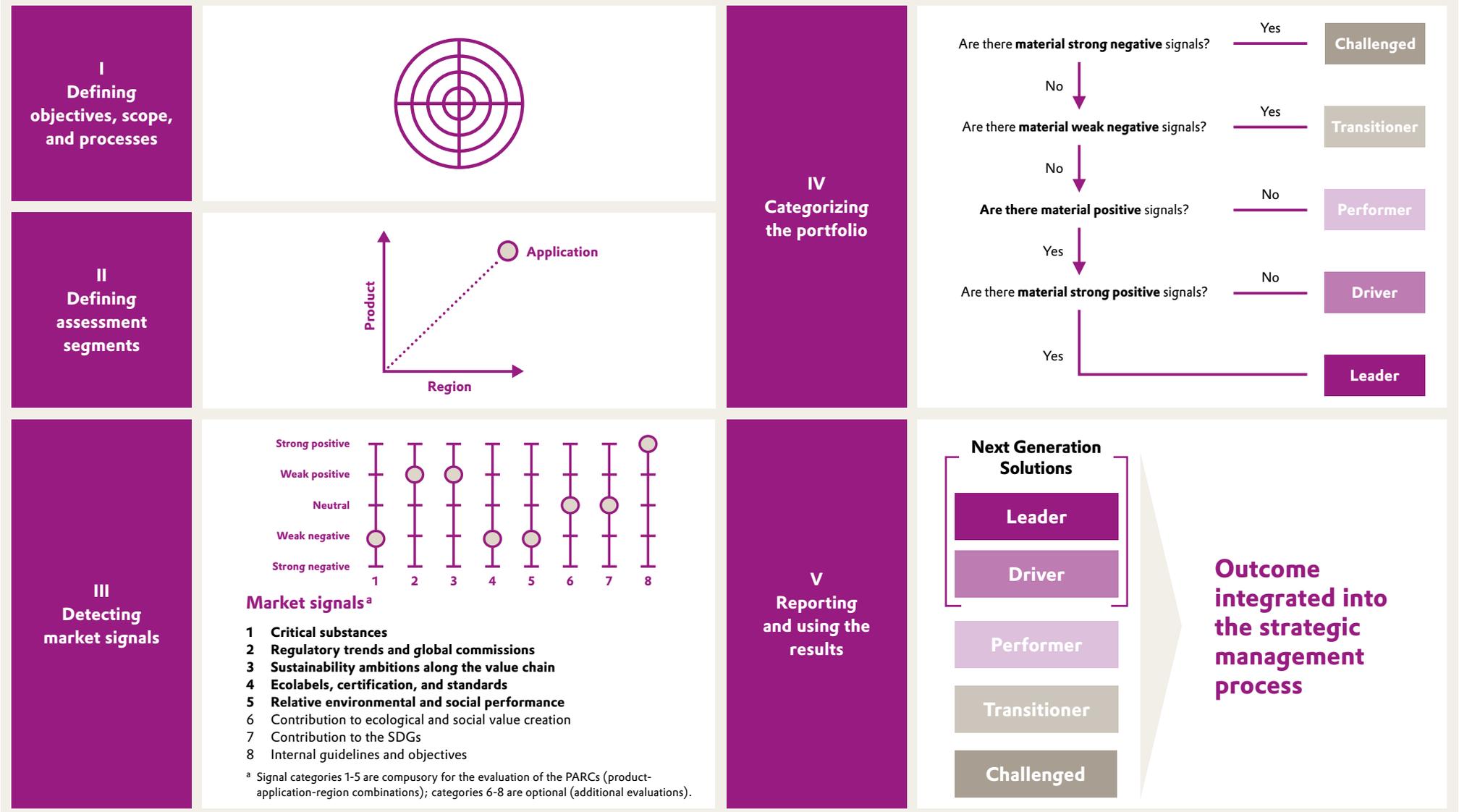
The assessment of all the PARCs analyzed is used in a structured overall evaluation of the sustainability performance of our portfolio, resulting in allocation to the performance categories leader (A++), driver (A+), performer (B), transitioner (C-), or challenged (C--) (CO7  p.21). We refer to products and solutions allocated to the categories leader (A++) and driver (A+) as Next Generation Solutions. These have attractive growth rates and stand out positively in their markets because of their clear sustainability benefits.

### 2021 and 2022 findings

In recent years, we have accelerated the processes used to compile and evaluate data for the Evonik Carbon Footprint (2020) and the impact valuation (2021) so that the results can be presented simultaneously with our financial results at our financial press conference. As a reflection of its strategic importance, we have now synchronized the sustainability analysis with the overall process. From now on, the findings are reported for the current reporting period. To this end, the sustainability analysis 2022 was initially performed on the basis of the business data for 2021 and repeated at the start of 2023 on the basis of the figures for 2022.

Sustainability analysis of our business: methodology

C07



For fiscal 2022, we examined 534 PARCs (2021: 507 PARCs), covering the total sales generated by Evonik with chemicals in the fiscal year. The number of PARCs increased year-on-year because we take an increasingly differentiated view of applications and regions. That further enhances the quality of our portfolio overview. The most important findings are:

- Evonik generated 91 percent of sales with products and solutions whose sustainability performance was at least in line with the market reference level (leader, driver, or performer category). The figure for 2021 was 91 percent.
- 43 percent of Evonik's sales came from Next Generation Solutions. These are products and solutions with a clearly positive sustainability profile that is above or even well above the market reference level (leader and driver categories). In 2021, the proportion was 41 percent.
- Weak negative market signals were identified for 7 percent of sales (transitioner category), and strong negative signals were identified for 2 percent (challenged category) (2021: 8 percent transitioner, 2 percent challenged). We are addressing these in dialogue with our customers through innovation or active portfolio management.

We want to increase the proportion of sales generated by our Next Generation Solutions from 43 percent at present to over 50 percent by 2030. On a long-term view, we aim to keep the proportion of sales generated with products that are classified as challenged as a result of changes in market conditions, consumer behavior, rising reference levels, or tighter regulation below 5 percent.

#### Life cycle assessments

Life cycle assessments are a focal area of our sustainability analysis. The proven expertise and good operational networking of our internal life cycle management group play an important part in continually enhancing our knowledge of the impact of our business activities. A broad spectrum of life cycle assessments is used for this. We use the findings for selective improvements such as more product-oriented measures to reduce our carbon footprint or optimize water management at our sites worldwide.

#### Value chain analysis

We involve the product managers of our businesses through workshops where we analyze the opportunities and risk potential of the relevant value chains. That includes disruptive factors observed in their markets, for example, as a result of changing customer requirements or increased regulation. In this way, we derive strategic recommendations for action on short- and long-term developments in our four Sustainability Focus Areas.

Target for 2030:  
**> 50%**  
of sales from  
Next Generation Solutions



## Portfolio transformation

Portfolio transformation is one of the three top topics identified in our latest materiality analysis. By transforming our portfolio, we want to make Evonik even more resilient and gain access to new, high-growth business opportunities. At the same time, our innovative products and technologies improve our customers' sustainability performance and can therefore strengthen customer loyalty.

#### Strategy and management

A key tool for the strategic management and development of our portfolio is the sustainability analysis of our business. This gives us important insights into the quality of our portfolio: from determining the proportion of sales generated by our Next Generation Solutions to showing which products we classify as transitioners or challenged. To this end, our method takes into account steadily rising market aspirations. These are shaped by a dynamic competitive environment with changing customer requirements, new technologies, and rising regulatory requirements. Our sustainability analysis enables us to incorporate such factors and the resulting changes in consumer behavior into our strategic management process.

Evonik wants to increase the sales generated with Next Generation Solutions from 43 percent (2022) to over 50 percent by 2030. This is to be achieved, on the one hand, through the ongoing development of existing Next Generation Solutions and, on the other, by aligning our research & development in order to generate additional sales with new Next Generation Solutions. At the

same time, we are reducing the proportion of sales from products classified as transitioners or challenged through selective reformulation or withdrawal from specific businesses.

Our special strength is working in close partnership with our customers. Most of our customers are industrial companies that use our products for further processing. The innovative solutions and technologies provided by our businesses offer important additional benefits for our customers compared with competitors in their end-markets.

Evonik strives to be integrated into customers' value chains where possible. That enables us to align our research & development, production, marketing, and distribution workflows closely to our customers' requirements. We also seek extensive contact to our stakeholders to enable timely identification of relevant developments and help us understand their market impact. A global Marketing & Sales Excellence team supports our businesses in customer focus and the customer benefits of what we offer. To achieve that, we make available a wide range of internal analyses, training programs, and sales tools. In addition, research & development alliances help us to address new market trends, mitigate technological and commercial risks, and improve the market penetration of sustainable solutions.

For example, Evonik and Unilever have set up a partnership to market a dishwashing liquid based on biosurfactants. Unilever aims to produce its cleaning agents and detergents without fossil fuels by 2030. One result of this alliance is an investment project at the Slovenská Ľupča site in Slovakia, where Evonik is erecting

the world's first industrial-scale facility to produce rhamnolipid biosurfactants. This triple-digit million euro investment will establish us as a pioneer in this field. Rhamnolipids are a class of fully biodegradable biosurfactants that are produced by fermentation, without the use of petrochemical feedstocks or tropical oils.

Progressive digitalization is also important in leveraging improved collaboration with suppliers and customers. We are selectively driving forward the establishment of digital interfaces and platforms. Examples are CAREtain® for customers in the cosmetics industry, EXPLORE PU for polyurethanes customers, and COATINO™, a digital lab assistant developed by Evonik specifically for the coatings industry.



COATINO™—The digital formulating assistant for the paints and coatings industry.

We are cooperating with a broad spectrum of industrial partners to encourage the transformation to greater sustainability in our supply chains and end-markets. For example, we are therefore partnering with Linde to offer a fully integrated solution based on our membrane technology to separate either hydrogen or natural gas from pipelines containing a blend of natural gas and hydrogen.

### CO<sub>2</sub>eq avoided by using Evonik products

Evonik markets a variety of products whose use makes a positive contribution to reducing greenhouse gas emissions compared with conventional alternatives. These include the following six products and system solutions: "green" tire technology, amino acids for animal nutrition, additives for hydraulic fluids, the hydrogen-peroxide-to-propylene-oxide process, POLYVEST® for tires with lower rolling resistance, and metal oxides for lithium-ion batteries. [More](#) . The amounts stated are avoided over the application life cycle of the products, based on volume sales of the products manufactured by Evonik. The method used to compile the data is the Avoided Emissions Guidance published jointly by the WBCSD and the International Council of Chemical Associations (ICCA), which was updated in 2017.

In 2022, the use of these six products resulted in the avoidance of 44.3 million metric tons CO<sub>2</sub>eq. We generated sales of €1.8 billion with these products. Since examples of further products were included in 2022, direct comparison with the previous year is not meaningful. Evonik aims to improve the quantification of the benefits of its Next Generation Solutions in customer applications (handprint) in the future.

### Four Sustainability Focus Areas (SFAs)

Our contributions to a sustainable transformation are bundled in four SFAs: fight climate change, drive circularity, safeguard ecosystems, and ensure health & wellbeing. That sharpens our businesses' awareness of the most important sustainability requirements in their markets and facilitates dialogue with customers on these aspects.

Each SFA addresses specific sustainability requirements and describes our contribution to the Sustainable Development Goals (SDGs). In this context, we examine both positive and negative impacts of Evonik's business activities. These impacts are examined for each product-application-region combination (PARC) as part of our sustainability analysis  p.20.

#### Fight climate change

This SFA bundles all contributions to reducing our scope 1, 2, and 3 emissions, increasing energy efficiency, and the use of renewable energies. We also consider the greenhouse gas emissions avoided along the value chain by using our products.

#### Drive circularity

Here, we bundle all contributions from the use of renewable and circular raw materials, the reduction in production waste, and the production of products that enable circular solutions.

#### Safeguard ecosystems

This SFA brings together all contributions in connection with Evonik products and solutions that support deforestation-free supply chains and biodiversity. Moreover, it covers environmentally friendly products that do not involve the use of chlorine or solvents and avoid polluting nature with persistent substances.

#### Ensure health & wellbeing

This SFA bundles all contributions made by Evonik products that avoid exposing people to volatile organic compounds (VOCs), microparticles, or dangerous chemicals during the application phase and those that allow access to safe food and water. Further, this SFA describes the contribution made by our solutions for efficient pharmaceutical active ingredients and medical therapies.

In our innovation activities, the four SFAs support selective optimization of business-related processes and products and the ongoing development of new business models. The three clusters at our strategic research unit Creavis—Defossilation, Life Sciences, and Solutions Beyond Chemistry—are also focused on high-growth solutions aligned with our SFAs.

In the coming years, our businesses will be quantifying and improving their handprint in the four SFAs, reducing their footprint, and generally creating additional value with sustainable solutions.  2-6

## Our targets

Below is an overview of the targets set for our strategy and growth area of action.

### Target attainment in 2022



Substantial increase in sales generated with Next Generation Solutions by 2030  
Status: 37 percent (2020), 41 percent (2021), 43 percent (2022)

### Targets for 2023 and beyond

Increase the sales generated with Next Generation Solutions to over 50 percent by 2030

Proportion of sales from challenged products should be permanently <5 percent



- Target not achieved
- Target partially achieved or target horizon extends beyond 2022
- Target achieved

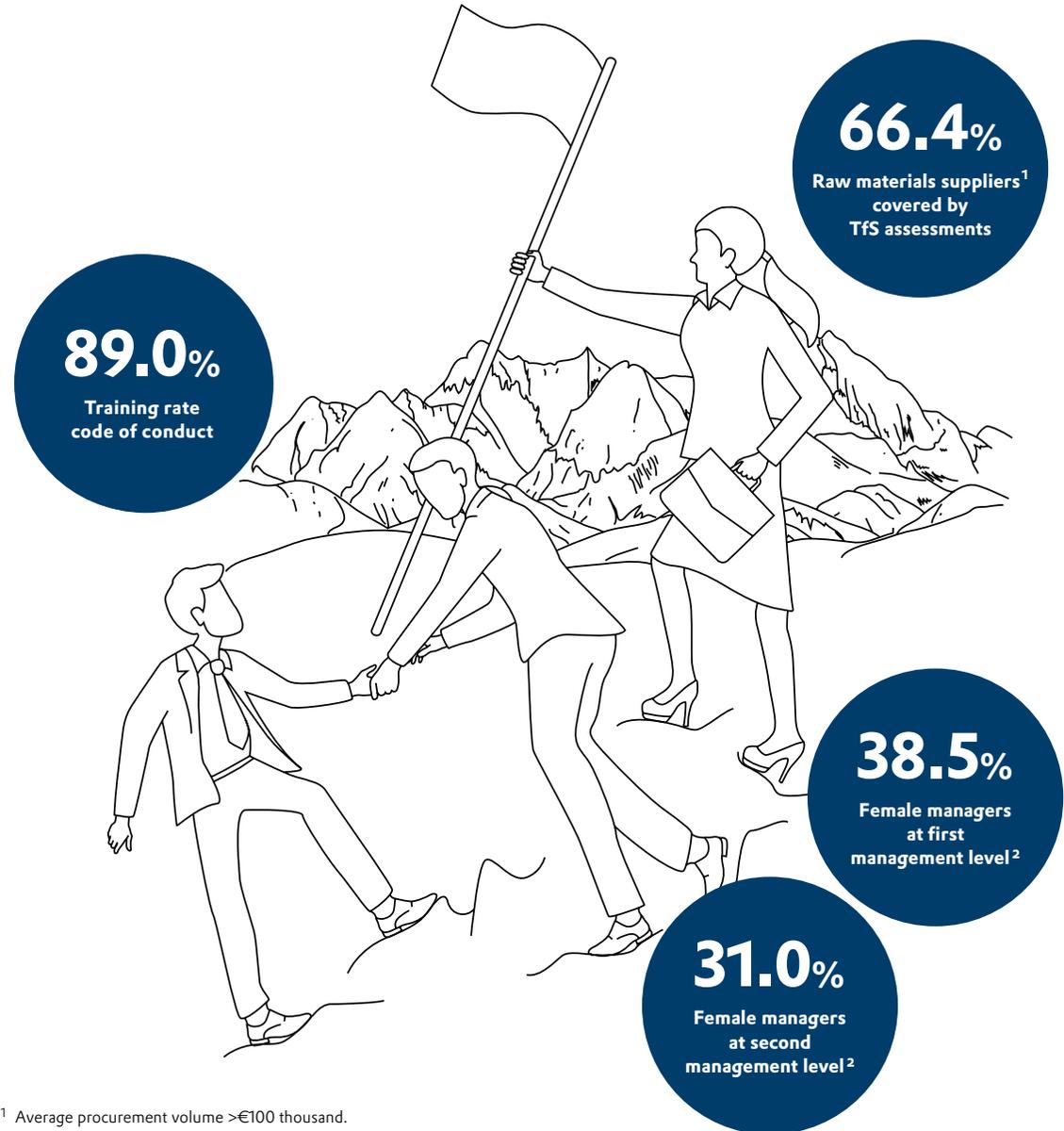
# Governance and compliance

*We are convinced that reliable and ethical management of the company is the basis for long-term business success, fair competition, and acceptance by society.*

## MATERIAL TOPICS

- Responsible management/human rights
- Cybersecurity
- Responsibility within the supply chain

## SDGS OF PARTICULAR RELEVANCE FOR EVONIK



<sup>1</sup> Average procurement volume >€100 thousand.

<sup>2</sup> At Evonik Industries AG.

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## Governance and compliance

- Establishment of a compliance management system for human rights
- Easier access to the whistleblower system
- Closer integration of risk management with sustainability opportunities and risks
- More intensive supply chain risk management for raw materials

## Responsible management/ human rights

### Strategy and management

As well as complying with the law and respecting human rights, the principles of business ethics involve respecting internal regulations and binding voluntary commitments. We strive to prevent compliance violations within Evonik as well as breaches of human rights by Evonik and in our supply chain. We therefore see fulfilling

statutory regulations, for example, on fair competition and on fighting corruption and money laundering, as a minimum requirement.

We are also committed to observing internationally recognized standards and our own more far-reaching guidelines and principles of conduct. The starting point for responsible corporate management at Evonik is our code of conduct, together with our global social policy and our policy on the environment, safety, health,

### Voluntary commitments 📍 2-23, 2-24

C08

Internal	External	
Code of Conduct for Evonik employees	econsense—Forum for Sustainable Development of German Business	Chemie <sup>3</sup>
Global Social Policy	ILO—International Labour Standards	Global Reporting Initiative
ESHQE Policy of Evonik Industries AG	OECD Guidelines for Multinational Enterprises	Responsible Care®
Policy Statement on Human Rights	Code of Responsible Conduct for Business	Together for Sustainability
Code of Conduct for Suppliers	World Business Council for Sustainable Development (WBCSD)	UN Global Compact

quality, and energy (ESHQE)<sup>1</sup>. In addition, the executive board has adopted a new version of its policy statement on human rights, which has been revised, in particular, in light of the German Act on Corporate Due Diligence Obligations in Supply Chains. Human rights have been included in the code of conduct since 2018.

Our code of conduct sets out Evonik's most important principles and standards, which all employees must be aware of. It is valid throughout the Evonik Group and is an integral part of the employment contract between each individual employee and Evonik. Evonik has defined responsibility for the topics included in the code of conduct, along with key contacts. Violation of the code of conduct can damage Evonik's reputation and result in substantial financial loss. In view of this, violations can have far-reaching consequences for the employee involved. We do not tolerate violations of our code of conduct. Evonik has issued a special code of conduct for suppliers, which sets out binding requirements  p. 42.

Our global social policy sets out rules for social responsibility and business ethics in our relationship with our employees and their dealings with one another. As a member of the UN Global Compact, we have given an undertaking that, within our sphere of influence, we will actively respect and promote labor rights and human rights, avoid discrimination, protect people and the environment, and fight against corruption. In addition, we want to make a contribution to achieving the United Nations

17 Sustainable Development Goals (SDGs). We have therefore identified the SDGs that are most relevant for us (see "Strategy and growth"  p. 19).

As a signatory to the chemical industry's Responsible Care® Global Charter, we have an obligation to continuously improve our performance in health protection, environmental protection, product stewardship, safety, and engagement with our stakeholders. Our ESHQE positions are predicated on the protection of people and the environment. Together with more detailed policies and procedures, they form Evonik's ESHQE regulations.

Evonik is involved in many national and international competency networks in the area of sustainability. These include econsense—Forum for Sustainable Development of German Business, and Chemie<sup>3</sup>, the sustainability initiative of the German chemical industry. We are also a member of the World Business Council for Sustainable Development (WBCSD) and are committed to its Vision 2050. We regularly report our climate and water performance to CDP. Since 2020, we have also reported our contribution to deforestation-free supply chains.

Our sustainability reporting complies with the GRI standards. We are a member of the GRI Community and support the mission of GRI to empower decision-makers everywhere, through the GRI Sustainability Reporting Standards and its multi-stakeholder network, to take action towards a more sustainable economy and world.  407-1, 408-1, 409-1

## Human rights

Respecting human rights is a central element of corporate responsibility. We address the associated obligations throughout the company and along the value chain within our sphere of influence. Evonik has various tools, principles of conduct, and guidelines to support compliance with human rights obligations.

From 2023, Evonik comes within the scope of the German Act on Corporate Due Diligence Obligations in Supply Chains (see special section "Focus projects of the transformation"  p. 62). This law sets out companies' obligations to make sure that their business activities do not contribute to breaches of human rights. It requires them to respect the core labor standards issued by the International Labour Organization (ILO) to prevent forced or compulsory labor and child labor, the right to freedom of association, the UN International Covenant on Civil and Political Rights, the UN International Covenant of Economic, Social and Cultural Rights, and the employment protection regulations applicable at the place of employment. In addition, the law requires compliance with three international environmental conventions, including the Minamata Convention<sup>2</sup>.

In 2021, the executive board instructed a project group led by the head of Compliance to set up a compliance management system for human rights, including environment-related aspects, to comply with the German legislation on due diligence in supply chains. Alongside Compliance, the project group included the Procurement, ESHQ, HR, and Sustainability functions.

<sup>1</sup> The code of conduct applies to a) all employees of Evonik Industries AG, b) all employees of companies where Evonik Industries AG directly or indirectly holds more than 50 percent of the shares or is able to exert a controlling influence in any other way, and c) the executive board of Evonik Industries AG and all managing bodies of the companies referred to in b). At companies where Evonik holds a stake but does not exert a controlling influence we work towards establishing comparable standards.

<sup>2</sup> The aim of the Minamata Convention is to protect human health and the environment from anthropogenic emissions and the release of mercury and mercury compounds into the air, water, and soil. The other two conventions are the Stockholm Convention and the Basel Convention.



## Elements of the compliance management system for human rights [2-24, 2-25](#)

### Standards

- Policy statement on human rights
- Code of conduct
- Global social policy
- ESHQE policy
- Code of conduct for suppliers
- General terms and conditions of purchase

### Prevention and awareness-raising measures

- Human rights risk analysis (due diligence)
- Supplier validation and evaluation
- Business partner integrity checks
- Whistleblower hotline

### Reporting

- Sustainability report
- Non-financial statement
- Reporting in compliance with the UK Modern Slavery Act
- Reporting in compliance with the California Transparency in Supply Chains Act
- Sustainability website [evonik.com/Sustainability](https://www.evonik.com/Sustainability)

Established standards and processes were examined using a gap analysis and are being adapted to the requirements of the German legislation on due diligence in supply chains. The project

work benefited from the expertise and resources of the established compliance management systems. It was also able to build on existing processes such as Evonik's established process for risk-based validation of suppliers.

### Our progress in 2022

We extended our compliance policy to include human rights in our House of Compliance and integrated this into the area of responsibility of the chief compliance officer. To support this, we are setting up a compliance management system for human rights. Its aims are timely identification of risks and the establishment of preventive and remedial action to avoid or mitigate breaches of human rights. We therefore consider that we are well-prepared with a view to future European and international requirements.

Evonik appointed its first group human rights officer effective July 1, 2022. His role includes implementing and continuously developing the compliance management system for human rights. He also chairs a cross-functional roundtable on human rights, which brings together representatives of the Procurement, ESHQ, HR, Marketing & Sales Excellence, and Sustainability functions.

### Human rights risk analysis

In 2022, Evonik conducted its first human rights risk analysis. This also covered environment-related aspects in its own business area and at direct and indirect suppliers. The analysis is based on Evonik's existing human rights risk map. The identified risks were validated, weighted, and prioritized on the basis of criteria such as the likelihood and severity (scope and remediability) of possible breaches of human rights. We will perform annual and ad-hoc

risk analyses in the future. To this end, we developed an appropriate IT solution in the second half of the reporting period. Since the appointment of the human rights officer, risk analyses have been performed as part of the due diligence in M&A projects. We have also improved the management of the important interfaces between the Procurement, ESHQ, and HR functions.

### Policy statement on human rights

The policy statement on human rights was revised in the reporting period on the basis of the risk analysis, the requirements of the German Act on Corporate Due Diligence Obligations in Supply Chains, and the UN Guiding Principles on Business and Human Rights and adopted by the executive board. [More](#)

### Further preventive measures

We have put appropriate preventive measures in place both in our own business area and, where applicable, in collaboration with direct and indirect suppliers. These are derived from the risk analysis in combination with our contribution to the risk<sup>1</sup> and—where relevant—our ability to influence the direct originator.

In our own business area, we can build on measures already in place, for example, in product stewardship, ESHQE, and HR, and gradually extend and improve them. That includes taking a more global view of human rights and environment-related risks.

In the reporting period, we developed a training concept for human rights. Implementation and integration into the uniform group-wide compliance training concept are planned for 2023. The training formats and content will be defined on a risk basis. In the future, human rights training will be mandatory for certain

<sup>1</sup> United Nations Guiding Principles on Business and Human Rights: Guiding principle 13 makes it clear that companies can cause or contribute to adverse human rights impacts through their activities and that their operations may be "directly linked" to negative impacts, "even if they have not contributed to those impacts."

target groups that could potentially come into contact with human rights or environment-related risks. We will be reporting a training rate for human rights training starting in 2023. In addition, we produced and published a video and a podcast on human rights in collaboration with the German Global Compact Network. New employees at Evonik also receive information on human rights due diligence as part of the onboarding process.

Evonik's procurement strategy includes criteria such as health, safety, human rights, labor rights, and environmental protection [p.42](#). A central focus of sustainable supply chain management is supplier validation, evaluation, and development, both before and during the business relationship. The code of conduct for suppliers, which we revised in the reporting period, sets out our expectations with regard to respecting human rights. We also expect our suppliers to require their suppliers to comply with the requirements set out in our code of conduct for suppliers.

Together with the external service provider SIGNUM Consulting GmbH, we operate a cross-functional IT tool to validate the integrity of business partners. As well as evaluating media sources, this uses various online research sources on human rights. Furthermore, it is possible to gain a direct insight into human rights-related aspects in collaboration with local partners. If there are indications of breaches of human rights, we immediately take appropriate counteraction or refrain from the business relationship. Implementation of the measures is monitored via the IT tool. In addition, non-compliant suppliers can be blacklisted directly in the system.

In the future, we will review the effectiveness of our preventive and remedial measures annually and on an ad-hoc basis.

#### Complaints procedure and reports of potential violations of human rights

Violations of human rights at or in connection with Evonik can be reported via internal channels and an electronic whistleblower system operated by an external service provider. Both employees and external stakeholders, such as business partners, suppliers, and local inhabitants in the vicinity of Evonik sites, can use this system, which is available in 20 languages, to report non-compliance or potential non-compliance to Evonik. The system has a separate category for human rights, and reports are channeled directly to the group human rights officer. Alongside the electronic whistleblower system, suspected violations of regulations can be reported to the responsible compliance office by phone, email, or letter. We are working continuously to improve the effectiveness of the complaints channels [p.34](#).

In the reporting period, we received one allegation of a breach of human rights.

#### Reporting

Transparent presentation of our human rights activities is very important to Evonik. For many years, we have provided relevant information in our non-financial statement, our sustainability report, and the sustainability section of our website. Our annual statements on the UK Modern Slavery Act and the California

Transparency in Supply Chains Act are also published on our website. [More](#) . They contain information on the action we take to prevent modern slavery.

In its most recent benchmark report, the Global Child Forum named Evonik for the first time as a "leader" in respecting children's rights, giving us recognition for the progress made with our policies, processes, and practices to systematize children's rights. Together with the Boston Consulting Group, this benchmark evaluates around 830 companies worldwide using 27 indicators and assigns them to the categories beginner, improver, achiever, and leader.



#### Corporate governance

As a specialty chemicals company with a presence throughout the world, good corporate governance with a long-term focus is essential for Evonik. The executive board and supervisory board are explicitly committed to responsible corporate governance and identify with the goals of the German Corporate Governance Code. We see respecting and applying the principles of corporate governance as important management tasks. That starts with collaboration within the executive board and supervisory board and between these two boards. It also includes Evonik's relationship with its shareholders and other people and organizations that have a business relationship with the company.

As provided for by the foreword to the German Corporate Governance Code, Evonik reserves the right not to implement certain provisions if departure from the recommendations is justified. The latest declaration of conformity with the requirements of the German Corporate Governance Code has been published on our website. [More](#) .

### Executive board

The executive board of Evonik Industries AG is responsible for running the company in the company's interests, taking into account the interests of the shareholders, employees, and other stakeholders. It discusses sustainability at its meetings several times a year, especially aspects relating to the environment, safety, and portfolio transformation. For information on the executive board's overall responsibility for sustainability and all climate-related aspects, see "Further elements of our sustainability management"  p. 122.

When making appointments to the executive board, the supervisory board considers both the professional qualifications of the candidates and the other criteria it has defined for the executive board as part of the diversity concept. [More](#) . These include, for example, a suitable mixture of ages, professional competencies, and fulfillment of the targets for the proportion of women on the executive board.

### *Percentage of women on the executive board and in management*

For the period from July 1, 2017 through June 30, 2022, the supervisory board set a target of 25 percent for the proportion of women on the executive board. At present, one member of the

executive board is female, and three are male, so it meets this target. For the period from July 1, 2022 through June 30, 2027, the supervisory board has set a target of 25 percent female members of the executive board (which is equivalent to one woman as the executive board currently has four members).

For the period from January 1, 2021 through December 31, 2024, the executive board has set a target of 30 percent female managers at the first and second management levels.<sup>1</sup> At year-end 2022, the proportion of female managers was 38.5 percent at the first management level and 31.0 percent at the second management level.

### Supervisory board

The supervisory board advises and supervises the executive board. It appoints the members of the executive board and names one member as the chairperson of the executive board. It also decides on the remuneration of the members of the executive board. The supervisory board examines the company's annual financial statements, the executive board's proposal for the distribution of the profit, the consolidated financial statements for the Evonik Group, and the combined management report. The executive board is required to obtain the approval of the supervisory board on decisions of fundamental importance, which are defined in a separate list. The supervisory board has the following committees: an executive committee, an audit committee, a finance and investment committee, an innovation and research committee, a nomination committee, and the mediation committee required by the German Codetermination Act.

The executive board provides regular, timely, and extensive information for the supervisory board on all matters of relevance

for the company. Major sustainability aspects are included in context. On this basis, Evonik's sustainability activities were discussed at several meetings of the supervisory board in 2022.

In accordance with the provisions of the German Codetermination Act, the supervisory board comprises twenty members, ten of whom are representatives of the shareholders, while ten are representatives of the workforce.

A minimum quota of 30 percent women is set by law. The supervisory board currently meets this requirement as it comprises six women and 14 men. Women therefore make up 30 percent of the total. The supervisory board takes diversity into account, both in its own composition and in appointments to the executive board. The supervisory board's diversity concept includes rules on the independence and age of supervisory board members and their maximum term of office. Supplementary criteria apply for the profile of skills and expertise of the supervisory board as a whole. These relate to the necessary knowledge and abilities of the members of the Supervisory Board, for example, international experience, a knowledge of business administration and science, and experience in managing a company. In this context, the supervisory board took on board a new recommendation of the German Corporate Governance Code in 2022 and extended the profile of skills and expertise to include experience in ecological and social sustainability. At present, nine members of the supervisory board have expertise in this area.

You can find further information in the declaration on corporate governance, which is available on our website and also forms part of Evonik's financial report. [More](#) .

 2-9, 2-10, 2-11, 2-12, 2-13, 2-15, 2-17, 405-1

<sup>1</sup> At Evonik Industries AG.

**Performance-oriented remuneration of senior management**

The supervisory board is responsible for the employment contracts with the members of the executive board. It sets the total remuneration package for each member of the executive board, comprising a basic salary, variable short- and long-term components, pension benefits, the reimbursement of expenses, insurance, and various other fringe benefits. The contracts with members of the executive board and all executives include remuneration elements based on personal performance and the overall performance of the Evonik Group. As one of our material sustainability topics, occupational safety (accident frequency) influences the remuneration of the executive board. From 2023, further sustainability aspects will be integrated into the long-term remuneration of the executive board and senior executives (see "Strategy and growth" p.18). The remuneration report 2022 provides further information on the remuneration of the executive board and supervisory board. 2-19, 2-20

In accordance with the recommendations of the German Corporate Governance Code, the supervisory board commissions a remuneration report (vertical comparison) to review the ratio of remuneration of the executive board to that of senior executives and Evonik's workforce. The most recent review was in 2020. The results are confidential and are not published. More

2-21

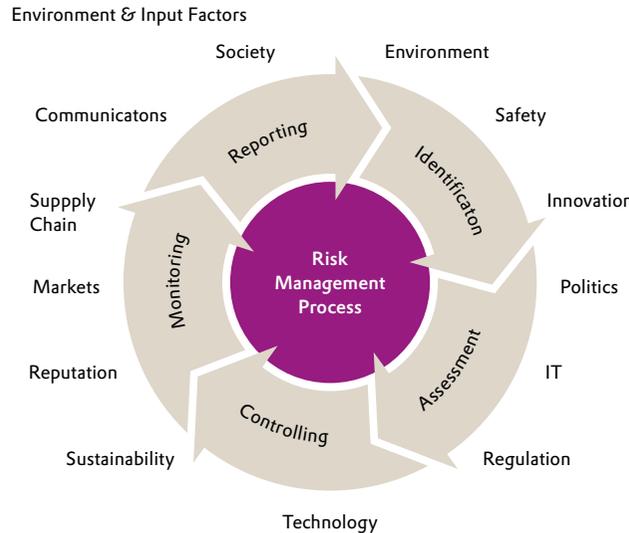
**Opportunity and risk management**

Since it operates globally, Evonik is exposed to a range of influences along the entire value chain that may be either opportunities or risks. Risk management at Evonik takes a multidisciplinary approach. Risk are identified when there is a deviation from the present business planning or the mid-term plan, which covers a

three-year period. Early identification and evaluation of potential opportunities and risks is part of our extensive opportunity and risk management. This takes into account financial and non-financial opportunities and risks, for example, in relation to occupational safety, process safety, product stewardship, health protection, and climate change. 202-2

**The risk management process at Evonik**

C09



Our established risk management system systematically captures and monitors both quantifiable and non-quantifiable risks in the present fiscal year and the mid-term period. Risk reporting is the starting point and result of our continuous risk management process. Risk coordinators ensure that internal and external risks

are identified and reported by their organizational unit (identification). Risk assessment uses clear and uniform criteria to allow classification and prioritization. The measures selected and implemented to manage risks are designed to limit the likely damage caused by the risk factors and/or their probability of occurrence (controlling). Progress with the measures implemented and the development of the risks over time are tracked (monitoring). Monitoring only becomes unnecessary when a risk actually occurs, becomes obsolete, or is reduced to an insignificant level. All units are required to update their opportunity and risk reports quarterly. Ad-hoc risks have to be reported without delay, even outside the defined reporting intervals (reporting).

**Examination of extreme risks**

We continuously align our risk management system to new requirements. Following the revision of German audit standard IDW PS 340, we also examine extreme risks and consider long-term scenarios, such as a major earthquake in the Rhine region or a rapid rise in sea levels. Extreme risks are incidents that could cause a crisis, for example, as a result of a major fire, cyberattack, or the collapse of supply chains. There is a very low probability that risks of this type will occur, but their impact on our business could be very extensive, and they could substantially jeopardize the company's status as a going concern.

**Closer alignment between sustainability risks and conventional risk management**

The identification of sustainability opportunities and risks within conventional risk management and monitoring of the measures taken are organized on a decentralized basis. Responsibility is assigned to the risk coordinators and risk officers in our management units: The risk coordinators in the divisions enter sustainability-related risks and opportunities, including their

impacts and likelihood of occurrence, in the group-wide risk reporting system for the current year and the three-year mid-term period. The status of the relevant measures is also entered. We use our annual risk coordinator conference to raise the awareness of the relevant personnel of the increasing significance of sustainability-related opportunities and risks.

The sustainability analysis of our business is our core process for strategic management and ongoing development of the sustainability aspects of our portfolio (see "Strategy and growth" p.20). The analysis covers economic, ecological, and social aspects along the value chain. It assesses the strengths/opportunities and weaknesses/risks of established business activities and major research projects from the perspective of market-specific sustainability aspects in our four Sustainability Focus Areas. We are presently developing a concept to include the results of the sustainability analysis in group-wide risk reporting in the future.

**Sustainability risks and opportunities beyond the mid-term period**

Sustainability risks often have a far longer time horizon than the mid-term period used for conventional risk management. Such long-term risks are particularly relevant for Evonik because our production facilities are typically operated for decades, our products remain in the environment for a prolonged period, and our supply chains are exposed to long-term environmental and social risks. Therefore, we are currently working on an approach to identify long-term sustainability-related risks and opportunities so that we can define adequate targets and measures to address them. That will help us take such opportunities and risks into account directly in portfolio management, innovation management, and decision-making in the future.

For some years, we have addressed opportunities and risks resulting from climate change through a cross-functional working group on the **Task Force on Climate-related Financial Disclosures (TCFD)** (see "The environment" p.84 and "Basis of reporting" p.134.) In our TCFD index, we provide information in the categories defined by the TCFD: governance, strategy, risk management, and metrics and targets. This index is published in our financial report and our sustainability report (see "Basis of reporting" p.135). In addition, we follow the work of the Task Force on Nature-related Financial Disclosures (TNFD).

Further information on risk management can be found in the opportunity and risk report in the financial report 2022. [More](#)

**Ethics and compliance**

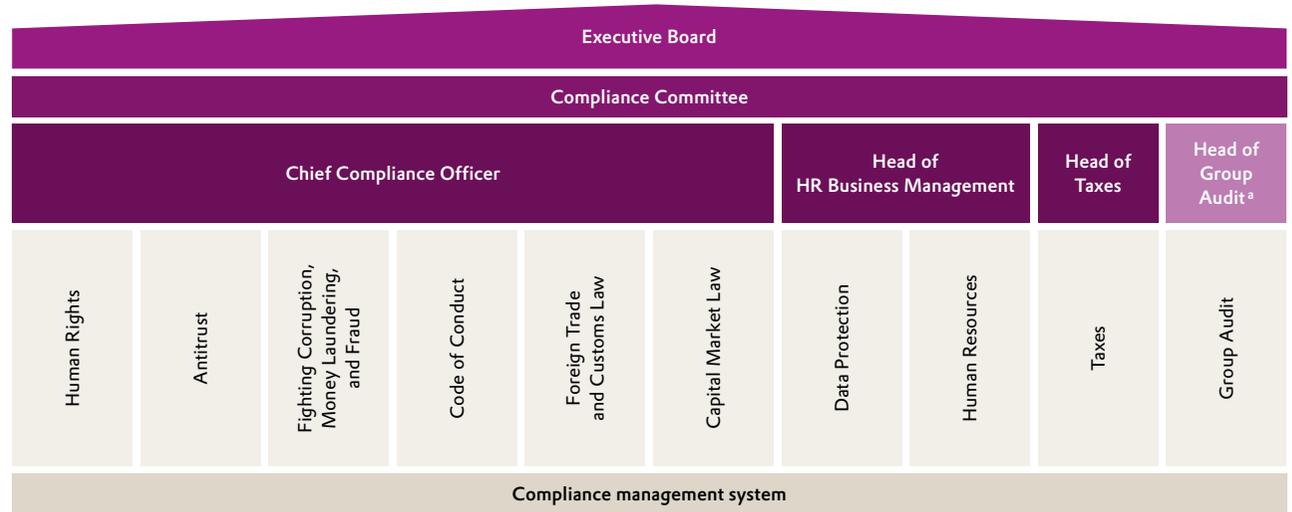
The compliance areas of specific relevance to Evonik are bundled in a House of Compliance. Each area defines and monitors relevant rules for its compliance-related issues and the voluntary commitments entered into by Evonik.

Responsibility for the environment, safety, health, and quality is bundled in a corporate function with the same name (see "The environment" p.80).

Minimum group-wide standards have been defined for the compliance management systems for the areas covered by the House of Compliance, and we make sure that they are

**House of Compliance** [2-23, 2-26, 205-1, 403-2](#)

**C10**



<sup>a</sup> Advisory role.

implemented in every area. Final responsibility for this rests with the executive board, which defines the key elements for the compliance management systems and monitors their observance. The supervisory board’s audit committee oversees the effectiveness of the system. The process of forming a consensus, sharing experience, and coordinating compliance activities takes place in the compliance committee, which is composed of the heads of the respective units, who have independent responsibility for their areas, and the head of Group Audit. Group Audit performs independent audits to support the executive board and subsequent management levels in the performance of their supervisory duties and continuous improvement of business processes. A key focus is auditing the internal control system and the risk management system.

**Compliance management system**

The compliance management system is based on the values and targets adopted by the executive board. Its main aim is to avoid,

or at least minimize, compliance violations and the associated risks. Compliance violations should be identified and sanctions imposed, depending on their severity. The heads of the compliance units work to make sure the compliance management system is appropriate and effective for the respective compliance issues.

*Principle of prevention*

Tools used to avoid potential compliance risks include risk analysis, training, raising awareness, and providing advice. We examine all sites, not just individual business locations, with a view to the topics covered by the House of Compliance such as corruption risks.

To identify potential risks as early as possible, every unit is required to perform regular risk analyses. Based on the results of its risk analysis, each organizational unit issues binding standards and processes for the precautions to be taken with regard to

business activities where there are specific compliance risks. The topics forming the focus of the risk analysis and the action taken may vary over a given period. Substantial changes in the relevant risk situation are examined on a case-by-case basis. As soon as a topic is examined, the main risks are reported to the management and governance bodies at the company concerned, depending on their type and extent. A regular risk analysis is undertaken in the compliance areas fighting corruption, antitrust law, and preventing money laundering. The following risk analyses have been performed in recent years:

- Antitrust law and fighting corruption (2015 to 2017)
- Anti-money laundering (2017 to 2019)
- Antitrust law, anti-money laundering, and fighting corruption, with a specific focus on procurement (2018 to 2020)

Taking the mitigating measures into account, these risk analyses did not identify any significant compliance risks.

**Compliance Management System** ⓘ 2-24, 2-25, 2-26, 205-1, 403-2, 407-1, 408-1, 409-1

C11

Responsibility of Management		
Values and Objectives		
Prevention	Detection	Response
<ul style="list-style-type: none"> <li>• Risk Analysis</li> <li>• Standards</li> <li>• Processes</li> <li>• Training</li> <li>• Sensitization/Communication</li> <li>• Advice &amp; Support</li> </ul>	<ul style="list-style-type: none"> <li>• Whistleblower System</li> <li>• Investigations</li> <li>• Monitoring &amp; Audits</li> </ul>	<ul style="list-style-type: none"> <li>• Corrective Measures</li> <li>• Sanctions</li> <li>• Lessons Learned</li> </ul>
Compliance Reporting		
Compliance Organization		

Adequacy, Effectiveness

Continuous Improvement

In the reporting period, we developed an IT-based process for our compliance risk analysis. The results of our first human rights risk analysis in compliance with the German Act on Corporate Due Diligence Obligations in Supply Chains have already been integrated into this application. We will perform risk analyses for the other aspects of the House of Compliance stepwise from 2023. Among other benefits, this digitalized process enables us to perform regular compliance risk analyses at shorter intervals.

Group-wide training concepts are available for all aspects bundled in the House of Compliance, and we continuously review them. Alongside the target group, they define the type, frequency, and content of training. Each organizational unit is responsible for conducting its training. We pay special attention to training in the areas of antitrust law, fighting corruption, anti-money laundering, and the code of conduct. Participants are allocated to three levels on the basis of risk T04  p.37.

**Uniform group-wide training concept**  2-24

**T03**

Topic	Description
Topics covered	Human rights <sup>a</sup>
	Antitrust law
	Fighting corruption
	Code of conduct
	Anti-money laundering
Selection of target group	Job function and qualifications
	Uniform risk criteria
	Risk level: none—low—high
	Differentiation between compliance issues
Frequency <sup>b</sup> and type	Low risk: approx. every three years → mandatory e-learning sessions
	High risk: approx. every two years → mandatory face-to-face and e-learning sessions (alternating)

<sup>a</sup> Implementation effective January 1, 2023.

<sup>b</sup> Training can be held more frequently, if necessary, e.g., if there are changes in the legal framework or statutory requirements.

Each unit is responsible for making employees aware of the importance and scope of the rules on each compliance topic. That includes advising and supporting them in questions relating to a particular issue. This supports early identification and evalu-

ation of risks. In the training sessions, we provide information on where to seek advice.

*Principle of detection*

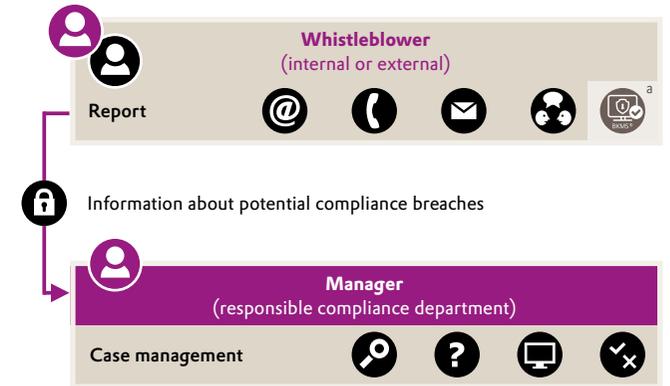
All employees are required to report possible or actual violations of the code of conduct to the responsible department or compliance officer without delay, regardless of whether they relate to them personally or to their colleagues. In addition to internal reporting channels—in writing by email or letter, by phone, or orally to the responsible compliance officer— an electronic whistleblower system operated by an independent external provider is available group-wide for the detection of possible compliance violations. Both Evonik employees and external stakeholders such as business partners and their employees, local residents near our sites, and employees' families can report suspected compliance violations via the whistleblower hotline, which is available in 20 languages. Reports are possible on all key compliance issues ( p.32) and are automatically forwarded to the department at Evonik responsible for the relevant compliance topic. In the reporting period, access to the whistleblower system in both the intranet and the internet was improved.

The whistleblower system is certified as conforming with European data protection legislation. Protecting data and whistleblowers has the highest priority. The data are stored on protected servers in Germany. Technical security measures mean that neither Evonik nor the external provider can draw conclusions about the identity of whistleblowers if they prefer to submit their report anonymously. The content of the report is processed exclusively by Evonik. Neither the external operator nor third parties can view the reports submitted.

Evonik takes up all allegations and investigates them internally. Under the corporate policy on internal investigations, whistle-

**Evonik's whistleblower system**  2-16, 2-25, 2-26

**C12**



<sup>a</sup> External whistleblower system. Guarantees anonymity, if desired by whistleblower.

blowers may not be placed at a disadvantage, provided that the reports are not deliberately incorrect or grossly negligent.

The group-wide policy and related operating procedure also set out uniform principles and process requirements for the conduct of internal **investigations** into suspected compliance violations. Moreover, possible immediate and follow-on measures to eliminate such violations are defined. These internal regulations apply to the units in the House of Compliance and organizational units that conduct internal investigations.

Every organizational unit must regularly check the appropriateness and effectiveness of its compliance management system. In addition, regular **reviews** are performed by Group Audit.

*Principle of response*

We initiate suitable measures to end the violation and minimize the risk. Depending on the severity of the case, the measures taken with regard to employees range from warnings or reprimands to termination of employment and claims for compensation. In addition, further action is taken to raise awareness, for example, through training. Possible sanctions against business partners are termination of the business relationship and blacklisting.

**Our compliance reporting**

Our annual compliance report mainly provides information on the compliance organization and issues specific to the compliance management system. The report on internal investigations presents the internal investigations conducted during the year. Both reports are prepared for the executive board, division heads, and the management board of Evonik Operations GmbH. They are also made available to the supervisory board's audit committee. Furthermore, the audit committee and executive board are informed of relevant risks and developments—insofar as is deemed necessary in individual cases—both during the year and on an ad-hoc basis in urgent cases. This applies to all material risks and violations of regulations that are of overriding significance for the Evonik Group. [📄 2-16](#)

Moreover, we have introduced half-yearly reports on internal investigations, training, key activities, and risks. These are addressed to the divisions, the management board of Evonik Operations GmbH, and the regions. This target group also receives ad-hoc notification of material risks and breaches of regulations where appropriate. Furthermore, we communicate relevant risks and issues to other line managers.

**Business partner assessment at Evonik**

Various departments are involved in different aspects of business partner assessments at Evonik. To leverage synergies, avoid duplication of work, and create transparency, a standing committee has been set up. Its members are Legal & Compliance, Procurement, Marketing & Sales Excellence, Foreign Trade, Group Security, and Human Rights. Together with our external provider, SIGNUM Consulting GmbH, these functions have

established an IT-based process to validate the integrity of business partners. To supplement their internal assessments, this enables the relevant departments to request integrity checks and to initiate and monitor any necessary action. If any of the findings are of potential relevance, the respective departments are automatically requested to evaluate them. This IT solution also facilitates interdisciplinary communication, collaboration, and documentation.

[📄 2-24, 2-25](#)

**Business Partner Assessment at Evonik**

C13

**5. Measures & monitoring**

- By departments, e.g.,
  - Measures to raise awareness
  - Monitoring
  - Notification of authorities
  - Termination of business relationship
- Legally secure documentation

**4. Evaluation**

- Evaluation of findings by departments based on pre-defined criteria
- Uniform traffic light system
- Involvement of other departments via a workflow-based IT solution



**1. Business partners**

- Defined by the relevant departments
- Basically, all types of business partners

**2. Initiators**

- Abstract criteria defined by the relevant departments
- External drivers, e.g., laws and standards
- Internal drivers, e.g., Evonik's internal regulations

**3. Screening and pre-evaluation**

- By an external provider
- Various levels, e.g.,
  - Database searches, sanctions, and watch lists
  - Media & internet
  - Corporate structure and ultimate beneficial owner
  - On-site verification

### Compliance rules for business partners

Evonik has issued a special code of conduct for suppliers, which sets out binding requirements  p.42. Intermediaries, above all sales intermediaries, are subject to a compliance check before the establishment of the business relationship and normally every five years thereafter. They also have to sign a compliance declaration. The focus on human rights aspects has been sharpened in connection with the extension of the business partner assessment process. Risk-based compliance checks (due diligence) and any necessary measures are also applied to business partners involved in acquisitions, joint ventures, corporate venture projects, and major investment projects. These are based on uniform rules for the Evonik Group. For information on human rights due diligence checks, see  p.28.  2-24, 2-26

### Our progress in 2022

Extensive information on the implementation of the German Act on Corporate Due Diligence Obligations in Supply Chains and the establishment of a human rights compliance management system can be found in the section headed "Human rights"  p.28.

In the reporting period, Evonik undertook a thorough revision of its benefits policy, which was rolled out group-wide. The heart of this revision was to restrict the corresponding internal rules to essentials and to give employees more specific information and guidance. In particular, the aim was to make it clear when benefits

involve risks and when they are not critical. At the same time, a new IT tool was developed and launched to check and document when benefits involve risks.

In the reporting period, we developed an e-learning training module on fighting corruption for the low-risk target group. This was rolled out in German. Further languages will be added in the first quarter of 2023.

In 2022, Group Audit examined compliance with anti-money-laundering standards in the Evonik Group. The purpose of this audit was to evaluate the observance of the relevant regulations and the efficiency and effectiveness of the related processes and responsibilities. The audit did not identify any violations, but it found scope for improvement. The relevant measures were defined and implemented within the deadlines set.

The IT tool used throughout Evonik to assess the integrity of business partners was extended considerably in the reporting period. New functionalities to enable effective tracking of action and effective business partner monitoring were added. Worldwide, 72 employees in departments that use the business partner assessment tool were trained in the new functionalities at virtual workshops.

In view of the changing legal requirements—especially protection of whistleblowers and due diligence in supply chains—we

analyzed the responsibilities, processes, and rules for internal investigations. We are currently working on a new approach, which we will drive forward and implement in 2023.

In the reporting period, we organized a global antitrust & compliance conference, where our experts were able to discuss and obtain information on current developments in the field.

The antitrust audit concept was redesigned with a stronger risk-based approach. Based on concrete and specific risk factors, the aim is to selectively single out individual departments, units, or topics and examine them in more detail.

### Fines and other sanctions

In 2022, the annual compliance reporting comprised a structured survey to identify significant fines (>€100,000) and non-monetary sanctions resulting from failure to comply with laws or regulations. The survey covered all areas included in the House of Compliance, plus Group Security, ESHQ<sup>1</sup>, and IT security. No fines or sanctions were imposed in the reporting period.

 2-27

### Legal proceedings resulting from anti-competitive conduct or the formation of cartels and monopolies

There were no pending antitrust proceedings in 2022.  206-1

<sup>1</sup> Including failure to comply with environmental laws and regulations.

## Training

For the compliance areas antitrust law, fighting corruption, anti-money laundering, and code of conduct, we report a training rate for 2022. This is defined as the number of training candidates with a valid certificate relative to the total number of training candidates. The data refer to both face-to-face training and e-learning sessions.

The chief compliance officer normally reports to the executive board quarterly on the present status of compliance, including on fighting corruption. In the reporting period, training sessions that are normally held as face-to-face sessions were mainly conducted digitally. [205-1](#), [205-2](#)

## Internal investigations into compliance violations

In the reporting period, the departments responsible for conducting investigations reported 162 initial evaluations of alleged compliance violations. Chart [C14](#) shows their distribution between the investigating departments.

As a result of these allegations, 142 internal investigations of suspected compliance violations were reported to us. Of the 85 investigations reported by the compliance function, 55 related to payments fraud, all of which related to third parties outside the Evonik Group.

## Compliance training and training rate 2022<sup>a</sup> [2-24](#)

T04

	Anti-money laundering		Antitrust law		Fighting corruption <sup>b</sup>		Code of conduct <sup>c</sup>	
	Training candidates, total	Training rate in %	Training candidates, total	Training rate in %	Training candidates, total	Training rate in %	Training candidates, total	Training rate in %
<b>Worldwide</b>	<b>5,112</b>	<b>97</b>	<b>4,742</b>	<b>85</b>	<b>14,899</b>	<b>91</b>	<b>31,693</b>	<b>89</b>
<b>Management functions</b>	<b>2,418</b>	<b>97</b>	<b>3,204</b>	<b>82</b>	<b>8,518</b>	<b>89</b>	<b>9,258</b>	<b>89</b>
Executives <sup>d</sup>	34	100	107	87	154	95	154	95
Senior management <sup>e</sup>	99	99	312	83	464	90	464	90
Other management levels <sup>f</sup>	2,285	97	2,785	82	7,900	89	8,640	88
<b>Non-management functions</b>	<b>2,694</b>	<b>97</b>	<b>1,538</b>	<b>90</b>	<b>6,381</b>	<b>94</b>	<b>22,435</b>	<b>90</b>
<b>Job functions</b>								
Production & Technology	4	100	144	89	3,481	90	13,831	87
Innovation management	1	100	712	86	3,083	97	4,686	95
Marketing & Sales	1,753	97	1,582	80	1,682	78	1,780	79
Administrative functions	3,354	97	2,304	88	6,653	92	10,371	91
Other <sup>g</sup>	0	0	0	0	0	0	1,025	87
<b>Regions</b>								
Asia-Pacific	1,251	99	1,189	83	2,360	93	3,760	94
Central & South America	294	94	181	70	387	90	744	81
Europe, Middle East & Africa	462	94	398	70	1,101	69	2,796	74
North America	844	91	800	81	2,296	90	4,934	83
Germany	2,261	99	2,174	92	8,755	94	19,459	93

<sup>a</sup> The training rate is defined as the number of training candidates with a valid certificate relative to the total number of training candidates as of December 31, 2022. All training reported in the system is included.

<sup>b</sup> We do not explicitly provide the disclosures on the training of business partners required by GRI 205-2.

<sup>c</sup> We do not explicitly provide the disclosures on the number of hours of human rights training required by GRI 412-2.

<sup>d</sup> Executives = executive functions, i.e., top management functions in the Evonik Group.

<sup>e</sup> Senior management = senior management functions, i.e., key functions in the segments, regions, service units, and corporate divisions.

<sup>f</sup> Other management levels = further management functions.

<sup>g</sup> Other = apprentices, non-permanent staff.

Based on the investigations concluded by year-end, 168 measures were taken: 11 employees were dismissed and another five received a warning or reprimand. Seven contractual relationships were terminated, and future business with the contracting parties banned. Special training and other awareness-raising measures were taken in six cases. In addition, 133 case-specific measures were implemented. [📍 2-16, 2-27](#)

The other measures shown in the chart comprise the internal action taken, especially in the case of payments fraud, for example,

flagging the SAP master data of the business partner with a corresponding warning, (temporary) bans on data interchange, and permanently blocking fake domains.

**Confirmed incidents of corruption and action taken**

Eight alleged cases of corruption were investigated in the reporting period. Six of them were in China and entailed very extensive investigations by local colleagues. Despite thorough investigation, no evidence was found in any of these cases. However, in one

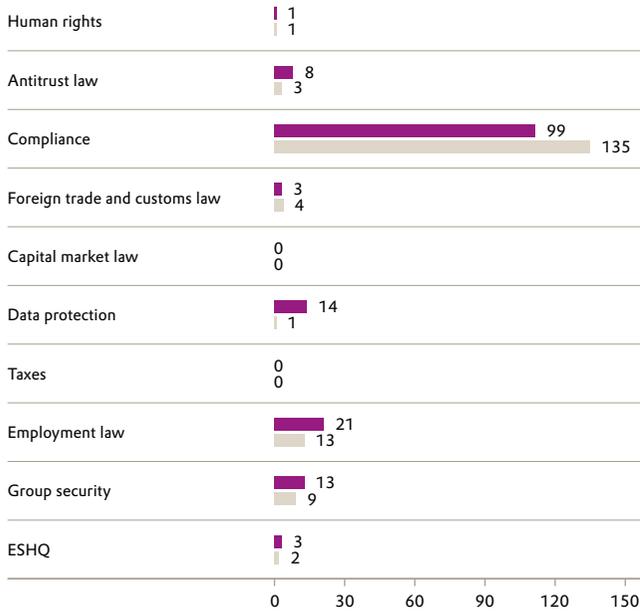
case the suspicions were so serious that various personnel and awareness-raising measures were taken to protect the company even though no definitive evidence was found. A further allegation related to the conduct of an employee in a function in Germany. This was investigated in detail with the support of Group Audit, and the allegations proved unfounded. In one case in Mexico, which was investigated with the aid of a local firm of lawyers, the investigation had to be halted due to lack of sufficient evidence.

[📍 205-3](#)

**Reports of suspected compliance violations**

**C14**

**Total 162**

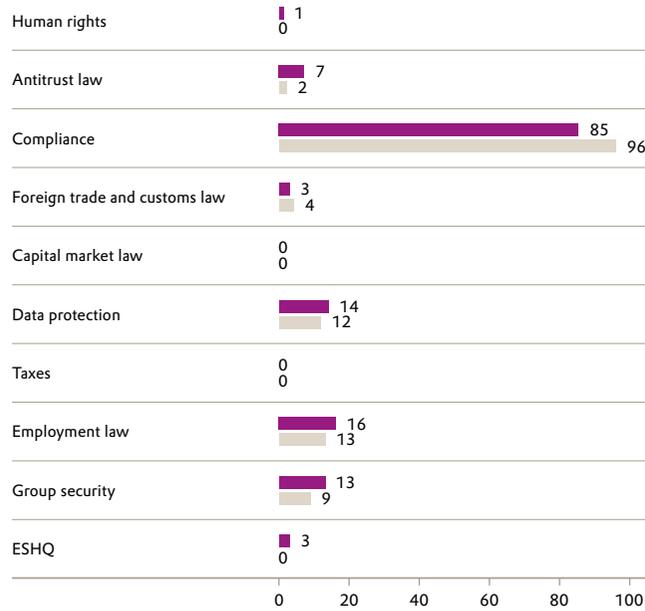


■ 2022 ■ 2021

**Internal investigations reported**

**C15**

**Total 142**

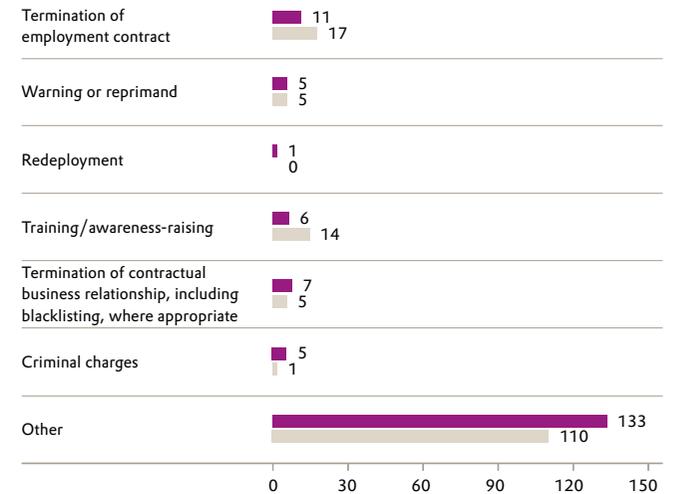


■ 2022 ■ 2021

**Action taken<sup>1</sup>**

**C16**

**Total 168 measures**



■ 2022 ■ 2021

<sup>1</sup> In some cases, more than one measure was taken in connection with the investigation.

## Cybersecurity

Evonik regards cybersecurity and information security as vital preconditions for successful digitalization. The challenges in cyberspace are increasing exponentially. This is attributable to the further professionalization of cyber blackmail, the serious effects of ransomware attacks, the increasing diversity of malware programs and their mutations, and critical weaknesses in widely used software products. The growing importance of this topic is confirmed by our extensive new materiality analysis: For the first time, cybersecurity was ranked as a material topic. To heighten cybersecurity, we are focusing on the risks of a loss of intellectual property, combined with a loss of business, inadequate observance of regulatory and compliance requirements, and inadequate robustness of critical IT and operational technology systems. We are also focusing on inadequate technical equipment and speed in order to keep pace with digital business projects, risks for third parties such as the loss of customer data, reputational risks, and emerging technological risks.

Cybersecurity affects IT throughout the Evonik Group, including both office systems and IT for operational technology (OT). The chief financial officer bears overall responsibility for cybersecurity. The chief information officer (CIO), who reports directly to the CFO, is responsible for cybersecurity at operational level. The CIO and chief IT security officer (CISO) report regularly to the CFO on the related tasks and risks, as well as the appropriateness and efficacy of the IT security management system. Our IT security organization includes a central cybersecurity operation center, which protects Evonik's digital territory and brings together the

important operational IT security functions. The cybersecurity operation center includes the cyber defense team, which is based in Germany and is responsible for identifying and dealing with IT security incidents.

Evonik's cybersecurity framework comprises a binding group functional policy, group-wide standards, and standard operating procedures for IT and OT. To protect its information and IT systems, Evonik uses the international security management systems. These include ISO/IEC 27001—our central IT organization was certified as compliant with this standard for the first time in 2020—and IEC 62443 for OT. There is a binding technical document containing supplementary information security rules for OT. This describes the OT security management system, including the roles in the OT security organization. We use a global network of experts and partners to counter cyberattacks. In addition, we are a member of various professional cybersecurity associations and working groups. Evonik has insurance to cover business interruption and consequential damages resulting from cyberattacks.

We continuously review our extensive security measures to prevent attacks by third parties and invest in technical and organizational measures to identify and ward off such attacks. One example is our cybersecurity enforcement program, which classifies our employees in cyberattack protection (CAP) groups. The higher the CAP classification, the greater the level of protection required. In addition, we are sharpening security measures for particularly high-risk employees and applications. For this purpose, a further level was added to our CAP system in the reporting

period. This covers information requiring special protection, for example, information affecting Evonik's competitiveness or access to critical IT infrastructure. For risk-based checking and improvement of the security of IT systems, we carry out regular penetration tests and IT security audits.

We drive forward and monitor the implementation of our security measures for the operation and use of IT with the aid of an internal management system. In this way, we keep a constant eye on the present threats and align our security measures to them. Our cybersecurity performance is measured and evaluated by the external rating agencies BitSight and CyberVadis using their own parameters. Evonik's current rating positions it in the top third of the manufacturing industry peer group. Evonik increasingly uses digital networking in its collaboration with suppliers, partners, and customers and develops special cybersecurity measures for this purpose.

Increasingly, our production plants are networked with each other. Originally designed as stand-alone solutions in many cases, they are increasingly being connected to the Office network and the internet. To mitigate the associated cyber risks, we constantly adapt the protection level for our plants by implementing our EMPOS program (Evonik Management Platform for OT Security). We use our Cyber Security Resilience Program—known as CRISP for short—to protect the Evonik Group against increasingly aggressive, state-motivated cyberattacks.

We regularly train our employees and use posters, training modules, video formats and interactive events, such as the Evonik

learning sessions to heighten awareness. We also carry out phishing tests. In the reporting period, we introduced mandatory online training for all system administrators to further enhance the risk awareness of this mission-critical group of employees. Timely information on current threats is posted on the intranet and via an app for mobile devices.

### Green Data Center

We systematically optimize the energy performance of our computer centers. For example, we have signed an agreement with the provider of our central computer center services on exclusive use of green power. In this way, we reduced annual carbon emissions by around 620 metric tons in 2021 and a further 402 metric tons in 2022.

### Azure Cloud consumption

Evonik increasingly uses Microsoft's Azure Cloud services. Microsoft has set itself the goal of reducing carbon emissions to zero. In addition, it aims to offset the greenhouse gas emissions into the atmosphere that it has generated since its establishment. Despite increased use of cloud services, we reduced our carbon emissions to 204 metric tons in 2022 (2021: 217 metric tons).

We have greatly reduced the energy consumption of the computers used in our offices. By altering the standard energy settings and making other optimizations, energy consumption of office computers dropped by more than 960,000 kWh in 2022. That is equivalent to avoiding 408 metric tons of CO<sub>2</sub>.

### Management of data protection

Protection of personal data is one of the principles used by Evonik to shape its relationship with employees, job applicants, customers, suppliers, other business partners, prospects, and other people affected. Therefore, handling personal data conscientiously is important to us. The new standard EU contractual clauses were a focus in the reporting period. Target group-specific data protection training is mandatory for employees.

All employees have access to information on the relevant requirements and responsibilities via the intranet. The organization of data protection and rules on reliable processing of personal data, including customer data, are set out, among other things, in the



All computer centers used by Evonik are powered by green electricity.

compliance policy and the group-wide data protection policy. Our data protection management supports compliance with the regulations and assists the organizational units in implementing them. It also monitors the correct use of data processing. Data protection incidents are dealt with in accordance with the statutory and in-house documentation, information, and reporting obligations. In the reporting period, Evonik did not receive any complaints from customers relating to the loss of data or violation of data protection rules. [418-1](#)

In 2022, we commissioned an external readiness check of data protection compliance at Evonik. This was based on the principles for the compliance management system issued by the German Institute of Public Auditors (IDW) in audit standard IDW PS 980.

### Tax <sup>1</sup>

The payment of taxes is a central link between legislators, states, local authorities, and companies. We affirm our responsibility to stakeholders in the countries where we operate. As well as credibility and transparency in all tax matters, this includes levying taxes correctly and includes timely and complete payment of taxes. In 2022, for example, Evonik paid income taxes worldwide totalling €353 million and received reimbursements of previous tax payments totalling €179 million. Tax planning is based exclusively on economic principles using Evonik's business model and corporate values. We reject aggressive tax strategies geared exclusively toward tax avoidance.

<sup>1</sup> Voluntary reporting in accordance with GRI Standard 207: Tax 2019, because taxation was not identified as a material topic in the 2022 materiality analysis. This section refers to the disclosures [207-1, 207-2, 207-3](#).

A group-wide tax policy sets out the fundamental responsibility, together with the associated tasks, accountability, authorizations, and guidelines for the fulfillment of our tax obligations. This policy defines how those involved work together in order to meet Evonik's obligations and allocates tasks and responsibilities.

The Tax department is one of the units assigned to our House of Compliance, which is responsible for setting minimum group-wide standards for compliance management systems— including tax compliance. In our code of conduct, the executive board has defined principles for tax strategy. These are published on our website. [More](#)  p.34.

Evonik strives for a high level of transparency and a stable legal basis in tax matters. In accordance with the applicable national provisions, we make all relevant facts and circumstances transparent. We communicate openly and constructively with public institutions, local fiscal authorities, and financial statement and tax auditors. Where necessary, we also defend Evonik's tax position by utilizing the legal scope and weighing up non-tax aspects. In addition, Evonik plays its part in the development of tax legislation and administrative instructions, as well as in the academic debate on aspects of tax policy.

#### Tax compliance and management of tax risks

In the interests of tax compliance, the Evonik Group gives top priority to prompt and full settlement of all tax liabilities in accor-

dance with the applicable laws, directives, contracts, and legal judgments. Other tax compliance objectives are optimizing and steadily extending the internal tax control system and mitigating tax risks.

Evonik has a decentralized group-wide risk management system, which includes effective and appropriate management of tax risks. This provides for systematic identification, analysis, evaluation, monitoring, and minimization of tax risks as well as communication of the risks. Information on the violation of tax compliance obligations can be reported anonymously via a whistleblower hotline run by a third party  p.34.

Fiscal authorities around the world are becoming increasingly digitalized. The trend is away from the examination of paper documents and restricted data access to a process- and system-based approach. Aspects range from the transfer of data packages to real-time access and new questions relating to data models, more timely tax audits, and a digital tax compliance management system. In view of this, Evonik is currently building up the necessary digital know-how and corresponding IT solutions. We have developed a digital agenda and installed corresponding software solutions for our tax compliance management system to enable monitoring of defined principles, measures, and controls. Furthermore, for tax purposes, online controls have been introduced to optimize business processes and identify structural errors.

#### Donations to political parties

The executive board defines the aims and conditions for the Evonik Group's donations and sponsorship. It has delegated coordination and monitoring to the Board Office and Communications functions on the basis of specific policies and guidelines. For example, the approval of the executive board is required for individual donations of supra-regional significance and sponsorship from a threshold of €100,000. The divisions and regions can decide on regional and site-specific activities within an annual budget approved by the executive board. At the Evonik Foundation, the management is responsible for coordinating and supervising donations. The executive board of the Evonik Foundation defines the areas of focus.

The Evonik Group made many donations and was involved in many sponsorship projects in the reporting period. Information can be found on our website. [More](#) . We will continue to play our part in supporting democracy, the rule of law, and the social market economy in Germany in the future. In 2022, the executive board decided that no further donations would be made to political parties. Instead, the focus will be on continuing the political and societal debate with relevant stakeholder groups. We will continue to play an active part in the debate with the general public, politicians, the business sector, and NGOs, including setting focal areas and initiating discussions.

In 2022, Evonik renewed and refined its entry in the European Transparency Register and the list of lobbyists maintained jointly by the European Commission and European Parliament. It also made an initial entry in Germany's national lobby register.

 2-15, 415-1

## Responsibility within the supply chain

### Strategy and management

Evonik has a significant influence on the environment and society through its procurement volume. By working closely with our suppliers, we want to help prevent breaches of human rights and environmental violations. We strive to counter a lack of transparency and inadequate traceability in the supply chain. 📍 2-6

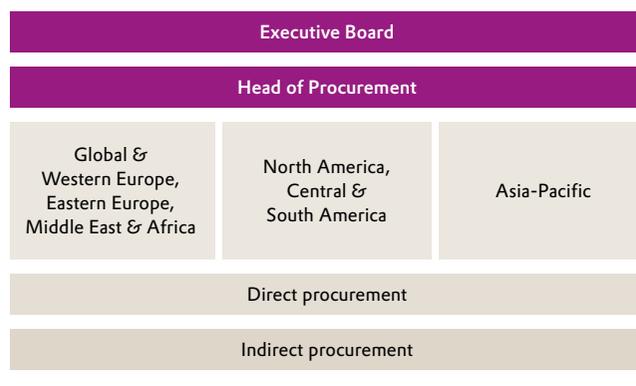
By selecting suppliers carefully, we do not simply secure and increase their sustainability standards, we also enhance the quality of the entire value chain. Our focus is on validating and evaluating suppliers. Suppliers of certain critical raw materials are subject to a special examination. We define critical raw materials as all raw materials that could potentially involve a supply risk or reputational risk, such as conflict minerals and renewable raw materials, including palm oil. We have established specific procurement strategies for these critical raw materials. The processes are integrated into a management system, where they are mapped. As well as monitoring suppliers of critical raw materials, we aim to examine all major raw material suppliers<sup>1</sup> from sustainability perspectives through Together for Sustainability (TfS) assessments by 2025. At year-end 2022, we had validated around 66.4 percent of this group using the corresponding criteria.

Continuous dialogue with our suppliers is very important for us. In addition to direct contact to Evonik's procurement organization, employees at supplier companies always have the option of reporting any issues or problems to our externally operated

whistleblower hotline. All cases are examined promptly so that appropriate action can be taken. In 2022, we received one report of an issue relating to our suppliers.

### Evonik's procurement organization

C17



The aim of our procurement organization is to guarantee long-term reliability of supply for the production of Evonik products and to secure competitive advantages for our operating businesses. Alongside economic requirements, our procurement strategy takes account of criteria such as health, quality, safety, social factors, and environmental protection. As a member of the UN Global Compact, we are committed to its principles. These requirements are documented in our code of conduct for suppliers, which is based on our corporate values, the principles of the UN Global Compact, the International Labor Standards issued by the International Labour Organization (ILO), and the topics addressed by the Responsible Care® initiative. The code of conduct

for suppliers was updated in the reporting period to give greater prominence to the importance of respecting human rights by direct and indirect suppliers and to draw attention to the risks and consequences of failure to comply.

Procurement is organized globally at Evonik and comprises direct procurement (raw materials, logistics, and packaging) and indirect procurement (general and technical goods and services). Both are subdivided into strategic and operational procurement activities. Global procurement is managed from Germany, with the support of regional units in Asia and North and South America.

The validation and evaluation of our suppliers are an integral part of sustainable supply chain management at Evonik. The validation of new suppliers includes checking that they meet the requirements of our code of conduct for suppliers. In our evaluation of suppliers, special attention is paid to our strategic suppliers and suppliers of strategic raw materials. Strategic suppliers and raw materials are defined as those identified by the operational units as being of high significance for our business performance. These may be key raw materials or single-source situations. We work systematically both to extend strategic relationships with suppliers and to validate new suppliers. To supplement our code of conduct for suppliers, our approach includes self-assessments, audits, and validation of suppliers through the Together for Sustainability (TfS) initiative.

In 2022, we sourced raw materials and supplies, technical goods, services, energy, and other operating supplies with a total value of €13.6 billion (2021: €10.4 billion) from around 35,000 suppliers. Local sourcing accounted for around 76 percent of this amount<sup>2</sup>

<sup>1</sup> Annual procurement volume > €100 thousand.

<sup>2</sup> For us, local sourcing means deliberate procurement from sources that are geographically close to our production sites.

(2021: 76 percent). Raw materials and supplies accounted for 53 percent of procurement volume (2021: 57 percent). Spending on petrochemical feedstocks was around €4.5 billion and accounted for 61 percent of our raw material base. [204-1](#)

**Together for Sustainability (TfS)**

Harmonizing global standards in the supply chain creates transparency and makes it easier for both suppliers and customers to reliably assess and evaluate sustainability performance. The chemical industry set up the TfS initiative for this purpose in 2011. Evonik is one of the six founding members. [More](#). The aim of TfS is the joint development and implementation of a global assessment and audit program for responsible procurement of goods and services. It also provides webinars and training on sustainability. In this way, the initiative does not simply make environmental and social standards in supply chains measurable; it also contributes to a direct improvement.

Active involvement in TfS is important to us. Our employees are represented on TfS workstreams in Germany, North and South America, and Asia. Moreover, Evonik plays a leading role by chairing or co-chairing TfS workstreams. Sharing knowledge of sustainability criteria with suppliers is a key aspect of TfS. Through the TfS Academy, we therefore invited our suppliers to participate in the corresponding TfS and EcoVadis<sup>1</sup> webinars in 2022. This new learning platform is used to provide specific information and for the training and development of both suppliers and Evonik’s procurement organization.

As a member of the TfS initiative, we are also subject to TfS assessments. The EcoVadis rating agency once again awarded us platinum status in 2022. This award places us among the top 1 percent of the companies evaluated by EcoVadis in both the chemical industry and in other sectors. In previous years, EcoVadis awarded our specialty chemicals company gold status on six occasions.

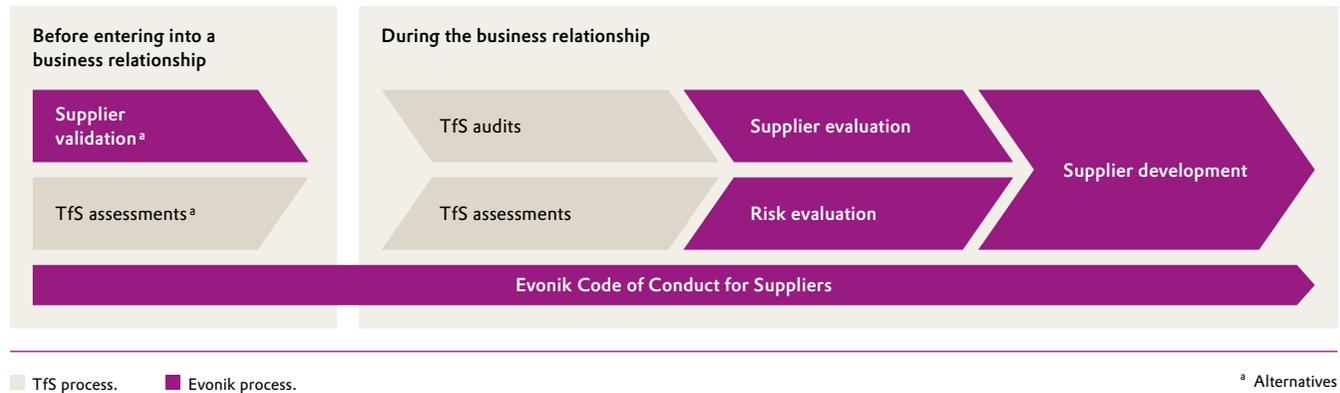
Worldwide, the TfS<sup>2</sup> member companies initiated 378 audits and 1,545 assessments in 2022. Evonik initiated 11 of these audits and 108 of the assessments. About 90 percent of our direct and over 80 percent of our indirect procurement volume was covered by TfS assessments.

**Validation and evaluation of suppliers**

We expect our suppliers to share our principles and act correctly in all respects, which means accepting responsibility towards their employees, business partners, society, and the environment. Validation is the first step in every new supply relationship. For this purpose, we use a validation process based on the values defined in our code of conduct for suppliers. Alongside quality, environmental protection, safety, health, and energy management, the assessment of potential risk factors includes corruption prevention, cybersecurity, labor and social standards (the right to freedom of association and collective bargaining), human rights (compulsory, forced, or child labor), conflict minerals, and responsibility within the supply chain. All details are entered

**Supplier validation and evaluation**

C18

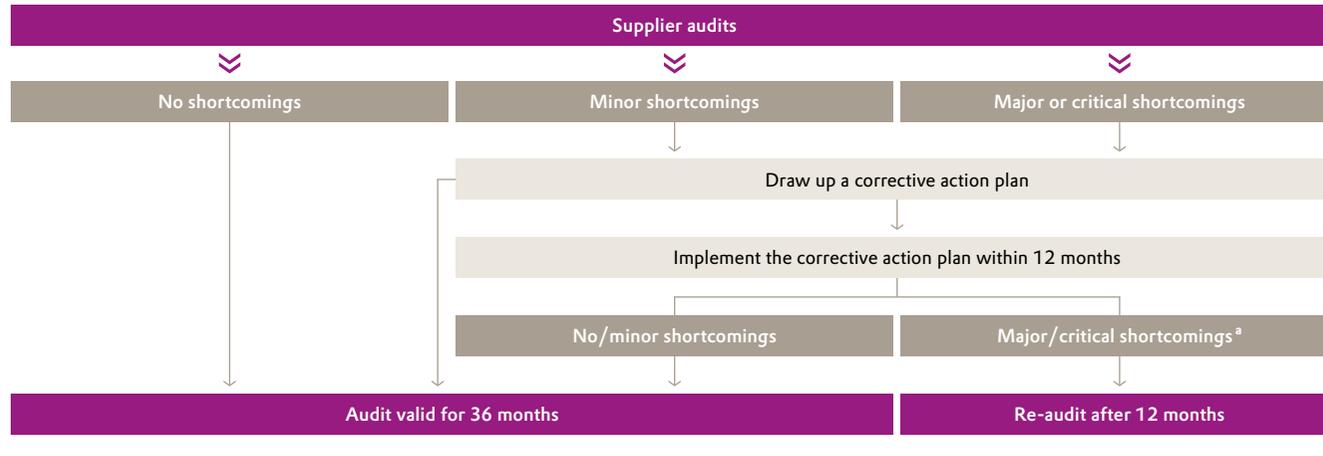


<sup>1</sup> EcoVadis is the partner that performs the sustainability assessments for the TfS initiative.

<sup>2</sup> The results of the audits and assessments by EcoVadis and TfS were outside the scope of the auditor’s limited assurance engagement.

**Audit escalation process**

**C19**



<sup>a</sup> If the shortcomings are particularly serious and no improvement can be identified, we reserve the right to end our collaboration with the supplier.

online and evaluated using a validation matrix. The initial validation is a country-based process and does not include a separate review of the location of operations. The values and expectations set out in our code of conduct for suppliers are communicated to all suppliers in our general terms and conditions of purchase. In 2022, we evaluated 1,804 new suppliers. That was over 93.2 percent of new suppliers.

Successfully completed TfS assessments can also be used as evidence of validation. Overall, suppliers are evaluated using a method that identifies and quantifies risk factors as a basis for risk mitigation. This safeguards the supply of raw materials and technical goods to Evonik and enables us to gain access to new procurement markets and suppliers. In the reporting period, TfS

assessments were performed on 118 new suppliers of raw materials, technical goods, and services.

We apply the same care to the evaluation of existing relationships with suppliers. In addition to the annual evaluation of all significant supplier relationships, a more detailed review of strategic suppliers is undertaken. On the basis of the findings, measures are initiated as required **C19**. To minimize the risk to Evonik, as part of our management of contractors, we obtained and evaluated evidence and self-assessments on compliance with the relevant German legislation (the German Minimum Wage Act, the German Employee Secondment Act, and the German Ordinance on Craftsmen). [📍 2-23, 407-1, 408-1, 409-1, 414-1, 414-2](#)

We have a clear and structured process for supplier audits, including various escalation steps. If shortcomings are identified, we expect our suppliers to implement corrective action plans within a defined timeframe. If the shortcomings are particularly serious and no improvement can be identified, we reserve the right to end our collaboration with the supplier.

Chart **C20** shows the sustainability performance of our suppliers in the various evaluation categories used by the EcoVadis ratings<sup>1</sup>. Taking all criteria together, around 65 percent of our suppliers are within our target range of 45 to 100 points.

**Sustainability performance of Evonik suppliers<sup>1</sup>**

**C20**



<sup>1</sup> The results of the audits and assessments by EcoVadis and TfS were outside the scope of the auditor's limited assurance engagement.

We focus particularly on the process of following up on audits and assessments. In the reporting period, corrective action was initiated with four suppliers, where major or critical issues were identified during audits. In 22 cases, supplier assessments showed that insufficient attention had been paid to sustainability aspects. In these cases, as well, corrective action was initiated. 30 suppliers showed an improvement in the follow-up to the previous audit/assessment. In particular, shortcomings in the implementation of environmental measures and potential for improvement in occupational safety were identified at suppliers audited by TfS. None of the suppliers evaluated had significant negative impacts on the environment or on social aspects. There were no cases of discrimination or restriction of the freedom of association.

[406-1, 407-1, 408-1, 409-1](#)

In 2022, we evaluated 2,054 new suppliers. That comprised audits, assessments, and supplier validations performed by TfS and directly by Evonik.

### Conflict minerals

The Dodd-Frank Act requires companies listed on the US stock market to disclose whether or not their products contain potential conflict minerals. These are mineral raw materials from the Democratic Republic of Congo and its neighboring countries that are often used to finance armed conflicts. In addition, human rights are often violated in the production of conflict minerals. Evonik is not listed on US stock exchanges and therefore has no legal obligation to comply with the reporting requirements of the US stock market regulator. Nevertheless, we believe we have a responsibility to check the origin of such substances sourced from established suppliers. The minerals checked include tin, tungsten, tantalum, gold, and cobalt. We continuously evaluate whether further critical raw materials should be included. Furthermore, we require new suppliers to provide evidence of origin in the validation process. In 2022, we screened 1,804 new suppliers and did not identify any use of conflict minerals.

### Our progress in 2022

During the reporting period, we continued to improve the processes used to evaluate and validate suppliers. We also refined our monitoring of raw material risks ([p. 46](#)), optimized the integration of operating requirements, and increased the flexibility of the process. Consequently, we can now respond faster in volatile conditions. Moreover, we stepped up communication with our suppliers on our sustainability objectives. For this, we held supplier seminars for Europe, Asia, and North America. Special attention was paid to our new commitment to SBTi, our expectations within the framework of TfS, and the requirements of the new German Act on Corporate Due Diligence Obligations in Supply Chains.

In view of our climate targets, we played a key role within the TfS initiative in developing a guideline for the uniform calculation of product carbon footprints. [More](#). This was published in October 2022 in order to harmonize the calculation of product carbon footprints for raw materials in the chemical industry. For further aspects of the reduction in scope 3 emissions, see "The environment" [p. 83](#).

In the reporting period, we also prepared intensively for the new German supply chain legislation. Building on established processes for supplier valuation and evaluation, we updated our procurement rules, including the code of conduct for suppliers. In addition, we identified critical supply chains from a human rights perspective [p. 28](#).

### Supplier validation, assessments, and audits, including corrective action [414-1, 414-2](#)

T05

	2018	2019	2020	2021	2022
No. of new suppliers evaluated <sup>a</sup>	1,357	2,049	2,055	1,754	1,804
No. of new and established suppliers evaluated <sup>a</sup>	1,508	2,192	2,272	1,946	2,054
No. of suppliers audited where a need for corrective action was identified	26	26	34	34	25
thereof suppliers where significant actual or potentially negative impacts were identified <sup>b</sup> (in %)	–	–	–	–	–
thereof suppliers with whom corrective action plans were agreed (in %)	85	100	100	100	100
thereof suppliers where the supply relationship was terminated as a result of the evaluation (in %)	–	–	–	–	–

<sup>a</sup> Based on environmental and social criteria.

<sup>b</sup> Zero percent environmental impacts, zero percent social impacts.

We extended our activities under our supplier diversity program. The focus here is on the USA and indirect procurement. Internally, we evaluate the quantities procured from “diversity suppliers,” while we also identify further potential suppliers to increase the proportion of such suppliers. We define “diversity suppliers” as companies that are, for example, run by disadvantaged persons or classified within their industry as small businesses.

**Supply chain resilience in times of geopolitical change**

As an overarching goal, our procurement strategy includes securing the availability of raw materials on the best possible terms. Restrictions on the availability of starting products and intermediates in the short- or intermediate-term represent potential risks. In addition to preparations to substitute suppliers in emergencies, we closely monitor the business situation of selected suppliers of key raw materials in order to anticipate bottlenecks and mitigate risks. At the same time, we identify the possible impacts of present and potential crises and geopolitical conflicts on Evonik’s supply situation and introduce timely and specific mitigation measures where possible. We do this, for instance, by weighting the country of origin of materials in our risk assessment and using scenario analyses to assess relevant events. This procedure proved effective for the supply risks resulting from the coronavirus pandemic and is currently being refined, especially in view of Russia’s invasion of Ukraine and the related disruption. In this way, we can largely maintain supply and avoid negative impacts despite production stoppages and logistics constraints.

**Our targets**

Below is an overview of the targets set for our governance and compliance area of action.

Target attainment in 2022	Targets for 2023 and beyond
<p><b>Governance</b></p> <p> 30 percent women at both the first and the second management level below the executive board by year-end 2024 (status at year-end 2022: 38.5 percent at the first management level and 31.0 percent at the second management level)</p>	<p><b>Governance</b></p> <p>30 percent women at both the first and the second management level below the executive board by year-end 2024</p>
<p><b>Compliance</b></p> <p> Perform an initial risk analysis using a new IT tool, starting with compliance with the German legislation on due diligence in the supply chain</p>	<p><b>Compliance</b></p> <p>Regular risk analysis on compliance aspects</p> <ul style="list-style-type: none"> <li>• Human rights in 2023</li> <li>• Antitrust law, fighting corruption and prevention of money laundering by year-end 2024</li> </ul>
<p><b>Responsibility within the supply chain</b></p> <p> 100 percent of all raw materials suppliers where annual procurement volume is &gt;€100 thousand to be covered by TfS assessments by year-end 2025 (status at year-end 2022: 66 percent)</p>	<p><b>Responsibility within the supply chain</b></p> <p>100 percent of all raw materials suppliers where annual procurement volume is &gt;€100 thousand to be covered by TfS assessments by year-end 2025</p>

-  Target not achieved
-  Target partially achieved or target horizon extends beyond 2022
-  Target achieved



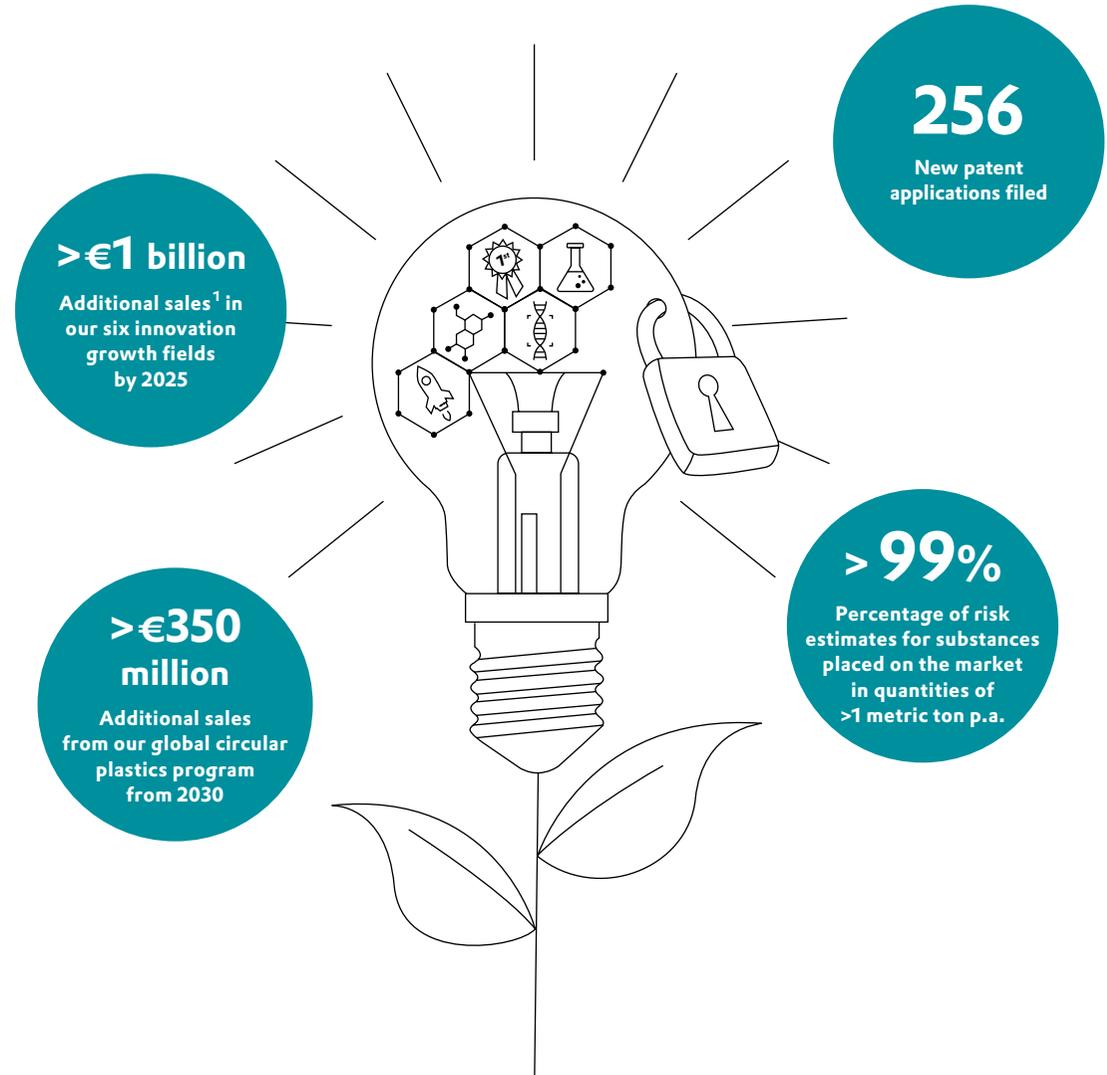
# Value chain and products

*In addition to our own production and business processes, we always have an eye on the supply chain for our raw materials, goods, and services and on product benefits and applications for customers. Our innovative products help our customers meet their sustainability goals.*

### MATERIAL TOPICS

- Circular economy
- Product stewardship

### SDGS OF PARTICULAR RELEVANCE FOR EVONIK



<sup>1</sup> With products introduced in or after 2015.

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## Value chain and products

- Sustainability integrated into management of the innovation portfolio
- Development of circular business models
- Extension of the product range for mechanical and chemical recycling
- Product stewardship: new regulatory challenges

## Research, development & innovation

### Strategy and management

Innovations play a key role in aligning Evonik systematically with sustainability and profitable growth. In this way, we are also helping our customers to achieve their own climate protection, circularity, and biodiversity objectives. Examples of our innovative contribution to a sustainable transformation are our membrane technologies and our lipid nanoparticles for modern mRNA vaccines.

Sustainability is integrated into the management of our innovation portfolio. The aim is to improve both our handprint<sup>1</sup> and our footprint. Therefore, there are deliberate personnel overlaps between the research, development & innovation (RD&I) council

and the sustainability council. We use strategic perspectives to allocate our research and development resources. These include an intensive sustainability assessment using the methodology that has become established for the sustainability analysis of our business (see “Strategy and growth” ▢ p.20). Idea to Profit (I2P®) is used to manage our R&D projects—from the idea through systematic development to profitable commercialization. In the reporting period, we included our Sustainability Focus Areas in this process for the first time (see “Strategy and growth” ▢ p.24).

Our innovative capability enables us to open up opportunities in new, future-oriented businesses in six innovation growth fields:

- **Sustainable Nutrition:** establishing new products and services for sustainable nutrition of livestock and people
- **Healthcare Solutions:** developing new materials for implants, as components of cell culture media, and for custom-tailored, innovative drug formulations

<sup>1</sup> We define handprint as the positive impacts of our products along the value chain compared with other established products and applications on the market, especially in customers’ applications.

- **Advanced Food Ingredients:** creating a portfolio of health-enhancing substances and nutritional supplements as a contribution to healthy nutrition
- **Membranes:** extending SEPURAN® technology for efficient gas separation to further applications
- **Cosmetic Solutions:** developing further products based on natural sources for cosmetics and sensorially optimized formulations for skincare products
- **Additive Manufacturing:** developing products and technologies for additive manufacturing

Our aim is to generate additional sales<sup>1</sup> of over €1 billion with these innovation growth fields by 2025. We are making good progress towards this. Our R&D activities are guided by our Research, Development & Innovation (RD&I) function. This comprises the R&D teams of the growth divisions, innovation management, Creavis, which is our business incubator and strategic research institute, and Evonik Venture Capital. The strategic framework for our R&D is set by the RD&I council, which also manages the targeted allocation of human and financial R&D resources. It is chaired by the member of the executive board responsible for chemicals and innovation. Other members are the chief innovation officer, the head of Corporate Strategy, and the heads of the divisions.

Creavis serves the Evonik Group as an innovation driver for resource-saving solutions with a perspective that goes beyond 2025. In this role, it develops transformative innovations beyond the product and market focus of the operational units. Creavis bundles its activities in three incubation clusters:

- The Defossilation cluster helps industries become less dependent on fossil raw materials by developing high-growth solutions that make a contribution to the transition to a circular, climate-neutral economy.
- The Life Sciences cluster focuses on novel concepts for resource-saving and sustainable food production for the world's continuously growing population. Another focal area is preventing and curing diseases, especially as many people are living to an advanced age.
- Solutions Beyond Chemistry fosters traceable, secure, and circular value chains based on domain knowledge and data-based solutions. These increase the transparency, effectiveness, and sustainability of industrial systems.

Our venture capital activities facilitate early insight into innovative technologies and business models. By collaborating with start-ups around the world, Evonik gains faster access to attractive future technologies and markets. The Evonik Group has made more than 50 investments since the establishment of Evonik Venture Capital in 2021. **More** . In May 2022, we set up a new Sustainability Tech Fund with a total investment volume of €150 million. This is oriented, on the one hand, towards climate-neutral technologies and business models and, on the other, towards innovative technologies that complement our Next Generation Solutions. In the reporting period, Evonik invested in the sustainability fund Azolla Ventures I and prepared to invest in Chrsyalix Venture Capital's Carbon Neutrality Fund. Both concentrate on technologies to reduce CO<sub>2</sub>.

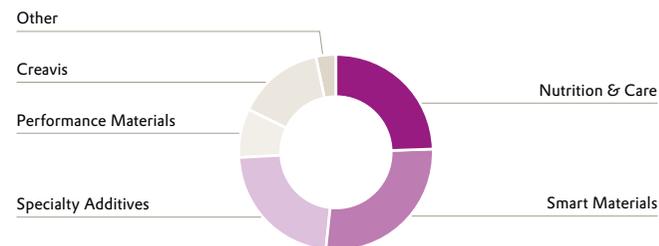
### Global research network

RD&I has more than 40 locations worldwide and around 2,700 R&D employees. R&D expenses totaled €460 million in 2022. The ratio of R&D expenses to sales was 2.5 percent (2021: 3.1 percent). At present, our operational chemicals divisions account for around 82 percent of our R&D expenses, while Creavis accounts for about 15 percent. In the reporting period, some of our projects received funding from the European Union or the Federal Republic of Germany. In all, we received funding of around €5.2 million.

Evonik has an extensive patent strategy to protect new products and processes. The value and quality of our patent portfolio have increased steadily in recent years. 256 new patent applications were submitted in 2022, and we had around 24,000 patents and pending patents.  201-4

### Breakdown of R&D expenses

C21



<sup>1</sup> With products introduced in or after 2015.

To position ourselves close to our customers with our innovative ideas, we have innovation hubs in attractive growth regions. We pressed ahead with this globalization strategy in the reporting period, for example, by opening a new innovation hub at our location in Allentown (Pennsylvania, USA). This hub comprises several state-of-the-art development and test laboratories and a pilot plant and creates 50 new jobs for scientists, engineers, and laboratory technicians in the Lehigh Valley region around Allentown. The expansion of this site makes it our leading research, development, and innovation center in North America.

### Our progress in 2022

In the reporting period, we drove forward many research projects with which we are making a contribution to the transition to sustainability and more efficient use of resources.

The new Home of Polyurethanes at our location in Istanbul (Turkey) strengthens our technical service for customers in Turkey and the whole of the Middle East and Africa. This laboratory facility and center of excellence play a key role in triggering the local development of new product solutions so we can unlock new business potential in this attractive region. The state-of-the-art facility offers customers digital analysis methods for polyurethane (PU) foam applications, technical service, and customized training opportunities.

In China, Evonik has launched a new portfolio of processing aids under the brand name TEGO® Surten E. These additives improve performance and efficiency in photovoltaic wafer cutting, which reduces the costly post-treatment required for cut wafers. This product series therefore extends our range of additives for renewable energy generation.



Collagen triple helix structure.

Evonik Venture Capital has invested in Laxxon Medical (Nevada, USA), a specialist in 3D screen printing technology for the manufacture of structured tablets that enable the controlled release of pharmaceutical active ingredients over a prolonged period of time. In addition, multiple ingredients can be combined in a single tablet, resulting in fewer tablets. Evonik polymers support the accurate release of the active ingredients contained in these new types of tablets. Another benefit of this technology is that the speed of printing is significantly faster than established 3D printing processes, allowing mass production. Improved drug delivery could generate opportunities for pharmaceutical companies to extend existing patents.

Evonik launched its Vecollan® recombinant collagen platform for medical device applications on a commercial scale in July 2022. The high-purity collagen is reproducible and therefore simplifies regulatory approval of medical devices. It is produced without animal-derived starting products, but many of its properties are similar to human collagen. It is therefore suitable, among other things, for medical, pharmaceutical, and cell and tissue culture applications. The fermentation-based manufacturing process extends our portfolio of attractive system solutions for the medical device industry.

In September, we signed a letter of intent on a strategic cooperation with Pörner Group (Austria) and the Thai company Phichit Bio Power Co. Ltd., which will enable us to offer the tire industry a bio-based silica made from rice husk ash. This allows us to reduce the CO<sub>2</sub> footprint by 30 percent compared to our standard silica. In this way, Evonik is supporting its customers' defossilization and circularity objectives.

In November 2022, we opened a new global center for lithium-ion batteries in Shanghai (China). Here we will be researching battery materials and supporting customers with battery prototyping. Joint development of test batteries enables us to test our materials in conditions that meet specific customer requirements, which speeds up the overall innovation process. More than 90 percent of lithium-ion battery producers are in Asia, and most of the leading producers are in China. With its new center in Shanghai, Evonik is well-prepared to provide high-performance solutions to support the expected growth in this region.

## Circular economy

### Strategy and management

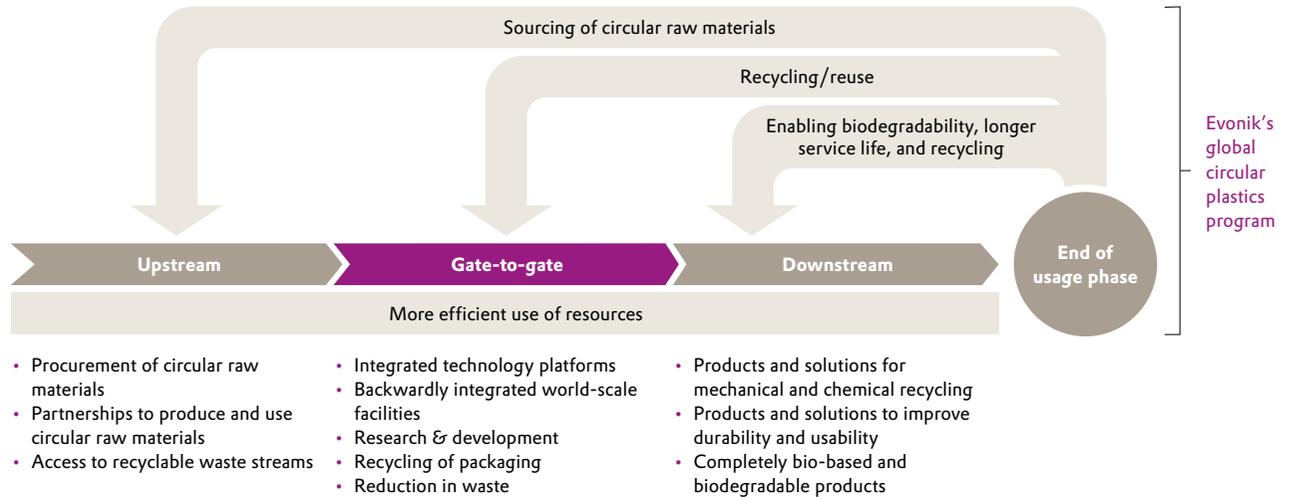
Circular economy means decoupling economic growth and the use of resources by returning valuable raw materials to the loop at the end of their useful life. Better use of resources and the circular economy are becoming increasingly important for Evonik in view of the growing shortage of raw materials and tight supply chains. That is also confirmed by our latest materiality analysis, where circular economy is ranked as one of the top 3 topics. Our activities aim to mitigate the inadequate availability of resources in the supply chain and our production processes. At the same time, circularity opens up new business opportunities and attractive growth potential for Evonik. That is shown, for example, by joint development with the Vita Group of an efficient process for recycling mattresses and the extension of our portfolio of additives for mechanical and chemical recycling.

In the reporting period, we continued to drive forward the circular economy and set a quantitative target for waste. We intend to analyze further waste streams in 2023 to identify additional reduction potential. For detailed information on waste, please see "The environment" (p. 93).

As part of the sustainability analysis of our business, we examine the circularity of our portfolio and of key value chains (see "Strategy and growth" p. 22). To determine the environmental impact of circular products, Evonik mainly uses life cycle assessments in accordance with ISO standards 14040 and 14044. In this context, we also examine which methods could be used for quantitative indicators in the future. One example is the circular

### Our contribution to a circular economy along the value chain

C22



economy baselining project, which we conducted in 2022. This comprised developing a method to evaluate the circularity of our products. In 2023, we plan to examine how this can be integrated into the sustainability analysis of our business. Furthermore, we are playing an active role within the WBCSD in the ongoing development of a circularity-related sustainability analysis.

### Global circular plastics program

Our global circular plastics program brings together our group-wide activities in the area of circularity that address plastics throughout the value chain. The program comprises short- to mid-term projects with a clear focus on commercialization.

Aspects addressed include

- the use of circular raw materials,
- the development of solutions for mechanical and chemical recycling technologies, and
- the development of innovative business models that take account of the requirements of the circular economy.

We regard intensive examination of our own value chains and the corresponding partnerships as an important key to supporting the transformation to circular forms of economy. Overall, we expect the global circular plastics program to generate additional sales of more than €350 million p.a. by 2030. 306-2

*Upstream*

The procurement of circular raw materials is important to leverage our own footprint and, especially, to reduce scope 3 emissions. Therefore, we aim to increase the use of alternative raw materials in the manufacture of our products ( see “The environment,” p. 83). This may include recycled secondary raw materials derived from fossil- and bio-based waste, bio-based primary raw materials, or CO<sub>2</sub>-based raw materials. We are endeavoring to increase the proportion of renewable raw materials. That includes examining technical, economic, ecological, and social aspects. One ongoing challenge is the limited availability of circular raw materials due to regional fluctuations in supply.

*Gate-to-gate*

We generate 84 percent of our sales outside Germany. That highlights the global alignment of our business. We have production facilities in 27 countries and are therefore close to our markets and our customers. Our largest production sites—Marl, Wesseling, and Rheinfelden (Germany), Antwerp (Belgium), Mobile (Alabama, USA), Shanghai (China) and Singapore—have integrated technology platforms, most of which are used by several business lines. This results in valuable economies of scale and integrated use of our material flows. Continuous process optimization and the efficient use of resources have always been very important in our production activities.

We strive to reduce and recycle the packaging used for our products. Measures include reducing the thickness of the body of steel drums, reducing the weight of the plastic liners used in intermediate bulk containers (IBC), and reducing the grammage

of paper sacks. We are stepping up the reuse of packaging. Initial pilot projects with end-customers have been defined to set up a system to return certain rigid types of packaging. By increasing the use of re-usable systems to secure loads, we are also reducing the use of shrink-wrap film and therefore the amount of plastic waste for our customers. Together with end-customers such as automotive manufacturers, we are establishing a circular system for pallets. For applications where there is high turnover of pallets, we have switched to a pool system that uses plastic pallets. We are constantly endeavoring to increase the proportion of recyclable packaging. For categories of packaging where recycling rates are low, increasing the rates is held back by regulatory or technical barriers. We are addressing this in collaboration with representatives of the packaging industry within the German chemical industry association VCI and with our customers. Our recycling rates per category are as follows: 301-1, 301-3

**Recycling rates by packaging categories** 301-3 T06

Category in %	Recycling rate per category <sup>a</sup>	Percentage of procurement volume <sup>b</sup>
Bulk containers (>180 l), e.g., IBCs <sup>c</sup> , metal drums	37.0	49
Small containers (<180 l), e.g., canisters	3.6	4
Pallets, e.g., wood and plastic	11.0	20
Film, e.g., refuse bags, flat film	3.6	5
Paper and cardboard, e.g., corrugated cardboard, paper bags	3.2	14
FIBCs <sup>d</sup> , e.g., plastic	-	9

<sup>a</sup> Based on weighted average of the units.  
<sup>b</sup> Based on invoice value, rounded.  
<sup>c</sup> IBC = Intermediate bulk container.  
<sup>d</sup> FIBC = Flexible intermediate bulk container.

We are working on various ways of increasing recycling rates for rigid bulk containers depending on the products, processes, and customers. These include the reuse of reconditioned IBCs (recycling rate: 100 percent ) and rebottled IBCs<sup>1</sup> where the steel cage and pallet are reused with a new plastic liner (recycling rate: 70 – 80 percent). In other areas, we use IBS with a plastic liner made from about 40 percent post-consumer recycle (PCR), which results in a recycling rate of about 60-65 percent. We are trialing PCR IBCs on the filling lines for non-hazardous goods at initial sites in Germany. The plan is to roll out usage further locally, nationally, and globally.

*Downstream*

Evonik also offers solutions that support circularity during the use of products and at the end of their life cycle. For example, our additives increase the durability of our customers’ products and therefore make a contribution to saving resources. Furthermore, our additives improve mechanical and chemical recycling processes and recycles. Evonik provides an extensive range of additives for mechanical recycling. In this way, we help our partners optimize the efficiency and quality of their circular processes.

For example, with our surfactants, printing inks can be washed out of used plastics faster, reducing the ink residues in recycled plastics. Moreover, after the washing process, less water remains on the plastic, saving time and energy in the drying process. Our additives also minimize odor and improve the processability and mechanical properties of recycles. As a result, the yields of secondary materials are increased. We are also involved in a joint project with BMW and other companies along the value chain that aims to increase the proportion of recycles that can be used in automotive components.

<sup>1</sup> Rebottled IBCs: IBCs where a completely new liner (bottle) is inserted into a used cage.

Since 2021, we have been partnering with Wildplastic, a start-up that supports countries with inadequate waste management systems in the collection of plastic waste from nature by providing fair payment. The recycled plastics are used, for example, in high-quality garbage bags. As well as additives for cleaning and reprocessing, we offer Wildplastic an extensive network and thus support the creation of jobs in the relevant countries. [More](#) .

Our products and technologies enable the recycling of used tires at the end of the life cycle for reuse in high-quality applications, thus avoiding incineration. Our partners reduce their ecological footprint by using tire granulates instead of fossil-based bitumen in road surfaces. As well as reducing traffic noise (low-noise asphalt) and cutting fuel consumption by cars, this greatly increases the service life of the road surface, reduces maintenance, and makes the surface recyclable.

Chemical recycling is a solution for plastic waste streams that cannot be recycled eco-efficiently using mechanical or technical processes. That applies, on the one hand, to mixed, heavily contaminated or colored thermoplastics and, on the other, to duroplasts that cannot be melted. To achieve this, Evonik makes additives, adsorbents, catalysts, and process know-how available to its partners. We therefore facilitate chemical recycling of plastics residues that would otherwise be incinerated or disposed of in landfills. We have developed chemical recycling processes to regain the basic components of polyurethanes for use in the production of new polyurethanes. With our expertise in catalysts and process technology, we are making a key contribution to this. Similarly, our catalysts and process technologies enable recycling of PET packaging and colored PET plastics,

which are not suitable for mechanical recycling, at the end of their life cycle.

In the case of heavily blended or contaminated plastics streams, we help avoid incineration by enabling their use in the production of pyrolysis oils. In this technology, plastics streams are converted into a pyrolysis oil at a high temperature without air. This can be used as a substitute for fossil naphtha in crackers, providing the basic ingredients for the synthesis of polymers. This technology is currently still at the pilot stage. To help meet the ecological and economic requirements on an industrial scale as well, we have increased our product offerings for the production of pyrolysis oils. We supply adsorbents and catalysts for the separation of contaminants and purification as well as additives that enable the processing of pyrolysis oils at low temperatures. Our SiYPro™ additives help our partners make their production processes safer and more robust. Another way of ensuring the circularity of heavily contaminated or mixed plastics streams is the production of synthesis gas. For this too, we are developing cleaning technologies such as adsorbents.

Evonik technologies are also used in the design for recycling approach. One example is a binder for heat-sealing applications (DEGALAN®), which allows the production of yogurt pots from a single material, so the pot and lid can be recycled together. Previously, yogurt pots had to be disposed of by incineration because of the aluminum lid. Together with a partner, at the K 2022 trade show for the plastics and rubber industry in Düsseldorf (Germany), we presented a concept for a monomaterial car seat produced by 3D printing: Substituting polyamide 12 for all materials used to produce seats, for example, plastics, metals, foams, and textiles, facilitates cost-efficient and ecological mechanical recycling. The concept should inspire other product

designers to reduce the range of materials used. Moreover, new business models such as leasing could make such concepts viable in more price-sensitive markets.



3D-printed prototype of a car seat: All components are made of the same class of plastics to facilitate mechanical recycling.

Durable products with good usability reduce the resources and waste that would otherwise be consumed or generated in maintenance or the production of replacements. Building protection additives are a good example: They enhance the stability and appearance of concrete structures that are exposed to weathering and environmental influences.

Alternative circular solutions are needed for products and ingredients that are difficult or impossible to collect and recycle because of their properties or application. Evonik's answers include, for example, fully biodegradable biosurfactants derived entirely from renewable raw materials.

**Our commitment**

Evonik is a member of the European Circular Plastics Alliance. This EU initiative aims to return 10 million metric tons of plastic recyclate to the market in Europe every year from 2025. Further, we have extended our involvement with Plastics Europe and the European Chemical Industry Council Cefic<sup>1</sup>, both of which support circularity. We are also a member of Circular Economy for Flexible Packaging, an initiative that develops circular solutions for all stages in the flexible packaging value chain. We support the Circular Valley project of WupperTalBeWegung e.V., which networks start-ups in the field of circular solutions with industry.

As a member of the WBCSD, we play a part in working groups that are working on standardization and evaluation of circularity, both in the chemical industry and along the value chain.

Evonik is involved in the Carbon2Chem<sup>2</sup> research project, which aims to convert exhaust gases from steelworks into chemical products such as ammonia for nitrogen fertilizers or methanol for use as a production input. We are a partner in the EU project ReProSolar, which is working on the complete recycling of photovoltaic modules<sup>3</sup>. In this context, all components of used modules are completely recycled. This allows pure silicon, silver, and glass to be returned to the manufacturing industry.

In the CEWI project, Evonik is working with companies, politicians, and other groups on circular models to drive forward the reprocessing of used cars. [More](#) .

Together with other companies in the plastics value chain in the federal state of North Rhine-Westphalia, we are setting up a networking platform and demonstration facility for practical research into recycling technologies up to market maturity.

 306-2

## Efficient use of scarce resources

**Alternative and renewable raw materials**

Evonik uses a wide range of raw materials in the production of its products. Like technical goods and services, they are sourced from a variety of suppliers. Production inputs decreased from 8.3 million metric tons in 2021 to 7.7 million metric tons in 2022. Production output was 8.8 million metric tons. Evonik replaces CO<sub>2</sub>eq-intensive raw materials with alternatives wherever this is possible and competitive.

In its production processes, Evonik uses dextrose and saccharose, mainly as substrates in the fermentative production of amino acids. Natural fats and oils and their derivatives are used to produce precursors for the cosmetics, detergents, and cleaning agents industries and in technical processing aids. Renewable raw materials are classed as critical raw materials for procurement purposes, especially with a view to the reliability of supply. Consequently, they are subject to a special examination.

We are endeavoring to increase the proportion of renewable raw materials. That includes examining technical, economic, ecological, and social aspects. In 2022, the proportion of renewable raw materials increased to 11.1 of production inputs (2021: 9.7 percent).

**Palm oil**

Evonik mainly uses palm oil, palm kernel oil, and their derivatives to produce ingredients for the cosmetics, detergents, and cleaning agents industry (Care Solutions business line) and to produce polymers used to improve the viscosity index and reduce the pour point of lubricants (Oil Additives business line). Our annual requirements are around 95,000 metric tons. We are critical of the establishment of new palm oil plantations and the associated land use. Therefore, we pay special attention to the ecological and sociopolitical developments relating to this market.

For many years, Evonik has supported the use of sustainable palm oil in the supply chain. The focus here is on internationally recognized certification standards. Evonik has been a member of the Roundtable on Sustainable Palm Oil (RSPO) since 2010. In our annual RSPO progress report, we outline our activities and targets to foster sustainable palm oil production. In keeping with our commitment to ensuring the responsible use of palm oil, we actively network with NGOs, customers, and other stakeholders in the value chain.

<sup>1</sup> Cefic = Conseil Européen des Fédérations de l'Industrie Chimique.

<sup>2</sup> Sub-project L IV: C2+ alcohols, C2+ olefins, synthetic fuel components, funding reference 03EW0008; funded by the Federal Ministry of Education and Research.

<sup>3</sup> EU funding reference 20028.

Evonik has drawn up recommendations for sustainable procurement and use of palm oil, palm kernel oil, and their derivatives to raise the awareness of our employees of how to take a responsible approach to these substances. We have published these recommendations on our website. [More](#) . Specific strategies, targets, and measures are defined by the operational management teams in the Care Solutions and Oil Additives business lines.

About 80 percent of the palm-based raw materials used by the Care Solutions business line are already RSPO-certified. Moreover, we have started to extend this to all available raw materials. Care Solutions' strategic priorities are certification of its sites and extending its portfolio of certified products. The Care Solutions sites that use palm oil are certified as conforming to the RSPO's mass balance (MB) and segregated (SG) standards. This shows that our organizational structure at these sites meets the RSPO requirements, which is a basic precondition for the continuous transition to certified raw materials. Care Solutions continuously screens market supply and uses its influence on direct pre-suppliers so that it can switch products globally to the MB standard. The majority of the palm-based products marketed by this business line already conform to the RSPO MB or SG standard. This is indicated in the tradename of all RSPO-certified products marketed by Care Solutions.

The strategic priorities of the Oil Additives business line are the certification of its sites and extending its portfolio of certified products. At present, all five production sites that use palm oil derivatives have been certified as conforming to the RSPO's MB or SG standard. In 2021, Oil Additives drew up a stepwise plan

for RSPO certification of the raw materials it uses. This includes a phased transition to certified starting products. More than 20 percent of palm-based raw materials are now RSPO-certified<sup>1</sup>. The original intention was to increase this to around 50 percent in 2022 and achieve a full transition in 2023. Due to the sharp rise in the price of raw materials, we have had to extend this stepwise plan: We now aim for a proportion of around 45 percent in 2023. Full transition is still planned for 2025.

Evonik plans to use only RSPO-certified palm oil and palm kernel oil in its products by 2025. In addition to the sharp price rise, significant regional fluctuations in the supply of certified derivatives are challenging as this entails uncertainty in meeting demand. The preconditions for achieving our target are therefore the availability of the necessary raw materials and commercial feasibility on the global market.

#### **Sustainable palm oil production: collaboration with WWF and Beiersdorf extended**

Progressive deforestation to establish new palm oil plantations is a major challenge. In view of this, Care Solutions has developed additional supply chain criteria with its customers. We expect further progress here to come from a joint project with the WWF and Beiersdorf. This partnership aims to strengthen sustainable development in the Malaysian region of Tabin in Sabah on the island of Borneo. This program takes a three-pronged approach—protect, produce, restore. The aim is to encourage the sustainable production of palm oil and other agricultural produce and stop deforestation. By 2025, a total of 20,000 hectares farmed by small- and mid-sized growers should be certified as conforming to the RSPO. In addition, a political framework is to

be created for sustainable agriculture and forestry. The three partners have also pledged to protect the wildlife habitat in Tabin and to set up at least one ecological corridor allowing wild animals to migrate to other habitats. Moreover, the aim is to stabilize the population of threatened and endangered species, such as rare Borneo elephants and orangutans.

In the reporting period, Evonik extended its collaboration with WWF and Beiersdorf to a further project on Borneo, in the Indonesian Province of West Kalimantan. The aim is to certify 200 independent palm oil producers with a total of 300 hectares of land as RSPO-compliant. The goal is to give these smallholders direct market access to a palm oil mill by 2026. This is an important building block for Beiersdorf and Evonik in their commitment to sustainability along the entire supply chain for palm (kernel) oil derivatives.

#### **Transparency and traceability**

Evonik advocates the responsible use of woodland and forests and the protection of the soil. Our Care Solutions and Oil Additives business lines are founding members of Action for Sustainable Derivatives (ASD). The goal of the ASD initiative is to ensure the traceability of palm oil derivatives to mills and plantations. Its risk analysis methods and joint action plans aim to help counter progressive deforestation. Within ASD, Care Solutions and Oil Additives report annually on the degree of transparency in the supply chain and at the oil mills involved. In 2022, Evonik's activities on traceability, exposure, and risk analysis within the framework of its ASD membership were extended to the supply chains for soybean and coconut oil derivatives.

<sup>1</sup> 2022.

## Product stewardship

### Strategy and management

Product stewardship is a vital precondition for our business. It is our “license to operate.” That includes evaluating the environmental and health risks of Evonik products and minimizing them where possible.

As well as complying with all statutory requirements such as the European chemicals regulation REACH<sup>1</sup> and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), product stewardship at Evonik includes voluntary commitments that go beyond these regulations. The key elements of our product stewardship have also been defined in a product policy. To supplement this, a group-wide standard defines how these commitments are to be implemented within Evonik, together with control mechanisms to monitor their observance. We have been committed for many years to the international Responsible Care® initiative and the Responsible Care Global Charter of the International Council of Chemical Associations (ICCA), which includes the global product strategy (GPS).

📍 416-1, 417-1

### Responsible handling of chemicals

We examine the entire value chain of our products from the procurement of the raw materials to the delivery to our industrial customers. This is a product stewardship approach and should not be confused with a complete life cycle assessment. In the light of global trade in chemicals and chemical products, it is important to encourage broad communication on their safe

handling and use. We therefore have an extensive worldwide information system. This includes information portals, safety data sheets—not just for dangerous products—in more than 30 languages, technical data sheets, and extensive information on our website. We also have 24/7 emergency hotlines, including an interpreting service, and email addresses.

Our specialist departments provide advice for our customers at all stages in the product life cycle, from the selection of the raw materials through dealing with possible toxicological, ecotoxicological, and physical chemistry risks and the resulting exposure-based risks. Our advice also includes regulatory requirements relating to the planned application, right up to transportation and disposal. Where necessary, we give customers training on how to handle our products. We did not register any breaches of product labeling regulations in 2022. 📍 416-2, 417-2

### Implementation of the REACH regulation and quality of dossiers

Under REACH, all substances produced, imported, or placed on the market in the EU in quantities of more than 1 metric ton p.a. have to be registered. Evonik supports the aim of protecting health and the environment in the handling of chemicals. To implement the complex REACH requirements, we maintain a close dialogue with our suppliers and customers, as well as with industry associations and authorities.

As well as the continued need to register substances, the priorities are the evaluation of dossiers and substances, and restriction and authorization. Evonik itself is not presently affected by authoriza-

tions. We compare the substance lists published by the authorities with our own portfolio to identify as early as possible whether any of our substances are affected so we can take suitable action where necessary. We maintain close contact with our customers on this. Our reviews also cover the raw materials we purchase. Where substances are categorized as being of very high concern, for example, if they are on the REACH list of potential candidates, we discuss the steps to be taken with our suppliers or look for alternatives. We have set up email addresses for all REACH-related inquiries from customers and suppliers to ensure they receive timely and full replies.

### European chemicals regulation REACH

C23



Another focus of our REACH activities is updating the dossiers for substances that have already been registered. This is based closely on the Cefic action plan, which Evonik has signed as part of a voluntary commitment. The review of all of Evonik’s dossiers with a view to enhancing quality will take place stepwise up to year-end 2026. Progress is outlined annually in this report and in a report to Cefic. We have already reviewed more than 320 dossiers since the action plan started in mid-2019.

<sup>1</sup> REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals.

### The Globally Harmonized System (GHS)

The GHS established by the United Nations classifies dangerous goods and substances for labeling on packaging and in safety data sheets. The GHS is still not applied uniformly around the world. We have therefore set up an in-house database to gather information on progress, changes, and national requirements for internal communication. Evonik implements the GHS/CLP requirements<sup>1</sup> in all countries where they apply.

### Our chemicals management systems

We evaluate all substances placed on the market (> 1 metric ton p.a.). Particularly dangerous substances are included from lower amounts. That allows a soundly based assessment of the risks. Where necessary, restrictions are placed on certain usage patterns or, in extreme cases, a complete ban is issued on use in certain products.

Evonik evaluates its substances using its own chemicals management system (CMS). This system supports us in global evaluation of our substances. The content of the CMS has been harmonized with the GPS requirements of ICCA and the REACH requirements. By the end of 2023, we want to include and evaluate all substances that have been added through acquisitions since 2017.

As an extension of the CMS, our Chemicals Management System<sup>PLUS</sup> is used for products containing more than 0.1 percent substances of very high concern. Our aim is to reduce or replace these wherever possible. The precondition for this is a detailed analysis so that we can derive suitable action to bring about a

further reduction in the possible negative effects on people and the environment. Around 2 percent of our products currently meet the criteria for evaluation on the basis of CMS<sup>PLUS</sup>. Since 2017, further substances that are within the scope of CMS<sup>PLUS</sup> have been added to our portfolio through acquisitions. We aim to include and evaluate these products by the end of 2023.

The European Green Deal published by the EU Commission sets out a timetable for Europe to become climate-neutral by 2050. One element in the zero-pollution target is the chemicals strategy for sustainability (CSS), which will have far-reaching consequences for the chemical industry and its value chain. Based on an internal examination and the economic analysis of the potential impacts of the CSS published by Cefic, we are engaging actively in the debate with decision-makers at national and European level through industry associations.

Evonik supports the goals of the Green Deal. In this context, we are campaigning for the proposed changes to be made circumspectly to safeguard planning reliability and retain REACH as the central regulatory instrument for chemicals. That includes playing an active role in consultations and in both phases of Cefic's analysis of the economic impacts. [More](#) . We are also drawing the EU Commission's attention to the threat to our industry of a shortage of certain classified substances or substance groups.

Evonik sees the more restrictive regulations that could result from the revision of REACH as particularly critical: the generic risk approach, registration of polymers, the extensive data

## Green Deal

### The main regulatory challenges for Evonik

- Amendment of the REACH Regulation, including more restrictive provisions
- Amendment of the Classification, Labelling, and Packaging (CLP) Regulation
- More stringent requirements as a result of the planned Ecodesign for Sustainable Products Regulation (ESPR)<sup>2</sup>
- Tightening of the Industrial Emissions Directive (IED)
- Introduction of a Safe and Sustainable by Design (SSbD) guideline
- Implementation of the EU Taxonomy Regulation
- Tightening of the Packaging Regulation

requirements to identify substances with endocrine disruptors and persistent properties, and the mixture assessment factor (MAF).

<sup>1</sup> CLP = Classification, Labelling and Packaging of Substances and Mixtures (Regulation EC no. 1272/2008).

<sup>2</sup> ESPR = Ecodesign for Sustainable Products Regulation.



Under the generic risk approach, the exposure data required for a sound scientific assessment would be disregarded. The plan is to base restrictions or bans solely on hazard properties. This approach is to be stepped up not only for end-consumer products but also for commercial users.

The EU Commission has been instructed to review and implement the requirements for polymer registration under REACH. The regulatory procedure process currently under discussion is likely to be divided into two phases. The first would be a notification phase to compile data on all polymers on the EU market. The second step would be to clustering of the polymers, including subsequent data generation. On this basis, up to 70 percent of polymers on the EU market would be subject to mandatory registration with corresponding data requirements. From an industrial perspective, the costs and work involved would have to be reasonable.

The CSS extends the data requirements for endocrine disruptors, including restrictions and possibly bans on consumer applications. Endocrine disruptors are either natural or chemical substances that disrupt or alter the regulation of the hormone system and can cause lasting damage.

The MAF relates to the introduction of an additional safety factor for the assessment of possible combined and synergistic effects. The EU Commission is calling for a generic MAF for all applications. That could result in the discontinuation of applications that are currently considered to be safe. Evonik advocates for the use of a targeted MAF.

The planned amendments to the CLP regulation also contain some critical aspects. For example, endocrine disruptors, PBT/vPvB<sup>1</sup>, and PMT/vPvM<sup>2</sup> are to be introduced as new hazard classes. PBTs are substances with persistent, bioaccumulative, or toxic properties. PMTs are substances with persistent, mobile, and toxic properties. The introduction would be within the scope of the CLP (EU), without prior consultation at UN level (GHS).



An employee of the Health Care business line in Darmstadt (Germany).

In addition, from an industrial viewpoint, endocrine disruptors are a mechanism of action, not an endpoint. What is more, the mobility criteria are inadequately defined. The EU's chemicals strategy aims to define substances that meet these criteria as

substances of very high concern (SVHC) and regulate them as such through the CLP regulation.

The proposed Ecodesign for Sustainable Products Regulation (ESPR) sets out performance and information requirements for almost all product categories. [More](#). These include, among others, durability, recycling, and resource efficiency. In Evonik's view, the planned information requirements for the digital product passport are unnecessarily extensive because they require the disclosure of product information that relates to the protection of intellectual property. Moreover, certain substances of concern (SoC) could be subject to regulation in addition to the REACH regulation.

The EU Commission also aims to tighten the Industrial Emissions Directive (IED). It wants to introduce an environmental management system comprising a chemicals management system including an assessment of the risks to health and the environment. The plan is to make the environmental management system obligatory for operators, although it differs from established environmental management systems such as ISO 14001 and ISO 50001.

Safe and Sustainable by Design (SSbD) is a new concept to evaluate the safety and sustainability of products in the innovation phase. SSbD is currently being developed and is being monitored both by industrial associations and by Evonik in close interdisciplinary exchange between product stewardship, innovation, and sustainability. It is initially planned as a guideline rather than legislation but will probably have implications for our product portfolio.

<sup>1</sup> Chemicals that are persistent (P), bioaccumulative (B), and toxic (T) or very persistent (vP) and very bioaccumulative (vB).

<sup>2</sup> Chemicals that are persistent (P), mobile (M), and toxic (T) or very persistent (vP) and very mobile (vM).

With regard to the implementation of the EU taxonomy, Evonik still sees a significant need for discussion on the “do-no-significant-harm” (DNSH) criteria for the environmental objective pollution prevention and control because in some respects these go well beyond the REACH regulation and are not defined sufficiently clearly. The delegated act on this environmental objective has not yet been published.

The EU Commission is planning to replace the Packaging and Packaging Waste Directive with a regulation. Here too, Evonik sees a danger that certain substances could be subject to regulation in addition to the provisions of the REACH regulation. The development of these proposals is being monitored both by industrial associations and internally at Evonik.

Aspects of product stewardship in the value chain are also examined as part of the sustainability analysis of our business (see “Strategy and growth” ▢ p.20). The focus here is on safeguarding our product portfolio by substituting dangerous substances in the supply chain. At the same time, we are working on alternative solutions for dangerous products. In the reporting period, we identified and evaluated various product stewardship signals in the context of the sustainability analysis of our business. Signal categories 1 and 2 specifically relate to critical substances and regulatory trends. We place great emphasis on the timely identification of market signals beyond regulations that have been adopted or are in force. PARCs with a negative rating—sales classified as transitioner or challenged—only account for a small proportion of our portfolio. We want to keep the proportion of sales generated with challenged products low on a long-term basis (see “Strategy and growth” ▢ p.22).

Sustainability analysis of our business

C24

Market signals<sup>a</sup>

- 1 Critical substances
- 2 Regulatory trends and global commissions
- 3 Sustainability ambitions along the value chain
- 4 Ecolabels, certification, and standards
- 5 Relative environmental and social performance
- 6 Contribution to ecological and social value creation
- 7 Contribution to the SDGs
- 8 Internal guidelines and objectives

<sup>a</sup> Signal categories 1–5 compulsory, 6–8 optional.

REACH-type regulations in other regions

Some countries and regions have either introduced or are currently introducing chemicals regulations with requirements similar to those of REACH. Examples are South Korea, Turkey, Taiwan, and the Eurasian Economic Union. Other countries, such as the USA, have also raised their standards significantly. Evonik is actively monitoring the development of regulations worldwide in order to be able to implement them in the relevant regions. In South Korea, consultations on the next volume band are taking place within the Chemical Substance Information Communicative Organization (CICO) and consortia. In Turkey, we played a leading role in the registration of the first substances in 2022. Since all substances in amounts of >1 metric ton p.a. have to be registered by year-end 2023, intensive work is underway on further registrations. In view of the current political situation, entry into force of the new chemicals regulation in the Eurasian Economic Union will probably be postponed to 2025. There are also plans to introduce REACH-style substance registration in India. Evonik is therefore stepping up its activities within industry associations.

Further product stewardship topics

Our product stewardship covers a broad spectrum of topics, which we are continuously addressing. The most urgent issues from the perspective of our stakeholders and in our own assessment are outlined below.

Animal protection

We need toxicological and ecotoxicological data to assess the safety of our products. In keeping with our responsibility to protect animals, we start by examining possible alternatives to animal testing in detail. These include, for example, quantitative structure-activity relationship analyses, analogies, literature, and non-animal testing, which are referred to collectively as NAMs (new approach methodologies). NAMs will receive greater attention in the revision of the CLP and REACH. We have set up an internal working group to bundle our expertise. As an active member of the European Partnership for Alternative Approaches to Animal Testing (EPAA), we drive forward alternative methods on a cross-sector basis. Evonik plays a part at national and international level to minimize the possible impact of the new demands made by the CSS chemicals strategy with regard to animal testing. Therefore, we are involved in the activities of the Next Generation Risk Assessment and the Usability of New Approach Methodologies (NAMs) for Risk Assessments and in discussions on data sharing.

Evonik is also involved in various national and international associations and initiatives engaged in the ongoing development of risk evaluation criteria such as EPAA, ECETOC<sup>1</sup>, and Cefic-LRI<sup>2</sup>.

<sup>1</sup> ECETOC = European Centre for Ecotoxicology and Toxicology of Chemicals.

<sup>2</sup> LRI = Long-Range Research Initiative.

Nevertheless, from a regulatory and scientific perspective, in many cases, tests on animals are often the only way to meet the necessary data requirements. If animal testing is unavoidable, Evonik ensures that the tests are performed only by test institutes that are validated in accordance with the applicable national and international legal provisions and that these tests meet animal protection standards. An internal working group monitors the auditing of the test institutes. As a responsible company, we have also drawn up our own animal protection guidelines.

### Nanotechnology

Nanotechnology is a generic term covering a wide range of developments and innovations as well as established technologies. Their common feature is the investigation, production, and use of minute structures measuring around 1 to 100 nanometers. Some have been known for many decades, while others are new developments. Nanomaterials used in products and efficient system solutions for our customers make a substantial contribution to environmental protection and climate protection. Evonik strives to handle the associated technologies responsibly and conscientiously. We see considerable opportunities in new materials for high-end batteries and energy-saving applications in the construction sector.

Our long-standing experience helps us implement measures to protect employees, customers, and consumers in the handling of nanomaterials. These measures are based on the latest assessment of the risks and dangers resulting from scientific investigations and epidemiological and toxicological studies. In addition, Evonik supports the establishment of new methods of investigation aligned to the specific effects of nanomaterials, which refine the evaluation of risks. We are also continuously investigating the potential hazards and safe handling of these materials. We

regularly discuss the opportunities and risks of nanotechnology with experts from industry, science, authorities, and industry associations.

### Microplastics

On behalf of the European Commission, in 2019, the European Chemicals Agency (ECHA) published a draft restriction on intentionally added microplastics. Evonik took part in public consultations, both directly and through associations (Cefic and VCI). At the end of August 2022, the Commission published its draft restriction, which will probably be adopted in May 2023. Compared with ECHA's original draft, some improvements have been achieved for the chemical industry, for example, extending the transition periods for substitution, reporting, and labeling. Nevertheless, the restriction will increase the administrative work for producers and users. We are advocating for the publication of an additional guideline to specify details that have not yet been clarified to safeguard implementation.

Evonik became a signatory to Operation Clean Sweep in 2015. The aim of this global campaign is to reduce pellet loss in production, processing, and transportation. Evonik also offers alternatives that can replace microplastic particles in both rinse-off and leave-on cosmetic products.

### PFAS

Evonik markets small amounts of polymers classified as a subgroup of per- and polyfluoroalkyl substances (PFAS) for the manufacture of medical products. A proposal has been submitted to the EU Commission on restricting these compounds under the REACH regulation. This is expected to be published in 2023. The proposals include an exemption for medical products. In addition, Evonik uses a small amount of PFAS compounds as precursors



Bioreactor for the cultivation of micro-organisms.

and intermediates in the production of pharmaceutical active ingredients. We assume that this application would also be exempt from a potential restriction on PFAS. Further, we produce small quantities of perfluorinated compounds that are mainly used in coatings to protect surfaces, for example, from graffiti. Evonik is making extensive information available to the relevant authorities for a decision. At the same time, we are looking for possible alternatives for use in surface coatings.

### Biotechnology

Industrial biotechnology uses micro-organisms such as bacteria, yeasts, and algae to develop sustainable industrial products on the basis of renewable raw materials and the associated processes. It is an important driver of growth and innovation and will therefore make a significant contribution to reducing the consumption of natural resources and enabling the transition to a bio-based circular economy.

Evonik uses natural micro-organisms, strains developed using conventional processes, and genetically modified micro-organisms. Safe, modern, high-performance biotechnology methods are used to optimize our microbial production organisms and processes. All microbial strains undergo a thorough scientific safety assessment in our laboratories as part of the necessary registration procedures. We comply with the latest scientific standards and regulations with the aim of making our products safe for people, animals, and the environment.

We use industrial biotechnology to produce biomolecules and micro-organisms. Examples are highly soluble, ultra-pure collagen for pharmaceutical and medical applications and biosurfactants for cleaning agents and cosmetic products. Furthermore, we produce omega-3 fatty acids from natural microalgae for aquaculture. Probiotics for antibiotic-free livestock farming are another example. Evonik also invests in understanding biological systems to create the basis for highly efficient system solutions. We use the DAISy chicken gut simulation model to investigate innovative feed additives. In our laboratories, we also use cell culture systems as skin test models in the development of cosmetics.

## Our targets

Below is an overview of the targets set for our value chain and products area of action.

Target attainment in 2022	Targets for 2023 and beyond
<p><b>Research, development &amp; innovation</b></p> <ul style="list-style-type: none"> <li>Generate more than €1 billion in additional sales<sup>1</sup> in our six innovation growth fields by 2025</li> </ul>	<p><b>Research, development &amp; innovation</b></p> <ul style="list-style-type: none"> <li>Generate more than €1 billion in additional sales<sup>1</sup> in our six innovation growth fields by 2025</li> </ul>
<p><b>Circular economy</b></p> <ul style="list-style-type: none"> <li>Generate more than €350 million in additional sales with solutions for the circular plastics economy from 2030</li> <li>Solutions for around 400,000 metric tons of recyclable plastics by 2025</li> </ul>	<p><b>Circular economy</b></p> <ul style="list-style-type: none"> <li>Generate more than €350 million in additional sales with solutions for the circular plastics economy from 2030</li> <li>Solutions for around 400,000 metric tons of recyclable plastics by 2025</li> </ul>
<p><b>Product stewardship</b></p> <ul style="list-style-type: none"> <li>Add substances/products from acquisitions<sup>2</sup> to CMS/CMS<sup>PLUS</sup> and process them by the end of 2023</li> </ul>	<p><b>Product stewardship</b></p> <ul style="list-style-type: none"> <li>Add substances/products from acquisitions<sup>2</sup> to CMS/CMS<sup>PLUS</sup> and process them by the end of 2023</li> </ul>

-  Target not achieved
-  Target partially achieved or target horizon extends beyond 2022
-  Target achieved

<sup>1</sup> With products introduced in or after 2015.

<sup>2</sup> Since 2017.

# FOCUS PROJECTS

of our strategic  
transformation<sup>1</sup>

# 2022

*Human rights*

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*EAGER*

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*POLYVEST® HT*

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*Sustainability data  
management*

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<sup>1</sup> This special section is outside the scope of the auditor's limited assurance engagement.

# Safeguarding human rights— an ongoing challenge

## *Colonnade at the Alte Nationalgalerie in Berlin*

The sun is just rising, beaming its rays between the pillars of the colonnade in front of the museum and the nearby cathedral. It is already pleasantly warm, and Laura Curtze (head of Human Rights and Labor Standards at the German UN Global Compact Network)<sup>1</sup> and Gerald Breyer (group human rights officer at Evonik) are meeting to discuss human rights.

They have both been involved in promoting human rights in various roles for many years.

<sup>1</sup> Until the end of November 2022.



»» *The ultimate aim is to improve how people live.«*

»» *The UN Guiding Principles on Business and Human Rights are our benchmark.«*



*Laura and Gerald in conversation outside the museum.*



Laura and Gerald recording a podcast in Evonik's Berlin office.<sup>1</sup>

<sup>1</sup> Podcast only available in German. 



**Laura:**  
Hello Gerald, I think there are some really interesting points about human rights on the agenda for today's meeting. I'd like to talk about Germany's new law on due diligence in the supply chain.

I'm interested in what Evonik is doing to implement the new requirements. After all, they are not confined to the new law: Other stakeholders require companies to comply with them too.

**Gerald:**  
In 2022, we conducted our first internal human rights risk analysis, which we also extended to include our suppliers.

**Laura:**  
It's quite common not to realize that topics are connected to human rights. What were the main findings of your risk analysis?

**Gerald:**  
In some areas, such as palm oil, we were already aware of the risks. Other risks were identified, and now we're working through them with our suppliers so they can

be ruled out in the future. For us, the risk analysis is a big step in understanding exactly what issues we as a company need to address.

**Laura:**  
Yes, a risk analysis creates transparency. It should be standard procedure at every company. How about a policy statement on human rights? Have you already got one? And has Evonik got a complaints procedure for reporting and documenting suspected breaches of human rights?

**Gerald:**  
Evonik has had a policy statement on human rights for some years, and we revised it in light of the risk analysis. It was adopted by the executive board in November 2022 and has been available on the intranet and internet since then. [More](#) .

Evonik has also had a complaints mechanism for a long time. This is an online system in 20 languages where people can report breaches or potential breaches of regulations. Absolutely anonymously if they wish.

## THE GERMAN ACT ON CORPORATE DUE DILIGENCE OBLIGATIONS IN THE SUPPLY CHAINS ...

... came into force on January 1, 2023; it applies to all companies based in Germany that have 3,000 or more employees.

... requires all companies based in Germany to comply with human rights and environment-related due diligence obligations within their own business area and in their supply chain.

... provides for fines and exclusion from public tenders for failure to comply with the legal provisions.

## EVONIK'S ACTIVITIES TO SAFEGUARD HUMAN RIGHTS<sup>1</sup>

- Establishment of a human rights risk management system and regular risk analyses
- Appointment of a group human rights officer
- Publication of a policy statement on human rights
- Preventive measures (training, etc.)
- Documentation and duty to report to the regulator

<sup>1</sup> Selected examples.



**Gerald:**

We decided to take steps to raise employees' awareness early on. There is mandatory training to enable our employees to recognize and avoid risks relating to human rights.

**Laura:**

If human rights risks are addressed collectively—giving due consideration to civil society, the corporate sector, and politics—we can find effective solutions for the topics we have mentioned.

It's important to keep in mind that, generally, the human rights due diligence process is not something instantaneous. It's a continuous, stepwise process that has to be constantly refined and improved.

**Gerald:**

As a company, we need to be aware that the German legislation on due diligence in supply chains is not the end of the road. The EU is currently working on a corporate sustainability due diligence directive. So there will be more aspects for companies to address in the future.

That shows that safeguarding human rights remains an ongoing challenge.



The video.

## Westhafen subway station— a human rights station



» Human rights  
under the earth.«

*For Laura and Gerald, the day ends at Westhafen subway station in Berlin. This station draws attention to the importance of human rights and encourages people to reflect on them.*

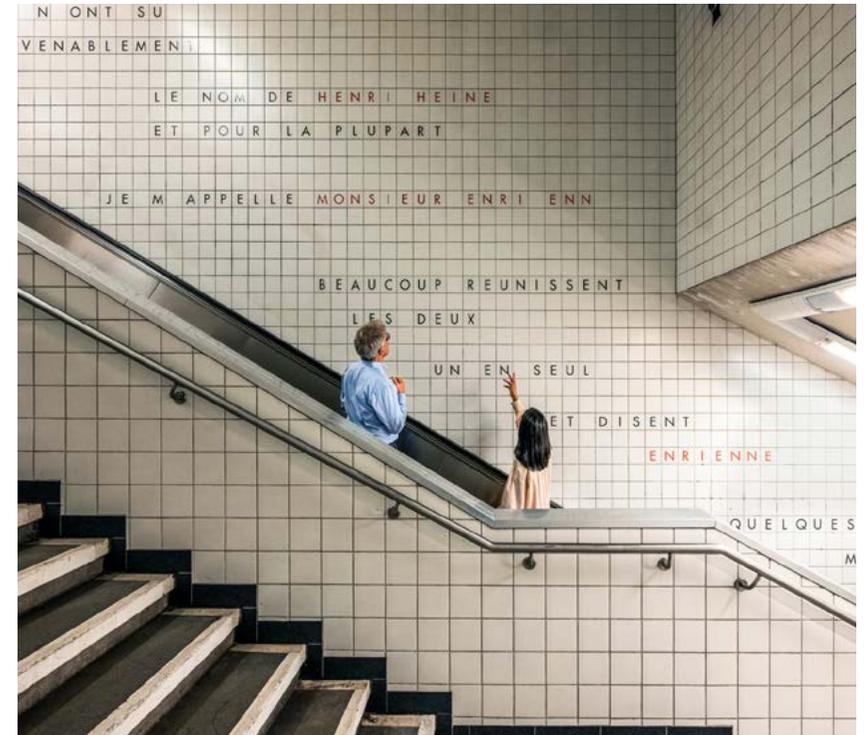
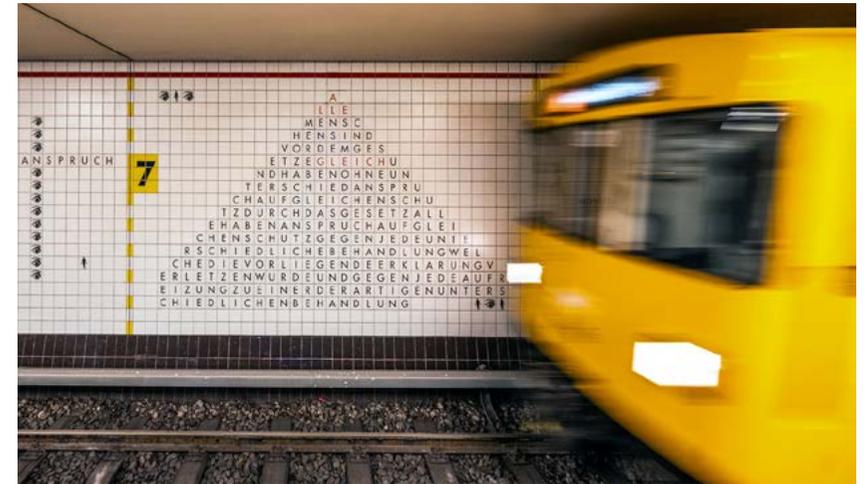
**INSCRIRE. To write human rights—  
an art project with a global reach**

Westhafen subway station has been a "human rights station" since 2021. It was the fifth human rights station in the worldwide INSCRIRE art project, following subway stations in Paris, Brussels, Stockholm, and Lisbon.

Where better to draw people's attention to human rights than somewhere they pass through every day?

The walls of the station are divided into 20 sections, each of which represents an article from the United Nations Universal Declaration of Human Rights.

The key feature is that all spacing between the words and all punctuation have been removed, so readers have to engage their brain and reconstruct the text piece by piece. Challenging and thought-provoking! Some texts are fairly easy to decipher, while others are more difficult.



» *All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.*«



# EAGER<sup>1</sup> – An ambitious project to reduce carbon emissions

<sup>1</sup> Evonik Assessment for Greenhouse Gas Emission Reduction.



*Evonik aims to cut its CO<sub>2</sub> emissions (scope 1 and 2) by a quarter by 2030. In 2022, the EAGER project team identified more than 400 measures that could be realized at over 20 sites to help achieve this goal. We talked to two key members of the project team, Dr. Julia Frey and Mikko Meyder, about the challenges and the distinctive features of this project.*

*Two key members of the EAGER team:  
Dr. Julia Frey and Mikko Meyder.*



Mikko Meyder

» *Implementation involves optimizing or developing the right technologies with our partners.«*



Dr. Julia Frey

» *Next Generation Technologies play a key role in reducing the carbon footprint of our production sites. That makes them an important element in the transformation of Evonik.«*

## In dialogue



Hello Julia, hello Mikko. You've completed the analysis phase of your EAGER project. Now you're moving on to the implementation phase. The analysis was really challenging because it was so complex: 20 sites around the world with more than 120 plants operated by 15 different organizational units. Plus selected sites in the Active Oxygens and Silica business lines.

What have you achieved for Evonik and what still needs to be done? Mikko, can you tell us what EAGER is about?

**Mikko:** EAGER is about reducing greenhouse gas emissions—to be precise, carbon dioxide emissions from production sites. Together with greater use of green electricity and other activities, that should help us achieve our new group-wide climate target. Evonik aims to reduce scope 1 and 2 emissions by a quarter, from 6.3 million metric tons CO<sub>2</sub> to about 4.7 million metric tons between 2021 and 2030. About 1 million metric tons of that should come from measures at our production facilities.



## The podcast.



The podcast team (from left): Dr. Matthias Blug (Product Manager Agrochemicals | Animal Nutrition), Thilo Krapfl (Vice President Industrial | Oil Additives), Dr. Julia Frey (Head of Sustainability & Efficiency | Process Technology & Engineering).



### Was EAGER an apt name for this project?

**Julia:** Definitely, it's a very good description of the attitude of everyone who was involved. I was impressed by the tremendous motivation. People really have taken sustainability on board. From the beginning of 2022, there were about 50 Evonik employees from a wide range of departments and disciplines working on the project worldwide. They looked at how we can achieve the necessary CO<sub>2</sub> reductions at our sites and in our production processes.

### Is it correct that EAGER was a five-step project?

**Julia:** Yes. First, we identified which energy sources at each site had the biggest impact on CO<sub>2</sub> emissions. Then we identified the processes and areas in the plants that use these energy sources. We organized workshops with local staff to develop ideas with them on how to save energy. After all, they are the experts: They know their processes best, and they know where there is leverage. In the next step, we screened the ideas for technical and technological feasibility. Finally, all the ideas were entered in the CO<sub>2</sub> cost abatement curve for the plant.

### Mikko, no doubt that varies enormously from one site to another?

**Mikko:** That's right. When we consolidated the various abatement curves, it became clear that we could not move forward at the same pace in all sites and business lines. Some sites can use "off-the-peg" solutions to optimize their production processes, but for other processes, we first need to develop the technology—possibly with external partners.

### Julia, you mentioned the CO<sub>2</sub> cost abatement curve just now. Could you explain what it is and how Evonik uses it to make investment decisions?

**Julia:** Yes, from the workshops we know which plants have the potential to reduce CO<sub>2</sub> emissions and by how much. We also know what measures are needed to do that. However, they also have to make sense economically. That is the basic precondition. Therefore, we looked at the one-time expenditures for the various measures and how each individual measure would impact regular costs. On that basis, we calculated the cost of every metric ton of CO<sub>2</sub> avoided. That can be used to derive the cost-efficiency of the proposed measures.

### The EAGER project

- Identification of measures to reduce CO<sub>2</sub> by 1 million metric tons CO<sub>2</sub>eq
- Contribution to Evonik's new climate target (scope 1 and 2 emissions), which is aligned to the target of "well below 2 °C" defined by the Science Based Targets initiative (SBTi)
- Project period: first half of 2022
- Involved 20 sites worldwide with 120 plants
- The highly motivated 50-member team identified 400 measures
- 2022 – 2030: €700 million earmarked for Next Generation Technologies (improvements to production processes/ infrastructure to reduce CO<sub>2</sub> emissions)
- Tracking and oversight of the measures by the EAGER steering committee



You can find statements by Dr. Julia Frey and her colleague Elena Kunze (top left) on our microsite: [sustainability-report.evonik.com](https://sustainability-report.evonik.com)



The video.



“Off-the-peg” measures need to be implemented as quickly as possible. In other cases, we need to optimize or develop the right processes or technologies together with partners. A lot is being done, but some things will take time.

**Mikko, do you think Evonik is on the home straight?**

**Mikko:** We’re not that far yet, but we’re making good progress. Implementation of the first results of the project has already started in Antwerp and Herne. At our site in Belgium, the topics we are specifically addressing are central heat pumps and green electricity from wind power. In Wesseling, we are planning to replace the gas driers used by the Silica business line with new electric driers powered by green electricity. Each drier will reduce our CO<sub>2</sub> emissions by several thousand metric tons a year. Now it’s important not to slacken our efforts for a single moment.

**Julia, Mikko, we’re coming to the end of our interview. Thank you both for your time here at Evonik’s Total Productive Management Academy in Marl.**

**One last question: what are the next steps for EAGER?**

**Julia:** The follow-on project to drive forward the implementation phase has already started. We’re orchestrating the measures identified in EAGER, driving forward the development of Next Generation Technologies, and naturally collecting further ideas on CO<sub>2</sub> abatement. We should not forget that 2030 is only an intermediate goal as we head for climate neutrality at Evonik by 2050.

# Sealants for insulating glass—High tech for energy efficiency

*H.B. Fuller | Kömmerling (Pirmasens)*

Today, Alexandra Rohr (Marketing & Communication, Glass, H.B. Fuller | Kömmerling) and Dr. Sara Liébana Viñas (Head of Technical Marketing, POLYVEST®, Evonik) are meeting at the H.B. Fuller | Kömmerling site in Pirmasens (Germany).

This is a Technology Center of Excellence for insulating glass applications. In view of the energy crisis, their meeting focuses on energy savings with insulating glass windows—a genuine high-tech application.



*Dr. Sara Liébana Viñas*

» *Sealants are not all the same. Polyurethane sealants may not look spectacular, but there is a lot of know-how involved in them.«*



The video.

*"We market POLYVEST® HT, a high-quality binder for polyurethane sealants, which are needed to manufacture modern, energy-efficient insulating glass windows that minimize energy losses from buildings and effectively reduce CO<sub>2</sub> emissions."*



**Sara:**

I recently read an article in a technical journal that really impressed me. It claimed that up to 50 percent of heat from houses is lost through doors and windows that are not properly sealed. That's a lot, and we need to minimize it for the good of the planet. Conversely, high-quality windows are an effective way to reduce the heat lost through windows. What energy cost savings can be achieved by fitting state-of-the-art windows in our apartments and houses?

**Alexandra:**

The potential savings vary depending on the house. For example, they are influenced by the local climate, the structure of the building, and the building materials. The size of the house and the quality of the insulating glass and the entire window have to be considered. If we take an average detached house, at current gas prices<sup>1</sup>, savings of up to €1,000 a year are possible if you compare the cost of heating a building with old single-glazing and one with modern, high-quality double-glazing with a permanent seal. Assuming that high-quality modern insulating glass has a lifetime of 30 years, that's an enormous saving.

**Sara:**

Are there any legislative changes to building regulations that have to be considered when choosing windows for public or private buildings?

**Alexandra:**

Yes, quite a bit is happening. The EU Commission and the EU Council recently agreed on key points for a revision

of the buildings directive. In broad terms, the main aims of the revised directive are for all new buildings to be zero-emission by 2030 at the latest and for the building stock to be zero-emission by 2050.

New public buildings have to meet these standards by 2028. Based on the new definition, zero-emission buildings are buildings with a very high energy performance that require very little or no energy, do not generate CO<sub>2</sub> emissions from fossil fuels, and have very low or no operational greenhouse gas emissions. Minimum energy performance standards are to be introduced for the renovation of existing buildings.

That should encourage the renovation of houses and apartments. Priority should be given to buildings with a very poor energy profile in order to continuously improve the energy performance of existing buildings. As well as energy-related targets, the new legislation will consider the health and wellbeing of people using the buildings.

**Sara:**

Installing windows with thermal insulation reduces energy consumption. It also reduces CO<sub>2</sub> emissions. The potential to reduce the carbon footprint is enormous.

One study shows that up to 100 million tons of CO<sub>2</sub> a year could be avoided in European countries by installing energy-efficient windows with multiple glazing. So, your solutions could make a massive contribution, couldn't they?



## POLYURETHANE ADHESIVES AND SEALANTS

Polyurethane adhesives and sealants are available as one- or multi-component systems. Depending on their formulation, they may be either rigid or flexible. Elastic properties are important for window glass to prevent warping as a result of changes in the ambient temperature.

The physical and mechanical properties of sealants can be adjusted by altering the composition of the components, for example, when using two-component polyurethane sealants, where two components are mixed together. The first component is normally a blend of polyols, plasticizers, fillers, and catalysts. The second is generally an isocyanate. The properties of the sealant can be optimized by selecting the right ratio of all these chemicals.

<sup>1</sup> As of November 2022.



*"The durability and reliability of insulating glass depend to a large extent on the quality of the sealants that are used." Find out more in the podcast with Alexandra Rohr and Sara Liébana Viñas.*



**Alexandra:**

Correct. One of the best ways of making a house more energy-efficient is optimal insulation. Today's windows are designed to do exactly that. Double- or triple-glazing with a durable gas seal can avoid several metric tons of CO<sub>2</sub> a year because energy losses are far lower than with older single-glazing or a drafty window.

**Sara:**

Insulating glass windows are made from two or more panes of glass with special coatings and an inert gas filler. The durability and reliability of insulating glass depend to a large extent on the quality of the sealants that are used. At H.B. Fuller | Kömmerling you make high-quality sealants for energy-efficient window systems. How does the sealant system work?

**Alexandra:**

The sealant holds the insulating glass unit together through an edge seal, which is also a reliable barrier that retains the gas and prevents moisture penetration. If the quality of the sealant is not good, the insulating inert gas can seep out of the space between the panes of glass or water vapor can penetrate it. That greatly reduces both the thermal insulating properties of the windows and their sound insulation.

**Sara:**

A modern insulating glass window really is more high-tech than I thought. I find it interesting that the quality of the

sealant guarantees that windows with multiple glazing retain their heat and sound insulating properties. What about the edge seal? How is it structured?

**Alexandra:**

From the outside, the edge seal on the insulating glass unit is rather unspectacular. All you can see is a black compound that runs right around the inside of the unit. But there is much more to it.

The edge seal is a dual seal comprising a primary and a secondary sealant. The main purpose of the primary sealant is to retain the gas in the insulating chamber and prevent penetration by moisture. The secondary sealant bonds the panes of insulating glass to one another. It forms a structural bond. At the same time, it enhances the sealing properties and protects the primary sealant from exposure to weather.

**Sara:**

The demands made on the two sealants are very different. Is that reflected in the choice of polymers?

**Alexandra:**

The primary sealant is normally made of polyisobutylene with thermoplastic properties. Secondary sealants can be made from various chemical substances and polymers, including polyurethanes, polysulfides, and silicones. They have to be "designed" so that they can reliably compensate for the pressure on the primary sealant in order to protect it most effectively.



The podcast.



Production facilities, delivery point, and warehouse at H.B. Fuller | Kömmerling.



**Sara:**

What criteria are used to select the secondary sealant?

**Alexandra:**

Various aspects have to be considered. Silicones have high UV resistance. They are often used in frameless glazing, which is exposed to direct sunlight for a long time. By contrast, polyurethane and polysulfide sealants have very good resistance, low water vapor diffusion, and low gas permeation. High-quality polyurethane sealants have the lowest water vapor diffusion. They are also flexible and bond with many types of surfaces such as glass, metal, and plastics.

**Sara:**

Polyurethane sealants are available as one- or multi-component systems. Depending on their formulation, they may be either rigid or flexible. For window glass, two-component systems are preferred because of their elastic properties in order to prevent warping as a result of changing thermal loads. And that is where Evonik plays an important role. We market POLYVEST® HT, a high-quality binder for polyurethane sealants, which are needed to manufacture modern, energy-efficient insulating glass windows that minimize energy losses from buildings and effectively reduce CO<sub>2</sub> emissions.

# Sustainability Data Management

*More efficient access to sustainability indicators*



*Evonik campus, Essen (Germany)*

Today, we are meeting two Evonik employees, Dörte Ehricke (Strategic IT Project Partner) and Guido Vornholt (Sustainability Expert and Sustainability Data Manager) at Evonik's headquarters in Essen (Germany). They will be talking about managing sustainability indicators and how they could be used more efficiently at Evonik—a truly pioneering project.

Guido and Dörte recording the podcast at Evonik's headquarters in Essen.<sup>1</sup>



<sup>1</sup> Podcast only available in German. ▶



Hello Dörte, hello Guido.

We're meeting up today to talk about your sustainability data management (SDM) project at Evonik. Your digital platform aims to make sustainability data available more efficiently for Evonik—at the push of a button, so to speak. Guido, you're the project manager and Dörte, you're the strategic IT project partner. What started the project, and what did you expect it to achieve?

**Guido:** Sustainability is an integral part of Evonik's corporate strategy. Now we're working on integrating the data and processes into other corporate functions. For our external sustainability report, we need reliable, audit-proof sustainability indicators that are available from a "single point of truth." The requirements will rise considerably in the coming years, for example, because of new international and regional regulations and rising demand from the capital markets and our customers for sustainability indicators. Moreover, from an internal perspective, we need to improve the strategic management of our businesses. Our operating units need greater transparency, so they have a better basis for decisions that have a bearing on sustainability indicators. That's essential for the efficient realization of related optimization steps. We also want to automate our sustainability-

related processes to make them more efficient. One example is the sustainability analysis of our business, which has so far basically been done manually.

This analysis looks at our whole portfolio from three perspectives—by product, application, and region. So far, we've defined more than 500 PARCs (product-application-region combinations). In addition, the individual indicators are determined in five sustainability categories such as the hazard potential of our products, our stakeholders' requirements, and ecological and social sustainability performance.



Dörte Ehrlicke,  
strategic IT project partner  
at Evonik.

» *A software solution can only be as good as the underlying processes, so it's essential to look carefully at those processes.«*

» *Sustainability indicators are important value drivers for companies—alongside financial data. Therefore, sustainability data should be compiled and evaluated with the same care as financial data.«*



Guido Vornholt,  
sustainability expert and  
sustainability data manager  
at Evonik.



Calculating this multidimensional structure manually was very time-consuming. That's why we started working on the first module of our sustainability data management (SDM) platform in 2022.

**The demands made on the project were obviously really high. How did you approach it?**

**Dörte:** Data and indicators are very valuable for a company. Making the data available quickly is the first challenge. Structuring it so it creates value for decision-making and the management of the business is the second one. As the first step, we jointly analyzed the systems landscape at Evonik, where the data are retrieved. That showed there is plenty of information available—but from different sources. Up to now, the data have been compiled and analyzed manually. All that manual work is very time-consuming and prone to errors. Moreover, the decentralized input of data led to inconsistencies, which then had to be eliminated manually.

From our analysis of the process, we could already see where the principal problems were and where initial improvements could be achieved by automating the sustainability analysis of our business. Using a uniform software platform greatly simplifies data delivery because all users enter their data directly in the system. Changes along the process chain are easier to trace for audit purposes. As a result, the whole process is faster and more convenient. It also increases the flexibility to perform specific analyses.

**Guido:** And that is where you come in Dörte, as our strategic IT project partner. Data retrieval with a few clicks only works with the right technological platform, and for that, we need your expertise and the input from Evonik's IT specialists.

**Dörte:** Yes, a software solution is always defined by the process behind it. User-friendly data delivery requires a lot of careful preparatory work by both sides. To exploit the full potential of the process, it therefore needs to be underpinned by an organizational change process. If the development of the technology can be linked to the associated change process, the "Big 5" of sustainability data management are within reach.

**The "Big 5"—what does that mean?**

**Guido:** The "Big 5" of sustainability management—for us, that means automation of sustainability-related processes, audit-proof sustainability data, analyzing diverse and complex data, integrating sustainability indicators into established business processes, and transparency for external reporting.

**Dörte:** The project made heavy demands on us all in 2022, and what we did was really trailblazing. But it was worth it: We implemented the first module in December 2022 for the sustainability analysis of our business.

**Is the sustainability data management project finished, or is there more to be done?**

**Guido:** It's not finished yet. Implementing the sustainability analysis of our business was only an important first step towards a comprehensive sustainability data management system at Evonik. We want to start work on the second module—greenhouse gas emission management (GEM)—in 2023. In this subproject, we'll be focusing on consistent calculation of greenhouse gas emissions at various levels, for example, for products and sites. Strategically, these figures are very important for Evonik. They form the basis for further measures to reduce CO<sub>2</sub>eq, and, at the same time, they provide a sound basis for forecasting our future greenhouse gas emissions.



The video.



Dörte and Guido  
at the video  
recording session.

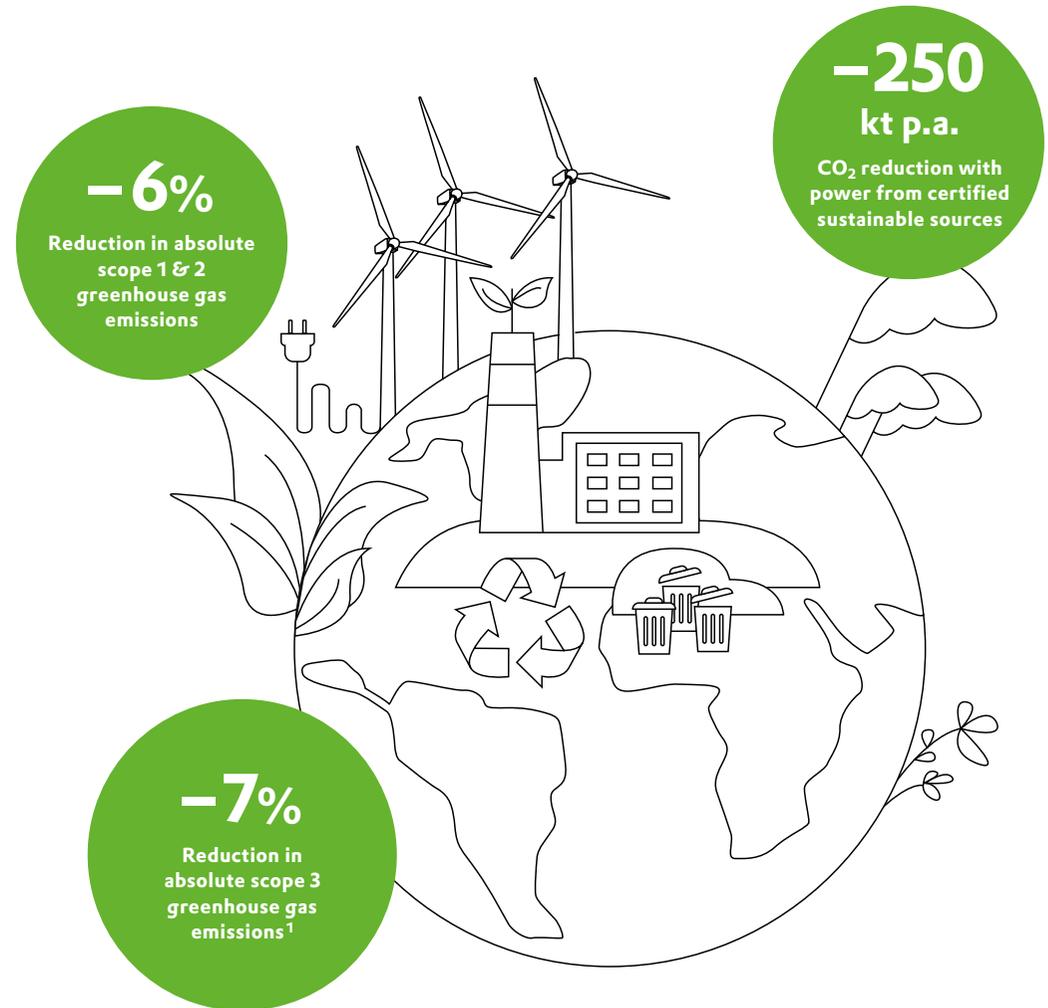
# The environment

*Protecting our environment and the climate are major global challenges of our time. Maintaining the natural basis of life for future generations is part of our corporate responsibility. This also includes continuously reducing emissions in keeping with our sustainability strategy.*

## MATERIAL TOPICS

- Green energy
- Mitigating climate change
- Biodiversity
- Water management

## SDGS OF PARTICULAR RELEVANCE FOR EVONIK



<sup>1</sup> Scope 3 emissions from all upstream categories and the category "Downstream transportation and distribution."

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## The environment

- **Commitment to SBTi<sup>1</sup>: Ambitious new climate targets**
- **Long-term agreements to purchase power from an offshore wind farm**
- **Significant increase in green electricity by 2030**
- **New targets for water and waste**
- **Biodiversity: expansion of our analyses**

## The environment

### Strategy and management

As a specialty chemicals company, we are aware that our production impacts the environment. To minimize the impacts, we have set ambitious targets and put many measures in place. According to our materiality analysis, the most important sustainability issues for Evonik include mitigating climate change, green energy, water management, and biodiversity.

Our actions are based on an extensive, integrated management system for the environment, safety, health, and quality. This applies to the whole of the Evonik Group and takes into account legal requirements, internal policies, and standard operating procedures. In addition to meeting compliance requirements, we therefore support a targeted improvement in our environmental performance. Furthermore, we require our manufacturing sites to be validated as conforming to ISO 14001, the internationally recognized environmental management standard. In the energy sector, we use ISO 50001 and are working to implement it digitally. At present, 48 sites are certified in conformance with

ISO 50001, so around 80 percent of Evonik’s energy consumption is certified.

The ESHQ (Environment, Safety, Health & Quality) function has a central audit system to regularly monitor the implementation of our strategy and management system. Based on the findings and analyses of internal and external audits and site inspections, talks are held on possible improvements and ways of implementing them. The executive board is informed annually of the outcome of the audits. The processes used to collect and process environmental data are subject to internal and external audits. Our high quality standards are backed up by regular training. Data input is decentralized, and the data can be evaluated on the basis of management units, legal structures, or regions.

In 2022, we made further progress with the introduction of our global ESHQ software ESTER (Evonik Standard Tool ESHQ and Reporting) to harmonize processes within the Evonik Group and make workflows leaner. For example, we continued to roll out the ESTER support organization, which offers users help with technical questions and should further improve the quality of the

<sup>1</sup> Validation of the targets by SBTi not yet completed.

processes. For this we developed dashboards, which are available group-wide, and established an overview of key safety indicators, which is updated daily. In addition, we took the first step towards switching our environmental reporting to ESTER.

The ESHQ function bundles all group-wide strategic management and coordination activities relating to the environment, plant safety, occupational safety, and health. The global strategy for the safety area of action is defined by the HR Executive Committee, which comprises the chief human resources officer, the HR partners of the divisions, and the heads of the ESHQ, Sustainability, and HR Business Management functions. Decisions on the implementation of this strategy are taken by the ESHQ panel. Its members are representatives of the divisions, regions, the technical committee, and employee representatives. The panel is chaired by the head of the ESHQ function, who reports directly to the chief human resources officer. Management and decision-making for the environment area of action are assigned to the sustainability council and the sustainability circle. The Sustainability and ESHQ functions work together closely to prepare and implement the work of the sustainability council and the sustainability circle (see "Further elements of our sustainability management" p.123). [303-1, 303-2, 306-1, 306-2](#)

### Validation and environmental protection costs

Our divisions and regions are subject to annual audits to monitor compliance with DIN EN ISO 14001 and RC 14001 validation at our production locations. In 2022, 67 internal and external ESHQ audits were conducted worldwide. The proportion of output

covered varies from year to year because of the addition of newly acquired units. However, it is always between 95 and 100 percent.

### Environmental protection investment and operating costs T07

in € million	2021 <sup>a</sup>	2022
Operating costs for environmental protection	295	320
Investment in environmental protection	64 <sup>a</sup>	78

<sup>a</sup> Data corrected due to the "fast close" process, see "About this report" p.134.

Investment in environmental protection increased substantially in 2022. Once again, most of the investments were at Marl Chemical Park in Germany, where we built two highly efficient gas and steam turbine power plants to renew our energy infrastructure and a further production complex for the specialty polymer polyamide 12.

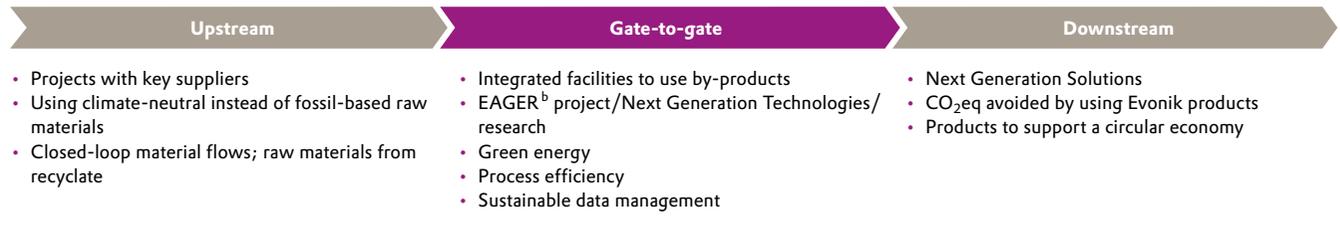
## Mitigating climate change

### Strategy and management

Mitigating climate change—which is one of our material topics—and the related extreme weather events are a major challenge for society and one that we are also addressing. We are driving forward the reduction of all climate-relevant emissions and other environmental impacts of our business activities. To actively mitigate the effects of climate change, we set ambitious new targets in the reporting period. We also integrated reducing our CO<sub>2</sub> emissions (scope 1 and 2 emissions) into the remuneration of the executive board and other executives. Carbon pricing is used as an additional planning criterion in investment decisions. Along the value chain, we are working on innovative solutions to reduce emissions—often in collaboration with suppliers and customers.

### Our levers<sup>a</sup> to reduce GHG emissions along the value chain

C25



<sup>a</sup> Examples.

<sup>b</sup> EAGER = Evonik Assessment of Greenhouse Gas Emission Reduction.

The main lever to reduce GHG emissions is our own production. In addition, compared with conventional alternatives, many of our Next Generation Solutions make a further contribution at the application stage (see “Strategy and growth” p.22).

**New climate targets 2021 – 2030 due to our commitment to SBTi<sup>1</sup>**

We joined SBTi in the reporting period. SBTi is a partnership of CDP, the United Nations Global Compact, the World Resources Institute, and the World Wide Fund for Nature. It defines and

encourages best practices for science-based target-setting and independently evaluates targets set by companies from this perspective. It has now become an internationally accepted standard.

We are committed to the SBTi target “well below 2 °C” and to reducing our absolute scope 1 and 2 emissions by 25 percent between 2021 and 2030. In the same period, we aim to reduce scope 3 emissions in all upstream categories and the category “downstream transportation and distribution” by 11 percent<sup>2</sup>. In this way, Evonik actively supports the Paris Agreement on Climate Change.

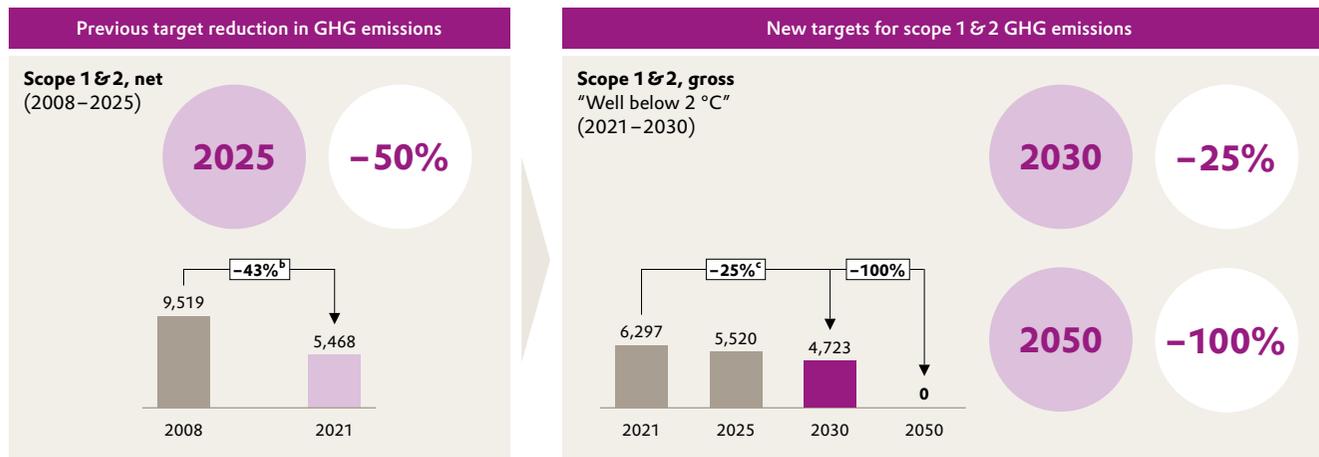
Here is a summary of our previous and new climate-related targets:

**Previous target for scope 1 and scope 2 (valid until year-end 2021):** The target was to reduce absolute scope 1 and 2 emissions by 50 percent by 2025, reference base 2008—the first full year after the establishment of Evonik (status 2021: –43 percent).

**New target for scope 1 and scope 2:** We aim to reduce scope 1 and 2 emissions by 25 percent between 2021 and 2030. This is aligned with the SBTi target of “well below 2 °C” (status 2022: –6 percent).

**Our commitment to SBTi<sup>a</sup>: ambitious scope 1&2 targets** 📌 305-1, 305-2

C26



**Previous target for scope 3 (valid until year-end 2021):** We aimed to reduce scope 3 emissions from the upstream value chain—principally from the “raw material backpack”—by 15 percent, reference base 2020.

**New target for scope 3:** We aim to reduce our scope 3 emissions in all upstream categories and in the category “downstream transportation and distribution” by 11 percent<sup>2</sup> by 2030, reference base 2021 (status 2022: –7 percent).

To achieve our ambitious scope 1 and 2 targets, we have put in place a wide range of measures. These include exiting coal-fired power generation at our site in Marl (Germany), ongoing global development of production processes and infrastructure (Next Generation Technologies), and switching to renewable energy.

<sup>a</sup> Validation of the targets by SBTi not yet completed.

<sup>b</sup> Net emissions (= gross emissions minus electricity and steam sold externally); reference base 2008; refers to the original target of –50% by 2025.

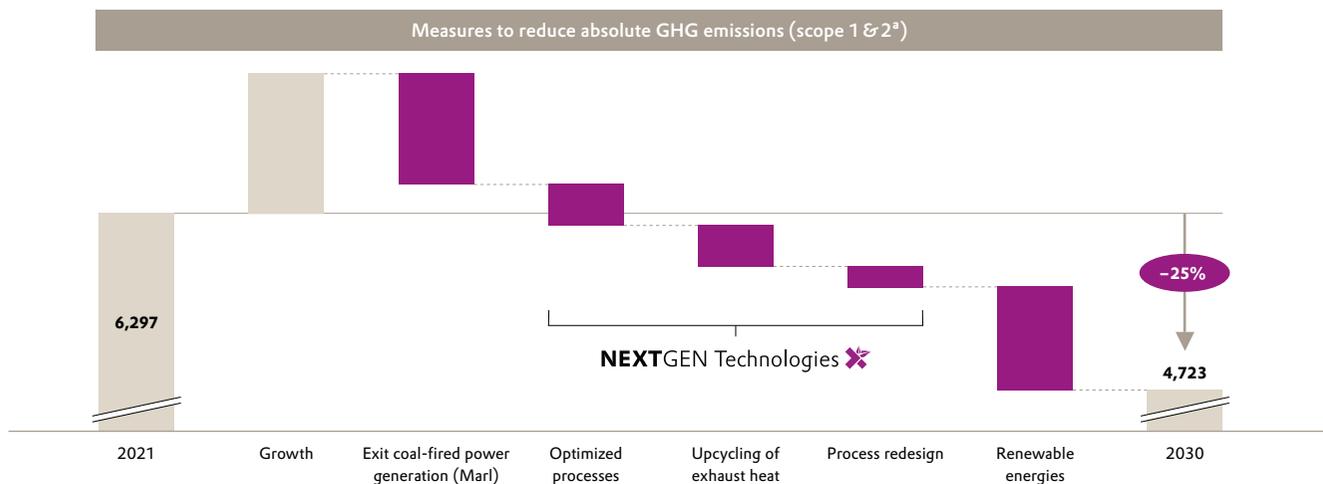
<sup>c</sup> Gross emissions; base year 2021, target year 2030.

<sup>1</sup> Validation of the targets by SBTi not yet completed.

<sup>2</sup> Exact target: 11.07 percent.

**Our roadmap for 2030 (scope 1 & 2)**

C27



<sup>a</sup> Gross emissions in kt CO<sub>2</sub>eq.

In the first half of 2022, the EAGER project identified the potential to reduce GHG emissions at our sites [p. 67](#). A cross-functional team identified scope to reduce CO<sub>2</sub>eq (scope 1 and 2 emissions) at the top 20 sites around the world by around 1 million metric tons (including the related costs of emissions avoidance), in accordance with the “well below 2 °C” target. The top 20 sites account for 80 percent of Evonik’s GHG emissions<sup>1</sup>. In the period to 2030, we plan to invest €700 million in Next Generation Technologies, in other words, in the ongoing development of production processes and infrastructure to reduce GHG emissions.

We are continuously developing our GHG reduction path in consultation with the business lines and multi-user sites and have started to implement the first measures.

In view of the geopolitical situation, we could not decommission the coal-fired power plant in Marl (Germany) as planned in 2022. Due to the consequences of Russia’s invasion of Ukraine, we are required to retain the capacity for the time being in order to safeguard general reliability of supply. Following modification

of the statutory framework, Evonik hired the necessary personnel, invested in technical maintenance, and procured coal on the global market. The supply of electricity, heat, and steam to the site is therefore safeguarded beyond 2022. We nevertheless assume that we will be able to achieve our scope 1 and 2 emissions reduction target for the period between 2021 and 2030.

**Measures to reduce scope 3 emissions between 2021 and 2030**

Reducing scope 3 emissions is challenging for the entire value chain because these emissions are outside their direct sphere of influence and are affected by many external factors. That necessitates intensive cooperation with partners along the value chain.

We aim to reduce our scope 3 emissions in all upstream categories and in the category “downstream transportation and distribution” by 11 percent<sup>2</sup> between 2021 and 2030. Therefore, we are analyzing which raw materials and suppliers offer us the greatest potential for reduction. The starting point comprises secondary data from databases but also, increasingly, primary data. To increase the proportion of primary data, we contact our key suppliers once a year. In this context, we discuss, among other things, the main ways we can leverage emissions reduction with our suppliers. That may be renewable energies, improved processes, or alternative raw materials. Taking the overview of all factors, we then discuss specific targets with our suppliers. In 2022, Evonik signed a letter of intent on a strategic alliance with Pörner Group (Austria) and Phichit Bio Power Co. Ltd. (Thailand) to offer the global tire industry a bio-based silica made from rice husk ash. This allows us to reduce the

<sup>1</sup> Based on greenhouse gas emissions from our sites in 2020.

<sup>2</sup> Exact target: 11.07 percent.

CO<sub>2</sub> footprint by 30 percent compared to our standard silica. **More** . Thus, we support our customers' focus on reducing carbon emissions and circularity.

The short-term availability of low-carbon raw materials is limited. Therefore, we use detailed mid- and long-term scenario analyses for the alignment of our procurement strategies. Green hydrogen is expected to drive the energy transition in the area of raw materials. That opens up opportunities for the production of green ammonia and green methanol. In the methanol process, CO<sub>2</sub> removal is possible, so the product would have a negative carbon footprint. Evonik is monitoring these developments and is in close contact with potential suppliers. Since ammonia can be used as a transport medium for hydrogen and as a substitute for marine diesel, we assume that the development here will be faster than for other raw materials.

A first step towards reducing our scope 3 emissions is the use of green C<sub>4</sub> crack, which is produced from green naphtha in Marl (Germany). There are signs of a significant increase in volumes, especially of biomethanol, which is used to produce MTBE. In addition, initial amounts of green acetone are being used to produce sustainable isophorone products. We have also extended certification under the mass balance standard of the Roundtable on Sustainable Palm Oil (see "Value chain and products"  p.54). For the first time, we are able to report process improvements on

the supplier side as a scope 3 measure thanks to the improved data transparency resulting from various supplier commitments.

#### Outlook and measures 2030 – 2050

On our climate journey, we are currently focusing on reducing our scope 1 and 2 emissions. In the period to 2030, this will be leveraged principally by exiting coal-fired power generation, switching to green electricity, and increasing process and energy efficiency at our sites, especially by applying best practices. Our efforts will be supported by digital process technologies and the establishment of a sustainability data management system.

Looking beyond 2030, we see broadening our technology and raw material portfolios as the key drivers of our transformation. We anticipate that the availability of alternative raw materials will improve significantly and drive forward circularity. From 2035, we expect new technologies to reach maturity, one example being the widespread availability of green hydrogen. In the following years, we expect to see the breakthrough of processes such as carbon capture and storage (CCS) and carbon capture and utilization (CCU). Together with partners, we are engaged in research in this field to improve our understanding of the interaction of such technologies with our portfolio of specialty chemicals under market conditions. For example, we have gained knowledge from the first projects on CCU in connection with the production of ammonia. We are following these projects and are in close contact with the relevant suppliers.

#### Task Force on Climate-related Financial Disclosures

A cross-functional working group at Evonik is following the objectives of the Task Force on Climate-related Financial Disclosures (TCFD) very closely. The TCFD focuses on climate reporting by companies and their climate-related opportunities and risks. We are considering purchasing an IT solution to enable us to produce scenario analyses in the future. We provide an overview of climate-related information in the categories governance, strategy, risk management, and metrics and targets in line with the TCFD structure (see "Basis of reporting"  p.135). The executive board receives regular updates on climate-related opportunities and risks as part of our group-wide opportunity and risk management.  201-2

Evonik is a member of the climate protection platform Chemistry4Climate—a joint initiative of the German chemical industry association (VCI) and the association of German engineers (VDI). The aim of this dialogue platform, which comprises around 70 partners from industry, NGOs, and politics, is to come up with practical ideas on how the chemical industry and other sectors can move towards defossilization by 2045. Chemistry4Climate supports Germany as an industrial base and promotes a fairer world, where value chains are viewed globally, and partner regions are given a fair share as advocated by the UN Sustainable Development Goals (SDGs).

### Greenhouse gas emissions

The standard used to report our GHG emissions is the Greenhouse Gas (GHG) Protocol Standard. We distinguish between direct scope 1 emissions from energy generation and production and indirect scope 2 emissions from the purchase of electricity and steam. Purchased electricity is calculated by the market-based method using the individual emission factors of the power suppliers.

#### Greenhouse gas emissions

305-1, 305-2, 305-4, 305-5, 305-6, 305-7

T08

in thousand metric tons CO <sub>2</sub> eq <sup>a,b</sup>	2021	2022
<b>Scope 1</b>		
Gas	1,881	1,918
Coal	1,275	1,060
Oil <sup>c</sup>	8	7
Substitute fuels and process emissions	1,168	1,018
Methane (CH <sub>4</sub> ) <sup>d</sup>	13	12
Dinitrogen oxide (N <sub>2</sub> O) <sup>d</sup>	12	18
Hydrofluorocarbons (HFCs)	25	19
<b>Total</b>	<b>4,381</b>	<b>4,051</b>
<b>Scope 2</b>		
Power, external input <sup>e</sup>	979	971
Steam, external input	937	882
<b>Total</b>	<b>1,916</b>	<b>1,853</b>
<b>GHG emissions, total scope 1 &amp; 2</b>	<b>6,297</b>	<b>5,904</b>
<b>Reduction in GHG emissions versus 2021 in %</b>	<b>0</b>	<b>-6</b>

<sup>a</sup> The calculation of greenhouse gases as CO<sub>2</sub>eq is based on the Sixth Assessment Report IPCC AR6 (2021) and is based on a period of 100 years.

<sup>b</sup> Adjusted presentation of the results in accordance with the GHG Protocol Standard.

<sup>c</sup> Actual figures for 2022. See "About this report" p.134.

<sup>d</sup> Emissions from production and energy generation.

<sup>e</sup> Market-based method using individual emission factors of electricity suppliers.

GHG emissions decreased by 6 percent to 5.9 million metric tons CO<sub>2</sub>eq in the reporting period. The principal reasons for this, apart from specific energy-saving measures, were a demand-driven reduction of 8 percent in production and the commissioning of the new gas and steam turbine power plant in Marl (Germany). The purchase of electricity from renewable resources, for example, by the Active Oxygens business line, remained at the prior-year level. Globally, these purchasing activities reduced our scope 2 emissions by around 250,000 metric tons CO<sub>2</sub> in the reporting period.

In 2022, Evonik had 24 (2021: 23) facilities that fell within the scope of the EU Emissions Trading System (EU ETS). Our new gas and steam turbine power plant in Marl (Germany) came into service in the reporting period. We have therefore completed the renewal of our energy infrastructure at this site. Overall, Evonik's emissions from the EU ETS facilities totaled 3.0 million metric tons CO<sub>2</sub> in 2022 (2021: 3.2 million metric tons CO<sub>2</sub>).

In addition, we are subject to carbon pricing systems in a number of countries. In Germany, we are subject to the national emissions trading system as well as the EU ETS. In the provinces of Fujian and Shanghai in China, our Nanping and Shanghai sites are subject to regional emissions trading systems. National emissions trading systems apply for our sites in Morrinsville (New Zealand) and Ulsan (South Korea). Our sites in Gibbons and Maitland (Canada) and Singapore are subject to the relevant national CO<sub>2</sub> taxes. Overall, about 61 percent of Evonik's GHG emissions are subject to carbon pricing systems.

### Carbon pricing

We use internal carbon pricing for major investments as a basis for effective management of our CO<sub>2</sub> reduction target. This adds another relevant indicator to the established planning parameters

for investments, such as exchange rates and raw material prices. The aim is to be able to reflect the development of carbon-intensive investments in a reliable and harmonized manner in all investment applications worldwide. At present, we assume that the carbon pricing for the EU ETS will be €95 per metric ton CO<sub>2</sub> up to 2030. In all other regions of relevance to Evonik, we are retaining our forecast of €50 per metric ton CO<sub>2</sub> by 2030 at the latest. In view of regional differences in the starting situation, we have developed scenarios for the development of carbon pricing—differentiated by countries and regions—showing the rise to the assumed final price. In these, we take into account both direct CO<sub>2</sub> emissions (scope 1 emissions) from production and energy generation and indirect CO<sub>2</sub> emissions from the purchase of secondary fuels (scope 2 emissions).

In the reporting period, we held workshops on use of the CO<sub>2</sub> cost calculator that we have developed. This tool allows efficient and systematic calculation of the CO<sub>2</sub> costs to be taken into account in every investment. Since it provides site- and fuel-specific emissions factors and regional scenarios for the development of carbon pricing, it permits harmonized evaluation of the CO<sub>2</sub> costs of investments throughout the Evonik Group.

### Evonik Carbon Footprint

We pay special attention to greenhouse gas emissions along the value chain. Since 2008, we have reported an extensive overview of greenhouse gas emissions—from the extraction of raw materials through production to the disposal of the products. The key parameter is the carbon footprint (CO<sub>2</sub>eq footprint). The data cover Evonik's direct energy and process emissions (scope 1), emissions from purchased electricity and heat (scope 2), and relevant up- and downstream emissions (scope 3). These include emissions from the production of purchased raw materials, services, and capital goods, energy-related emissions not

included in scope 1 and scope 2, emissions from inbound and outbound shipments, from the disposal of waste, emissions caused by business trips and employee commuting, energy requirements for administrative buildings, and emissions from the use, disposal, and recycling of sold products. The method is

closely based on the GHG Protocol Standard of the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), as well as the Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain published by the WBCSD.

**Evonik Carbon Footprint<sup>a</sup>**  305-3, 305-5

**T09**

Greenhouse gas emissions in million metric tons CO <sub>2</sub> eq		2021 <sup>c</sup>	2022
Scope 1	Direct energy- and process-related emissions	4.4	4.1
Scope 2	Indirect emissions from purchased energy (gross, market-based approach)	1.9	1.9
Scope 3 <sup>b</sup>	Category 1: Purchased chemical raw materials, packaging materials, and indirect goods and services	13.0	12.3
	Category 2: Capital goods	0.3	0.3
	Category 3: Energy-related activities (not included in scope 1 and 2)	1.7	1.3
	Category 4: Upstream transportation and distribution	1.1	1.0
	Category 5: Disposal and recycling of waste	0.3	0.3
	Category 6: Business travel	0.01	0.03
	Category 7: Employee commuting	0.06	0.05
	Category 8: Upstream leased assets (company cars, electricity and heating of administrative buildings)	0.00	0.00
	Category 9: Downstream transportation and distribution (to direct customers)	0.05	0.05
	Category 11: Use of sold products (direct emissions only)	4.2	3.2
Category 12: Disposal and recycling of products	2.8	3.1	
<b>GHG emissions, total scope 3</b>		<b>23.4</b>	<b>21.7</b>
<b>Reduction in scope 3<sup>d</sup> GHG emissions versus 2021 in %</b>		<b>-</b>	<b>-7</b>
<b>GHG emissions Evonik Carbon Footprint (sum of scope 1, 2, and 3)</b>		<b>29.7</b>	<b>27.6</b>
<b>Reduction in GHG emissions Evonik Carbon Footprint (scope 1, 2, and 3) versus 2021 in %</b>		<b>-</b>	<b>-7</b>

<sup>a</sup> The fast close process reporting process was used for this reporting period, see "About this report"  p.134. Differences between the data and totals are due to rounding. The inventory covers fossil greenhouse gas emissions and emissions of gases—other than CO<sub>2</sub>—of biogenic origin. Moreover, scope 3 categories 1 (-1.4 million metric tons biogenic CO<sub>2</sub>), 11 and 12 (approximately +0.9 million metric tons biogenic CO<sub>2</sub>eq together), and direct scope 1 process emissions (+130 kilotons biogenic CO<sub>2</sub>eq) entail relevant use of biomass with the associated net amounts of CO<sub>2</sub> removal and biogenic CO<sub>2</sub> emissions.

<sup>b</sup> Some calculations are based on assumptions and estimates. Scope 3 category 10 "Processing of sold products" is not reported due to its complexity; categories 13 "Downstream leased assets," 14 "Franchises," and 15 "Investments" are not disclosed separately as they are not applicable or not significant.

<sup>c</sup> The data presented in the sustainability report 2021 differ from the data presented in this report due to changes in the presentation of the results compared with 2021 and the inclusion of full-year data and corrected data in the calculations.

<sup>d</sup> Scope 3 emissions from all upstream categories and the category "Downstream transportation and distribution."

Until the 2021 report, the published GHG inventory included CO<sub>2</sub> removals (due to biological carbon sequestration by biomass at the beginning of the life cycle) and biogenic CO<sub>2</sub> emissions due to the use of biomass that was relevant to Evonik. To meet the requirements of the GHG Protocol Standard, these are no longer included in the inventory from 2022 onwards; instead, they are disclosed separately. The data in table T08 cover fossil GHG emissions and biogenic GHG emissions other than CO<sub>2</sub>. We have adjusted the data for 2021 accordingly. The development of greenhouse gas emissions along our value chain and the contribution made by the individual categories in the GHG Protocol Standard are presented for 2021 and 2022 in table T09.

In 2022, greenhouse gas emissions decreased to 27.6 million metric tons CO<sub>2</sub>eq, compared with 29.7 million metric tons CO<sub>2</sub>eq in 2021. This was mainly due to a cyclical reduction in business activities, which was reflected in lower procurement, production, and sales volumes. Shifts between business units were another factor. As well as measures to reduce emissions, the changes in the emissions data for individual scope 3 categories were due to the integration of more specific emissions factors, among other things, as a consequence of the successful increase in the proportion of primary data used.

**Other emissions into the air**

Alongside emissions of greenhouse gases as reported above, energy generation and industrial production result in further emissions into the air. We want to reduce these further and therefore take the emissions situation into account when planning new facilities. Our clean air measures include returning exhaust gases to the production process, thermal processing of residual gases with a high calorific value (as substitutes for natural gas), the use of electric filters to remove particulates, the use of catalysts to reduce nitrogen oxide, and desulfurization by

washing with subsequent precipitation. We also use other methods to reduce emissions from production facilities. Examples are wet and dry scrubbing, condensation, adsorption, and thermal and catalytic incineration. Some of these emissions treatment facilities are used simultaneously by several units.

**Other emissions into the air**  305-6, 305-7

**T10**

in metric tons	2021	2022
Carbon monoxide (CO)	1,096	843
Sulfur oxides (SO <sub>x</sub> /SO <sub>2</sub> )	1,530	1,219
Nitrogen oxides (NO <sub>x</sub> /NO <sub>2</sub> )	3,799	3,369
Non-methane volatile organic compounds (NMVOC)	939	867
Particulates	536	505
Heavy metals (As, Cd, Cr, Cu, Hg, Ni, Pb, Zn)	0.82 <sup>a</sup>	0.80
Ozone-depleting substances <sup>b</sup> in metric tons CFC-11 equivalents	0.20	0.30

<sup>a</sup> Corrected data.

<sup>b</sup> Emissions of ozone-depleting substances calculated in accordance with the Montreal Protocol.

The other emissions into the air declined in 2022 as a result of lower production output and the reduced use of coal for energy generation at Marl Chemical Park.  305-6, 305-7

**Impact of the new power plant in Marl**

The measures defined to achieve our GHG targets will bring a substantial reduction in further emissions in the future. Irrespective

of the continued operation of the coal-fired power plant in Marl (Germany) on a temporary, crisis-induced basis, the commissioning of the two new gas and steam turbine power plants will bring a fundamental change in Evonik’s emissions profile. This effect is enhanced by the new thermal afterburning unit in Marl, which came into service in 2022 as part of the new polyamide 12 complex. Overall, we expect these measures to reduce emissions into the air as follows by 2024:

- Carbon dioxide (CO<sub>2</sub>): –1,000,000 metric tons
- Nitrogen oxides (NO<sub>x</sub>/NO<sub>2</sub>): –1,000 metric tons
- Sulfur dioxide (SO<sub>x</sub>/SO<sub>2</sub>): –500 metric tons
- Dinitrogen oxide (N<sub>2</sub>O): –60 metric tons
- Particulates: –30 metric tons
- Heavy metals (As, Cd, Cr, Cu, Hg, Ni, Pb, Zn): –0.1 metric ton.

**Very low level of ozone-depleting substances**

The ozone-depleting chlorofluorocarbons (CFCs) are presently only used as refrigerants on a very restricted basis as a transitional solution in line with national and international regulations. Emissions of ozone-depleting substances fluctuate at a low level due to aperiodic replenishment of refrigerant systems. Consequently, they were again very low in 2022. The main substitutes at present are partially fluorinated hydrocarbons (HFCs), which are used in decentralized air-conditioning systems and small process cooling systems. These substances do not harm the ozone layer, but they have a significant impact on the climate. We anticipate that these refrigerants will be replaced by more climate-friendly products in the mid-term. The greenhouse gas potential of the refrigerants is shown in table “Greenhouse gas emissions” T08  p. 85.

**Green energy**

**Strategy and management**

Green energy is one of Evonik’s three most important material topics. In the reporting period, we made good progress with the strategic transformation of Evonik in this area. More and more of our sites source energy from renewable resources. Worldwide, we are working closely with the various business lines, sites, and specialists in the Technology & Infrastructure division to increase the proportion of total energy sourced by Evonik that comes from certified sustainable energy sources (green energy). In the reporting period, more than 15 percent of the electricity used in the Evonik Group came from renewable sources<sup>1</sup>. More than 30 sites in Europe, Asia, and North and South America currently source or generate sustainable energy. That avoids around 250,000 metric tons of CO<sub>2</sub> a year. Our energy management system, which we are extending to create an integrated digital solution, increases our energy efficiency and, at the same time, helps us further optimize the efficient use of resources.

**Significant increase in the proportion of green energy**

From 2026, our European sites will be far less dependent on fossil fuels. In November 2022, we signed a long-term power purchase agreement (PPA)<sup>2</sup> with the utility company EnBW for the 900 megawatt (MW) He Dreiht offshore wind farm. On the basis of this PPA, Evonik will source output of 100 MW from this new wind farm in the German North Sea over a period of 15 years. A second PPA was signed in December 2022 to increase this by a further 50 MW. Consequently, renewable energy sources will cover more than one-third of our electricity requirements in Europe from 2026. Evonik will compensate for fluctuations in the

<sup>1</sup> Data based on 2021; the data for 2022 will not be available until after the editorial deadline.

<sup>2</sup> PPAs are long-term power supply agreements between a producer (e.g., a wind farm operator) and major customers (e.g., industrial companies).

wind energy feed-in through its own balance group management. This shows that we have a keen eye on the reliability of supply, can avoid potential bottlenecks, and safeguard the long-term operation of our production facilities.

In 2022, we concluded PPAs for the supply of electricity from wind farms and photovoltaic installations to five Chinese sites. For example, since May 2022, our Health Care business line at the site in Nanning has been supplied with green electricity from wind power instead of coal-fired plants. Additional energy and recycling activities at the site have brought a further appreciable reduction in CO<sub>2</sub> emissions.

Worldwide, 23 percent of electricity purchased by Evonik from external suppliers already comes from renewable sources. The PPAs with EnBW in Germany increase this substantially to around 50 percent. At the same time, this cooperation reduces scope 2 emissions (purchased power) by 150,000 metric tons CO<sub>2</sub> a year. Our goal is to reduce scope 1 and 2 emissions from 6.3 million metric tons to 4.7 million metric tons between 2021 and 2030 [C26](#) [p. 82](#). About one-third of this reduction should be achieved by using renewable energies.

In addition to green electricity, biomethane is becoming increasingly important for Evonik as a substitute for fossil-based natural gas. At our site in Schörfling am Attersee (Austria), we increased the proportion of biomethane from 25 percent to 100 percent in the reporting period. Similarly, the High Performance Polymers business line has used biomethane in the production of some of its products in Germany since 2021.

[302-1, 302-4, 305-1, 305-2, 305-3, 305-4, 305-5, 305-6, 305-7](#)



Wind energy from the German North Sea: Evonik and EnBW have signed long-term power purchase agreements.

Beyond its own power supply interests, Evonik markets a range of products and solutions that enable the increased use of renewable energy and makes it more efficient. For instance, our crosslinkers are used in robust and durable rotor blades. Silicas and silanes strengthen the bonding of glass fibers and resin. Structural foams from Evonik help bring about a further optimization of the weight and design of future installations. Coating additives and polyurethane foam components protect rotor blades, which rotate at speeds of up to 400 kilometers an hour through rain, salt particles, and hail. Synthetic base oils lubricate the gears and protect them from wear and corrosion.

### Energy management systems and measures to increase energy efficiency

Evonik aims to reduce both absolute and specific energy consumption by 5 percent by 2025 (baseline year: 2020). That is helped by new technologies and efficient processes such as digitally controlled energy systems. In this way, our digital energy management system (EnMS) supports the achievement of operational energy targets at our sites. In 2021<sup>1</sup>, successful energy efficiency activities led to a reduction of more than 218 GWh in energy consumption, as well as reducing emissions by around 42,000 metric tons CO<sub>2</sub> [T11](#) [p. 90](#).

The ISO 50001-validated energy management system was used at 48 sites in the reporting period. As a result, more than 80 percent of our global energy consumption is subject to continuous improvement via a certified EnMS. In 2022, we successfully certified further sites in Europe and Asia-Pacific. ISO 50001 certification is planned for a further 20 sites in the coming years.

Through the targeted rollout of energy efficiency measures, we reduced specific energy consumption at all sites that use the energy management system by an average of 3.8 percent a year between 2019 and 2021. The following measures resulted in particularly high savings:

- Sustained reduction in steam through optimization of normal operating conditions at the site in Mobile (Alabama, USA) (energy savings: 14.3 GWh p.a.)
- Use of optimized control technology for desalination valves in Witten (Germany) (energy savings: 11.6 GWh p.a.)

<sup>1</sup> The figures for 2022 will not be available until spring 2023.

- Replacement and start-up of a drier in Wesseling (Germany) (energy savings: 5.5 GWh p.a.)
- Modification of the advanced process control system for a raw material in Antwerp (Belgium) (energy savings: 1.4 GWh p.a.)
- Optimal realization of various energy efficiency measures resulted in a successful reduction in the amount of steam at the site in Rosario (Argentina) (energy savings: 4.1 GWh p.a.)

The EnMS is being switched stepwise to a uniform digital basis for all sites, supporting all steps from energy data capture through data analysis to monitoring the action taken. The benefits of the digital EnMS are increased global data transparency and, in particular, faster, automated availability of real-time data at plant level.

More than 70 sites are to be integrated into the digital EnMS by the end of 2026. Over 90 percent of the Evonik Group’s energy consumption will then be continuously tracked by a central database.

Constant exchange of experience by experts at our sites, divisions, and service units is a key factor in encouraging and improving our employees’ awareness of the handling of energy and resources. In this way, regional networks are successively growing into a global knowledge platform—providing impetus for data analyses, assistance with the interpretation of standardized key indicators, and tools for sharing energy-, environment-, and sustainability-related best practices. [302-1, 302-4](#)

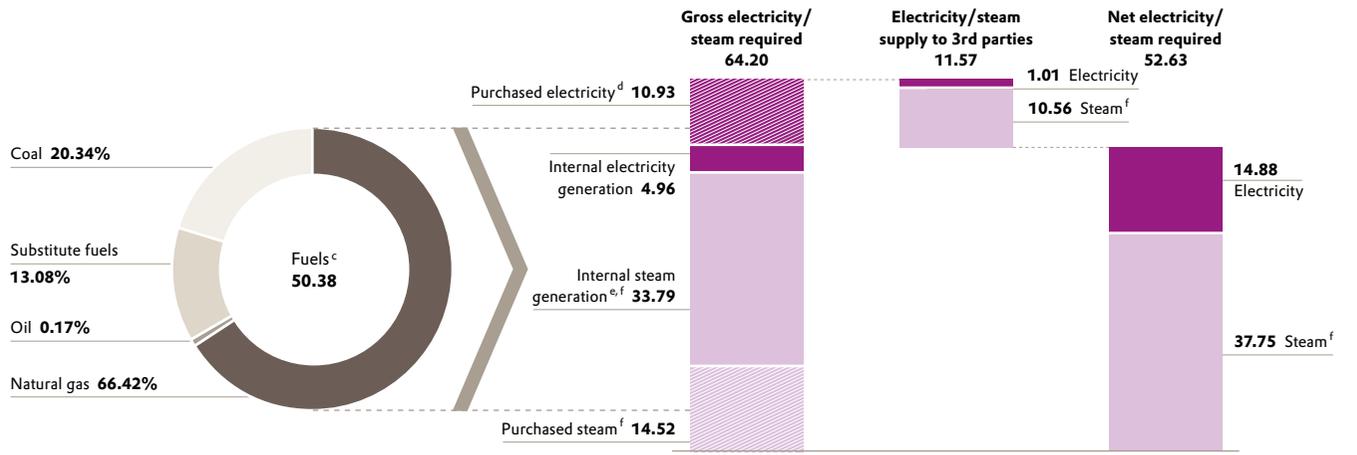
**Energy data**

In our energy reporting, we distinguish between primary energy inputs, generally fossil fuels used to generate electricity and steam, and secondary energy inputs. These mainly comprise purchased electricity and steam. We also use substitute fuels such as thermal processing of by-products, waste, and sewage sludge.

At present, natural gas and coal are Evonik’s main fuels. Looking beyond the current energy shortage caused by Russia’s invasion of Ukraine, Evonik’s goal following the commissioning of the new gas and steam turbine power plants in Marl (Germany) is to completely exit coal-fired power generation worldwide. In addition to natural gas-fired generation of electricity and steam for captive use, large amounts of process heat from exothermic reactions, for example, from the production of acrolein, are used in integrated heating systems.

Evonik’s energy data 2022 <sup>a,b</sup> [302-1, 302-4](#)

C28



<sup>a</sup> In petajoules.  
<sup>b</sup> Contains the energy required to generate refrigerants. Does not include cooling energy sold to third parties.  
<sup>c</sup> Fossil fuels and substitute fuels used by Evonik for internal energy generation.  
<sup>d</sup> Excluding trading and excluding supply of purchased electricity to third parties in Germany.  
<sup>e</sup> Including process heat, e.g., from acrolein production.  
<sup>f</sup> Conversion factor: 2.8 x 10<sup>6</sup> PJ per metric ton steam.

**Energy inputs** ⓘ 302-1, 302-3, 302-4, 302-5

T11

in petajoules <sup>a</sup>	2020	2021	2022
<b>Total fuels</b>	54.59	55.46	50.38
<i>Natural gas</i>	30.42	33.40	33.46
<i>Coal</i>	15.97	13.47	10.25
<i>Substitute fuels</i>	8.11	8.49	6.59
<i>Oil</i>	0.09	0.10	0.08
Power, external input	9.17	10.58	10.93
Power, external output	1.59	0.85	1.01
Steam, external input	12.84	14.52	14.52
Steam, external output	10.10	10.86	10.56
Gross energy input <sup>b</sup>	76.59	80.55	75.83
Net energy input <sup>c</sup>	64.90	68.84	64.26
<b>Change in net energy input versus 2020 in %</b>	<b>0</b>	<b>+6</b>	<b>-1</b>
Production in million metric tons	8.93	9.54	8.81
Specific net energy input in petajoules per million metric tons production	7.27	7.22	7.29
<b>Change in specific net energy input versus 2020 in %</b>	<b>0</b>	<b>-1</b>	<b>+/-0</b>

<sup>a</sup> The energy data are presented on the basis of the reporting boundaries and principles set out in the SBTi standard. The data for 2020 and 2021 have been restated accordingly.

<sup>b</sup> Fuel inputs plus purchased electricity and steam.

<sup>c</sup> Fuel inputs plus purchased electricity and steam less electricity and steam supplied to third parties.

The reduction in the volume of coal used in 2022 was due to the start-up of the new gas and steam turbine power plants in Marl (Germany). Since then, heating oil has played an insignificant role in the energy mix. It is only used for auxiliary firing systems in the coal-fired power plant I in Marl. Moreover, insignificant amounts are required for emergency generators at some sites.

Target for 2030:  
Reduce specific  
freshwater intake<sup>a</sup> by  
**3%**

<sup>a</sup> Relative to production volume.

The decrease in the use of substitute fuels was due to the drop in production and, among other things, to the renewal of the energy infrastructure in Marl. The electricity and steam data were virtually unchanged. The change in absolute and specific net energy input versus 2020 mainly reflects the trend in production.

## Water management<sup>1</sup>

### Strategy and management

We save water wherever possible and endeavor to achieve a further reduction in our emissions. In the reporting period, we set a new target for water: Between 2021 and 2030, we aim to reduce specific freshwater intake relative to production volume by 3 percent. This is to be achieved by a wide range of measures at our production sites. The measures were identified in the EAGER project. At the same time, we are continuing our work on established water management topics and monitoring our sites in water stress areas.

Adequate availability of water for cooling and production processes plays a key role in our production activities. We therefore regularly analyze the short-, medium-, and long-term availability of water at our sites. The focus is on the next ten to twenty years. We pay special attention to water scarcity and water stress, which is defined as the ratio of the amount of water available in a specific area to general demand for water. If this indicator points to mid- or long-term water scarcity, the site is potentially exposed to water stress. In such cases, Evonik takes steps to reduce water requirements and safeguard production. We draw up a catalog of all relevant measures and evaluate them from technical and economic perspectives. Our global water management takes into account quantitative, qualitative, and social

<sup>1</sup> Here we report the actual data for 2022. See "About this report" p. 134.

aspects of water use. We also consider our neighbors' claims. We take the AWARE method<sup>1</sup> recommended by the EU Commission as our guide. This uses the categories extreme—high—medium—moderate.

To take account of projections for climate change and socio-economic developments, we have identified the sites which could be most affected by water stress. In the reporting period, 13 production sites were classified as being exposed to extreme or high water stress using the AWARE system, and a further twelve were classified as having medium or moderate exposure. To avoid high water consumption and water pollution in water stress areas, we take effective precautions and develop site-specific measures. For example, we examine the use of alternative cooling systems or transportation options and options to reduce the use of process water. In this, we ensure close involvement of our ESHQ experts, the process and technology experts responsible for the relevant site, and the site itself. [303-1](#), [303-2](#)

Our water stress analysis is supplemented by a risk analysis covering the potential impact of natural catastrophes such as storms, hail, floods, hurricanes, tornadoes, and heavy rainfall. Moreover, our sites are regularly audited by insurance companies.

**Our progress in 2022**

Evonik strives to steadily reduce specific water intake at all sites. One example is our site in Umbogintwini (South Africa): Here, recovery of steam condensate and rainwater collection should help bring a further improvement in water efficiency. At our catalysts site in Dombivli (India), we opened a new zero liquid discharge (ZLD) plant. ZLD treats and recycles wastewater at the

end of an industrial process. This permits more efficient use of water and greatly reduces liquid waste. This is another way in which we contribute to the circular economy (see "Value chain and products" [p.51](#)). [303-1](#), [303-2](#), [303-3](#), [303-4](#), [303-5](#)

**Water data**

Total water intake was 446 million m<sup>3</sup> in the reporting period, while discharges amounted to 439 million m<sup>3</sup>. The difference of 7 million m<sup>3</sup> between water intake and discharge mainly comprises water used to replace evaporation losses. Around 98 percent (1,810 million m<sup>3</sup>) of our total water intake (including water consumption) was for cooling purposes in energy generation and production. Only around 2 percent (45 million m<sup>3</sup>) was used for production processes. We include water used in closed cooling circuits and evaporation losses when calculating the proportion of total water used for cooling.

Evonik's consumption of freshwater—the total of recycled water, drinking water, groundwater, and surface water—declined slightly from 255.9 million m<sup>3</sup> to 249.8 million m<sup>3</sup> in the reporting period. Freshwater is mainly used for cooling. The amount required therefore depends on capacity utilization in production and the temperature. That is also the main reason why specific freshwater consumption increased by 6 percent in 2022, although production declined.

In 2022, the salt water used for cooling purposes in methionine production on Jurong Island (Singapore) was around the prior-year level. Since 2022, the government has provided us with treated water, so we were able to reduce the intake of freshwater at this site.

**Water intake by source** [303-1](#)

T12

in million m <sup>3</sup>	2021	2022
Drinking water <sup>b</sup>	20.7	20.3
Groundwater	56.6	53.6
Surface water	174.3 <sup>c</sup>	172.7
Recycling of water from third parties and use of rainwater <sup>c</sup>	4.3 <sup>d</sup>	3.1
<b>Total freshwater</b>	<b>255.9</b>	<b>249.8</b>
Salt water (sea water)	206.0	196.6
<b>Total</b>	<b>461.9</b>	<b>446.3</b>
<b>Production</b> in million metric tons	<b>9.5</b>	<b>8.8</b>
<b>Specific water intake</b> intake in m <sup>3</sup> freshwater per metric ton production	<b>26.8<sup>d</sup></b>	<b>28.3</b>
<b>Development of specific freshwater intake relative to the reference base 2021 in %</b>	<b>0</b>	<b>6</b>

<sup>a</sup> Differences between the data and totals are due to rounding.

<sup>b</sup> Water from municipal or other utilities.

<sup>c</sup> New approach to water data, including the shift from through-flow cooling to cooling loops in the sourcing of cooling water from third parties at chemical parks.

<sup>d</sup> Data corrected due to the "fast close" process, see "About this report" [p.134](#).

**Emissions into water**

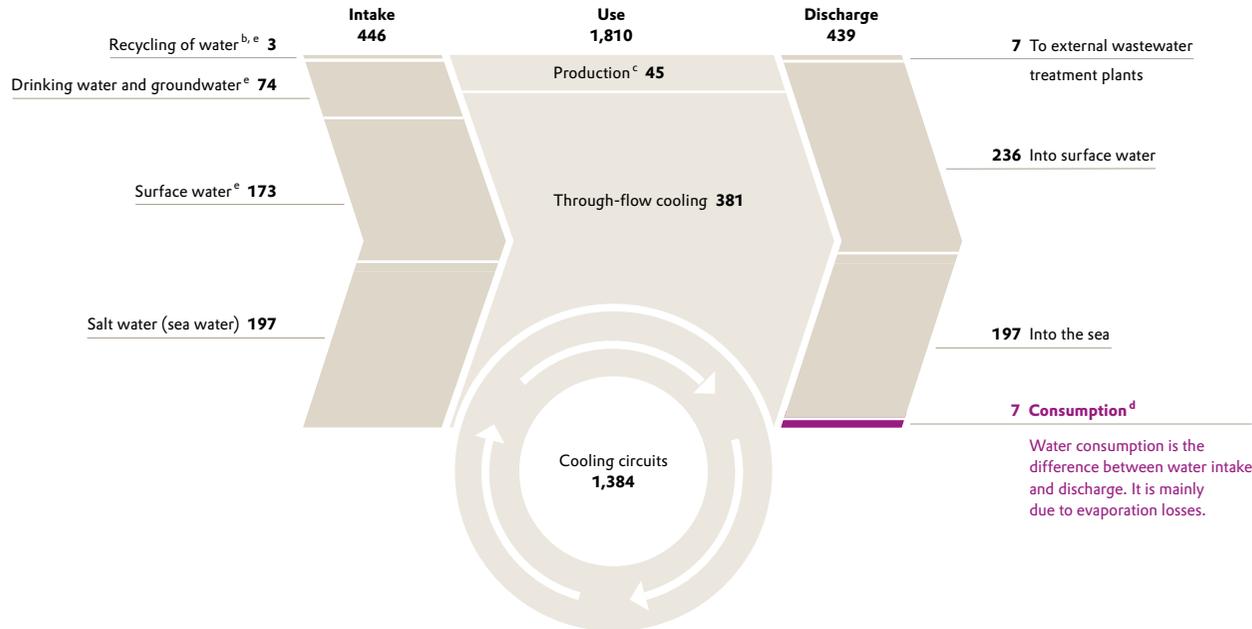
Our sites aim to make a contribution to protecting natural water resources. When planning new production plants, we therefore consider the use of processes that generate little or no wastewater. Where contaminated water from production processes (production effluent) is unavoidable, partial streams are tested, for example, for biodegradability. We have high technology standards and infrastructure for the disposal of wastewater at our

<sup>1</sup> AWARE stands for Available WAter REmaining.

Evonik's water data 2022  303-1, 303-2, 303-3, 303-4, 303-5

C29

(in million m<sup>3</sup> p.a.)<sup>a</sup>



<sup>a</sup> Figures in the chart are rounded. | <sup>b</sup> Recycling of water from third parties, including use of rainwater.  
<sup>c</sup> Water used in chemical processes, including generation of steam and water for sanitary purposes.  
<sup>d</sup> Water consumption in accordance with GRI Standard 303-5 (2018). | <sup>e</sup> Freshwater.

sites. In some cases, production effluent is pretreated in the production plants. Consequently, the effluent load of wastewater discharged into our own or third-party treatment facilities is moderate.

At Marl Chemical Park in Germany, sewage sludge is dewatered in our own treatment plant and subsequently incinerated in our

own facilities with integrated flue gas treatment. We use some of the exhaust gases from the production plants as substitute fuels. The incineration gases are then used to generate 20 bar steam. Wastewater discharged from our sites is carefully monitored by regular sampling and continuous measuring equipment. These analyses support the management of our wastewater treatment facilities. Moreover, many analyses are required by legislation on

self-monitoring. In addition, the authorities frequently perform unannounced checks to monitor discharges.

In 2022, we discharged a total of 439 million m<sup>3</sup> wastewater, including 7 million m<sup>3</sup> which was channeled to third-party facilities (e.g., municipal facilities) for treatment (indirect discharge). 49 million m<sup>3</sup> were discharged directly into water via our own drainage system after treatment in Evonik wastewater treatment facilities. These direct discharges also include amounts accepted from third parties for treatment at the wastewater treatment facilities operated by us at chemical parks. Since 2021, our external reporting only discloses the wastewater loads of direct discharges. In view of this, data from 24 direct discharge sources were included in the reporting period.

Organic substances—expressed as chemical oxygen demand (COD)—account for the highest proportion of our wastewater loads. COD is the concentration of all substances in the wastewater that can be oxidized under certain conditions. The wastewater loads of direct discharges were mainly unchanged from the previous year. The sharp drop in AOX loads is due to isolated production outages.

Wastewater loads<sup>a</sup>  303-2

T13

in metric tons	2021	2022
Chemical oxygen demand (COD)	1,406	1,447
Total nitrogen (N)	144	145
Total phosphorus (P)	43	48
Absorbable organic halogen compounds (AOX)	2.3 <sup>b</sup>	1.3
Heavy metals (As, Cd, Cr, Cu, Hg, Ni, Pb, Zn)	1.4	1.4

<sup>a</sup> Direct discharges only.  
<sup>b</sup> Corrected data.

## Waste management<sup>1</sup>

### Strategy and management

Our efforts to further reduce production waste are aligned with a clear principle. The first priority is to avoid waste through continuous process improvements and by extending integrated production systems, otherwise waste should be recycled or used to generate energy. As a third option, if this is not possible, it should be disposed of safely. In the reporting period, Evonik set a new target for waste: Between 2021 and 2030, the target is to reduce specific production waste relative to production volume by 10 percent. This is to be achieved through a wide range of measures at our production sites. These measures were identified in the EAGER project. In addition, we will be continuing our work on a waste management system. The main focus here is on circular waste streams.

Target for 2030:  
Reduce specific  
production waste<sup>a</sup> by  
**10%**



<sup>a</sup> Relative to production volume.

### Waste management<sup>a</sup> 306-4, 306-5

T14

	2021 <sup>b</sup>	2022	2021 <sup>b</sup>	2022
	internal	internal	external	external
in thousand metric tons				
Incineration with recycling of heat energy	29	16	32	26
Disposal by incineration	63	42	25	29
Recycling (including composting)	41	52	81	72
Landfill	4	2	81	56
Chemical/physical/biological treatment	11	9	21	18
Other reprocessing methods	2	2	36	67
Other disposal methods	3	1	21	23
<b>Total</b>	<b>154</b>	<b>124</b>	<b>297</b>	<b>292</b>

<sup>a</sup> Differences between the data and totals are due to rounding. | <sup>b</sup> Data corrected due to the "fast close" process, see "About this report" p.134.

Continuous optimization of production processes contributes to avoiding and minimizing waste. That includes in-plant reprocessing of substance streams and the use of highly specialized catalysts to minimize side reactions. Where waste is unavoidable, the focus is on mechanical or thermal reprocessing. For this, we have set up collecting stations at our sites. Various types of recyclable waste such as glass, paper, and wood are collected separately and sent to external recycling firms. We regularly monitor them through audits and demonstrate their suitability in conformance with statutory provisions.

We also use the benefits of integrated production sites and systems for systematic waste management. By-products of a production process are used as raw materials in other production plants. For example, at the integrated C<sub>4</sub> production facilities at our site in Marl (Germany), we produce butadiene, butene-1, MTBE (methyl-tert-butylether), isononanol, and plasticizers. Integrated management means that waste products can be used in other plants. At Marl Chemical Park, liquid organic residues are used as a substitute for heating oil in the gas synthesis plant at this site, and waste sulfuric acid is recycled in the sulfuric acid plant.

<sup>1</sup> Actual figures for 2022, see "About this report" p.134.

Waste <sup>a,b</sup>  306-1, 306-2, 306-3, 306-4

T15

	2021 <sup>c</sup>	2022	2021 <sup>c</sup>	2022	2021 <sup>c</sup>	2022
	internal	internal	external	external	internal and external	internal and external
in thousand metric tons						
Hazardous production waste, reprocessed	69	65	64	62	133	127
Hazardous production waste, disposal	68	45	36	45	104	90
Non-hazardous production waste, reprocessed	4	5	45	44	49	48
Non-hazardous production waste, disposal	13	8	43	49	55	57
<b>Total production waste</b>	<b>153</b>	<b>123</b>	<b>188</b>	<b>200</b>	<b>342</b>	<b>323</b>
<b>Production</b> in thousand metric tons					<b>9,540</b>	<b>8,813</b>
<b>Specific production waste</b> in metric tons per metric ton production					<b>0.036</b>	<b>0.037</b>
<b>Development of specific production waste relative to the reference base 2021</b> in %					<b>0</b>	<b>2</b>
Hazardous building and demolition rubble, reprocessed	0	0	1	1	1	1
Hazardous building and demolition rubble, disposal	1	0	38	7	39	7
Non-hazardous building and demolition rubble, reprocessed	0	0	39	59	39	59
Non-hazardous building and demolition rubble, disposal	0	0	31	26	31	26
<b>Subtotal building and demolition rubble</b>	<b>1</b>	<b>0</b>	<b>109</b>	<b>93</b>	<b>109</b>	<b>93</b>
<b>Total</b>	<b>154</b>	<b>123</b>	<b>297</b>	<b>292</b>	<b>451</b>	<b>416</b>

<sup>a</sup> Differences between the data and totals are due to rounding. | <sup>b</sup> Only includes waste streams in the gate-to-gate process.

<sup>c</sup> Data corrected due to the "fast close" process, see "About this report"  p.134.

Alongside reprocessing methods, waste with a high calorific value ("substitute fuel") is used to produce energy. This reduces the use of primary fossil fuels. We use some of the exhaust gases from production plants as substitute fuels. Heat from the substitute fuels and incineration gases is used to generate steam.

In our analysis of waste management/circular economy, we distinguish between waste processed on-site and waste transferred off-site. Waste transferred off-site physically leaves our reporting boundaries as "genuine" waste. By contrast, waste processed on-site is recorded as waste, but its environmental

impact is generally only registered for the by-products of the various treatment steps, for example, as CO<sub>2</sub> from incineration T14  p.93.

Production waste decreased to 323,000 metric tons (–6 percent) as a result of lower utilization of production capacity in 2022. The proportion of hazardous production waste that could be reprocessed rose slightly in the reporting period to 59 percent (2021: 56 percent).  306-1, 306-2

Specific production waste was 3 percent higher than in the previous year. In some cases, the reduction in production and the amount of waste did not develop in parallel. This was due, for example, to the start-up processes at new plants. Building and demolition rubble decreased to 93,000 metric tons in 2022 (–15 percent). This was attributable to a reduction in construction activity at the site in Marl, where most of the preparatory earthworks for the restructuring of the power plants were completed in 2020.

The percentage of waste reprocessed comprises recycled substances, incineration with recycling of heat energy, and other disposal methods. The reprocessing rate increased to 57 percent in 2022 (2021: 49 percent). This was mainly due to increased reprocessing of building rubble in connection with the construction of a new lipid production plant.

As a specialty chemicals company, we are involved in research and development work on mechanical and chemical recycling (see "Value chain and products"  p.53).

## Biodiversity

### Strategy and management

Biodiversity is one of Evonik's 15 material topics. It is also plays a role in SDG 12, which is of relevance for the Evonik Group. We are aware that our business operations involve both opportunities and risks with regard to biodiversity. These include the loss or protection of biodiversity on land and in the oceans, including microbial organisms. It is important to avoid supply chain disruption and production stoppages caused by reduced biodiversity and damaged ecosystems. The starting points for our examination of biodiversity are conventional environmental topics such as emissions into water and the air and responsible water and waste management, which we report on regularly.

The following aspects of biodiversity are addressed in the sustainability analysis of our business: water, eutrophication, acidification, land use, use of renewable raw materials, emissions of critical and persistent chemicals, and microplastics.

Our contributions to maintaining diversity are bundled in our Sustainability Focus Area safeguard ecosystems (see "Strategy and growth" [p.24](#)). Within this Sustainability Focus Area, we examine both water intake for production and water consumption over the entire life cycle of our products, including raw materials and the usage phase. A life cycle assessment of our entire water consumption in the reporting period confirmed that the main leverage for our water consumption is in the upstream



Flowering plants at the Evonik Campus in Essen (Germany).

value chain: More than 70 percent of our water consumption is attributable to our procurement of both fossil-based and bio-based raw materials.

As part of a strategic project in the reporting period, we gained a deeper insight into our stakeholders' biodiversity requirements by conducting interviews, for example, with NGOs and investors. In the future, we intend to look more closely at both the impact of our activities on biodiversity and our dependence on what nature provides. Furthermore, we keep a close eye on the activities of biodiversity initiatives such as the Task Force on Nature-related Financial Disclosure (TNFD).

### Evonik's products and solutions <sup>1</sup>

Declining biodiversity has a negative effect on Evonik's business activities. At the same time, our business activities can have a negative effect on biodiversity. However, Evonik's products and solutions also play a part in maintaining biodiversity and help protect habitats. For example, the use of amino acids in the nutrition of poultry and pigs greatly reduces the land required to produce feed. The use of our amino acids in aquaculture aims to maintain marine biodiversity by replacing the use of fishmeal and fish oil. For salmon farming, Evonik and DSM have jointly developed an innovative process for biotechnological production of omega-3 fatty acids from natural algae. This can avoid the use of fish oil, which is a limited resource. The joint venture Veramaris has a world-scale production facility in Blair (Nebraska, USA). Veramaris therefore helps meet demand from the global salmon farming industry for the omega-3 fatty acids EPA<sup>2</sup> and DHA<sup>3</sup>. Evonik produces special marine coatings such as silicone hybrid resin ([more](#)) and silicon dioxide ([more](#)) to protect ships from fouling by marine organisms and thus reduce the spread of non-native species in our oceans. In the selection of raw materials, we apply internationally recommended certification standards for palm oil and plan to use exclusively deforestation-free palm derivatives (see "Value chain and products" [p.54](#)). In 2022, Evonik once again participated in CDP Forest and was awarded a B rating.

<sup>1</sup> For information on CO<sub>2</sub>eq avoided by using Evonik products, see "Strategy and growth" [p.23](#).

<sup>2</sup> EPA = eicosapentaenoic acid.

<sup>3</sup> DHA = docosahexaenoic acid.

### Our progress in 2022

In the reporting period, we were involved in various working groups on biodiversity within the German chemical industry association (VCI). That included work on the development of tools and methods for the evaluation of biodiversity aspects by VCI. Similarly, we continued our discussions with the European Commission on the EU biodiversity strategy for 2030 with a focus on the proposed EU soil legislation.

For biodiversity analyses, we use a geoinformation system based on the data of the IBAT Alliance<sup>1</sup>. On this basis, we annually examine the potential impact of our worldwide sites on areas of special significance for biodiversity. This focuses on all sites within one kilometer of conservation areas. For 2022, we also report for the first time on sites within one kilometer of key biodiversity areas. These are areas with land, freshwater, and marine ecosystems that play a key role in protecting global biodiversity. Areas are classified as global key biodiversity areas if they meet one or more of eleven criteria, which are subdivided into the following five categories: threatened biodiversity, geographically restricted biodiversity, ecological integrity, biological processes, and biological irreplaceability. The data on key biodiversity areas are also made available by the IBAT alliance and are linked to the data on Evonik sites in our geoinformation system GISSus.

### Evonik production sites adjacent to conservation areas 2022

304-1

T16

Production site	Country	Area in km <sup>2</sup>	IUCN <sup>a</sup> -categories	Ramsar <sup>b</sup> -area
Lafayette	USA	7.004	V	
Marl	Germany	6.544	IV, V	
Morrisburg	Canada	1.132	Ia	
Antwerp	Belgium	1.083	IV	x
Lülsdorf	Germany	1.003	IV, V	
Hanau-Wolfgang	Germany	0.777	IV, V	
Rheinfelden	Germany	0.506	V	
Wesseling	Germany	0.330	IV, V	
Herne	Germany	0.264	IV, V	
Krefeld	Germany	0.245	IV, V	

<sup>a</sup> IUCN = International Union for Conservation of Nature.

<sup>b</sup> Ramsar Convention = convention on wetlands, especially as habitats for waterfowl.

The list of sites adjacent to conservation areas has not changed compared with 2021. However, the area of some sites deviates slightly from the data published in 2021.

T17 shows our biggest production sites adjacent to key biodiversity areas.

### Evonik production sites adjacent to key biodiversity areas 2022

304-1

T17

Production site	Country	Area in km <sup>2</sup>	Criterion
Antwerp	Belgium	1.083	Migratory birds, other
Rheinfelden	Germany	0.506	Other
Delfzijl	Netherlands	0.105	Migratory birds, other
Tonawanda	USA	0.077	Migratory birds
			Species threatened with extinction, critically endangered, and endangered species
Qingdao	China	0.040	Endangered species, migratory birds
Taoyuan City	Taiwan	0.035	Endangered species
Ami-Machi	Japan	0.034	Endangered species
			Species threatened with extinction, critically endangered, endangered, and endemic species
Umbogintwini	South Africa	0.020	Endangered species, migratory birds, other
Lauterbourg	France	0.018	

At our site in Lafayette (Indiana, USA), Evonik Tippecanoe Laboratories has worked with the not-for-profit organization The Nature Conservancy for more than 25 years. Our site in Umbogintwini (South Africa) participates in various projects and programs to protect biodiversity. These include the management of non-endemic vegetation, analysis of wetlands, and collaboration with the Wildlife and Environment Society of South Africa (WESSA). [More](#) .

<sup>1</sup> The IBAT Alliance comprises the following four non-governmental organizations: (1) BirdLife International, (2) Conservation International, (3) International Union for Conservation of Nature (IUCN), (4) United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC).

## Our targets

Below is an overview of the targets set for the environment area of action.

### Target attainment in 2022<sup>1</sup>

-  Reduce absolute scope 1 and scope 2 emissions by 25 percent between 2021 and 2030 (status: -6 percent)
-  Reduce absolute scope 3 emissions<sup>2</sup> by 11 percent<sup>3</sup> between 2021 and 2030 (status: -7 percent)
-  Reduce both absolute and specific energy consumption by 5 percent between 2020 and 2025 (status: -1 percent absolute; +/-0 percent specific)
-  Develop site-specific action plans for sites that are potentially exposed to water stress as part of a global water management system<sup>4</sup>
-  Reduce specific freshwater intake by 3 percent relative to production volume between 2021 and 2030 (status: +6 percent)
-  Reduce the specific volume of production waste by 10 percent relative to production volume between 2021 and 2030 (status: +3 percent)

-  Target not achieved
-  Target partially achieved or target horizon extends beyond 2022
-  Target achieved

### Targets for 2023 and beyond

- Reduce absolute scope 1 and scope 2 emissions by 25 percent between 2021 and 2030
- Reduce absolute scope 3 emissions<sup>2</sup> by 11 percent<sup>3</sup> between 2021 and 2030
- Reduce both absolute and specific energy consumption by 5 percent between 2020 and 2025
- Reduce specific freshwater intake by 3 percent relative to production volume between 2021 and 2030
- Reduce the specific volume of production waste by 10 percent relative to production volume between 2021 and 2030

<sup>1</sup> Following our commitment to SBTi, we set new climate targets in the reporting period. These replace the previous targets.

<sup>2</sup> Scope 3 emissions comprise all upstream categories and the category "Downstream transportation and distribution."

<sup>3</sup> Exact target: 11.07 percent.

<sup>4</sup> This target was refined in the reporting period.

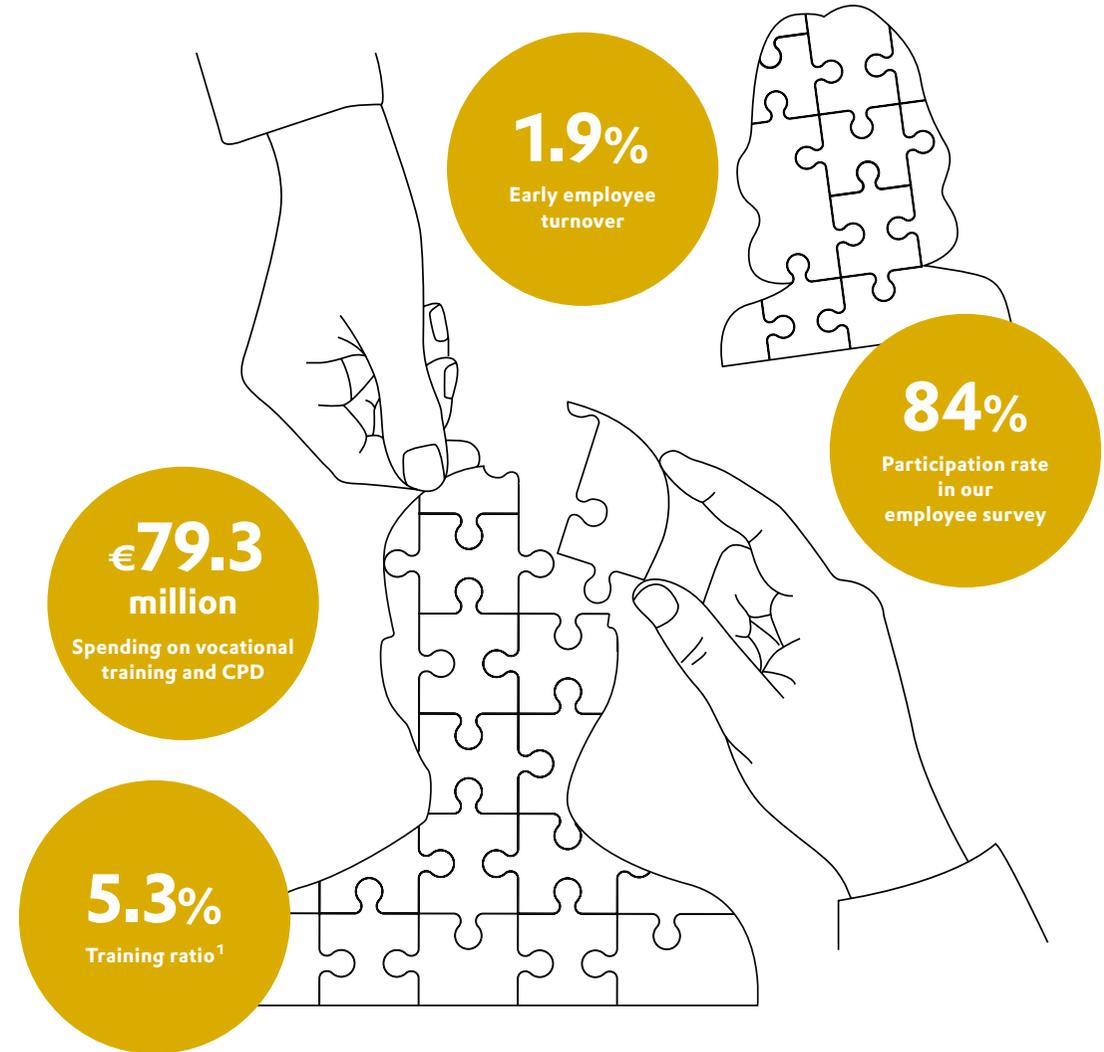
# Employees

*Leading Beyond Chemistry is a far-reaching promise that more than 30,000 employees at Evonik work to fulfill. Their talent, professional qualifications, and passion are the cornerstones of Evonik's success.*

## MATERIAL TOPICS

- Attractiveness as an employer
- Employee satisfaction
- Diversity and equal opportunity

## SDG OF PARTICULAR RELEVANCE FOR EVONIK



<sup>1</sup> Average for the German chemical sector: approx. 5%.

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## Employees

- Employee satisfaction is a new material topic
- Diversity is very important at Evonik
- Multiple accolades as an attractive employer
- Ten years of the Well@Work health initiative
- Greater integration of sustainability into core HR processes (Next Generation Culture)

## Employees

### Strategy and management

The recruitment, development, and long-term retention of talented employees with first-class qualifications are vital for our lasting success. Good human resources work is therefore particularly important for the evolution of Evonik. The central focus is translating our strong appeal as an employer into high employee engagement. Our HR strategy provides the framework for our daily HR work, in close alignment with the requirements of our operating businesses and corporate functions. Increasingly, their requirements involve an in-depth understanding of the economic, ecological, and social aspects of sustainability, including corresponding management knowledge. That affects all levels of the HR process—from recruiting talented, mission-critical personnel through their individual development to actively shaping the transformation by providing motivated leadership and performance- and results-oriented remuneration models.

Our global HR organization comprises the HR Talent Management and HR Business Management functions, both of which have

global management tasks and work closely together. Our HR processes are supported by digital services, learning offerings, and a global knowledge database for executives and employees.

HR Talent Management bundles activities relating to attracting, developing, retaining, and leading employees. HR Business Management coordinates the regional employer function, all performance-related aspects, digital HR applications and system solutions, interaction with representatives of the workforce, and aspects of employment law.

The heads of both HR functions report directly to the chief human resources officer (CHRO). The HR Executive Committee is the highest decision-making body for HR. It takes decisions on the basic focus of the two HR functions and on questions relating to the group-wide human resources strategy. The committee comprises the CHRO, the heads of HR Talent Management and HR Business Management, and representatives of the divisions and regions. The heads of the Sustainability and ESHQ functions attend as permanent guests. The global HR roundtable is the decision-making body at operational level. It brings together the

heads of HR in the divisions and the process owners from the HR organizational units. An HR business council, which is chaired by the CHRO, drives continuous exchange about the portfolio and performance of the global HR units. It includes all HR representatives of the divisions and the heads of the two HR functions. Evonik has a special focus on the development of the Asian markets. Since fall 2022, this has been supported by the new, overarching HR, ESHQ and Sustainability function. This function is based in Singapore and coordinates key strategic issues in the region. It is a member of the HR decision-making bodies.

The development of corporate executives is a separate function, which reports directly to the chairman of the executive board.

## Attractiveness as an employer

### Strategy and management

Responsible action enhances Evonik's attractiveness as an employer. Alongside performance-oriented remuneration and additional benefits, that includes providing a motivational working environment focused on health and occupational safety, individual development opportunities, diversity, and work-life balance. Evonik employees are its most important advocates: They give the company a distinctive face and play a key role in developing an authentic employer brand with people at its heart. External rankings, internal surveys, and early employee turnover are important indicators of our attractiveness as an employer.



### Talent management

We regularly assess and evaluate potential, succession scenarios, and development requirements at HR meetings attended by the executive board. Attractive career paths, job rotation, and high-quality development programs are essential to develop tomorrow's top executives. Topics such as sustainability, entrepreneurial and individual responsibility, and a focus on geopolitical developments play a central role.

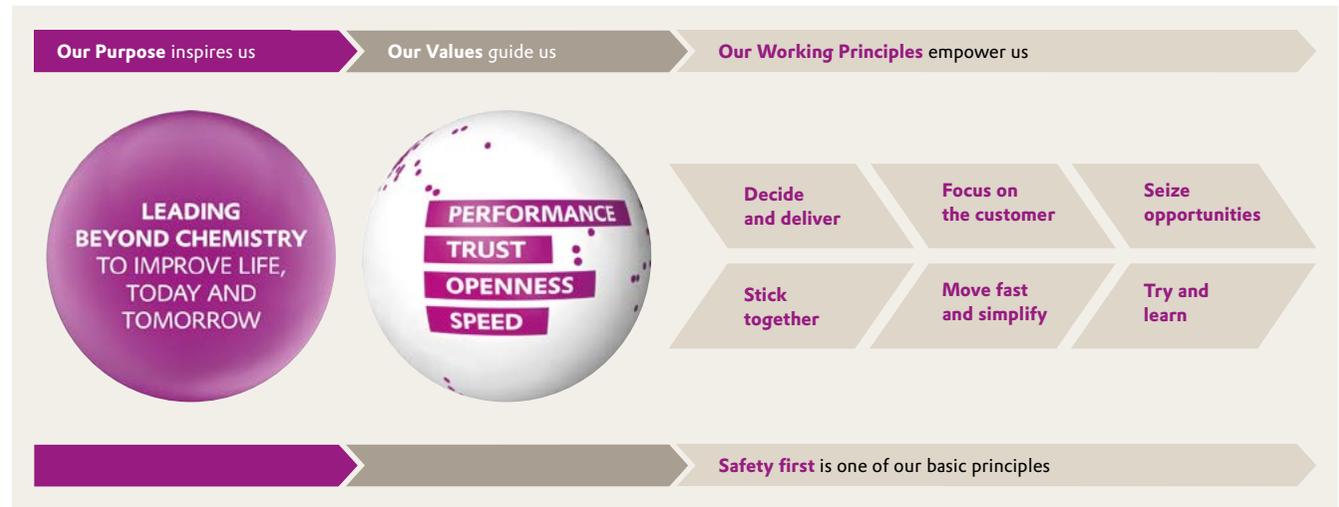
Filling top management positions is not the only focus. The Evonik Explorer program gives employees an opportunity to apply proactively to take part in a group-wide talent program. This program prepares participants for their next development steps on either a specialist or a management career path. The starting point for all participants is a nine-month development program that gives them an individual, practice-oriented foundation for their target position. In 2022, around 300 Evonik explorers took advantage of this personalized development program.

### Onboarding new employees

The welcome and introduction received by new employees are key experiences at the start of a new employment relationship. Personal contact between employees, line managers, and new colleagues plays a key role in this. The introduction of the digital system solution Workday actively supports this process. Dashboards and checklists provide useful guidance for our managers. New employees benefit from target group-specific training videos and initial virtual contact with regional executives and subject specialists. All of this helps to make them feel welcome at Evonik from day one.

### ONE Culture

C30



### Culture initiative

The world of work is undergoing profound changes—from digitalization and new ways of working to the responsible use of natural and social resources. During such periods of upheaval, thriving corporate values can make a valuable contribution by providing guidance and stability. We support this through our ONE Culture initiative, which invites all employees to play an active part in shaping and driving forward our corporate culture. This has been a source of many improvements, including in some areas of our operational HR work.

Our aim for the coming years is to integrate sustainability requirements at all levels of the HR process— from personnel

planning, including analyzing the additional capabilities, skills and management qualities needed, through corresponding upskilling offerings for employees to greater inclusion of sustainability indicators in remuneration systems. The first steps were taken in the second half of 2022 as part of our Next Generation Culture. The first step comprised an inventory of present and future sustainability requirements in different occupations and greatly extended the information, training, and workshops available on this topic. We also paved the way to integrate sustainability into the long-term remuneration of the executive board and other executives in the future (see “Strategy and growth” [p.18](#)).

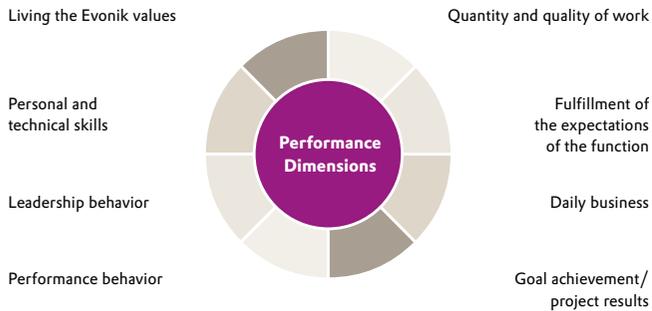
[2-19](#)

**Performance management system**

Our performance management system is based on eight performance dimensions. These include performance and leadership behavior and, in particular, goal achievement and quantity and quality of work. How goals are achieved and the related behavior are always taken into account.

**Performance management**

C31



In the past year, we gave greater weight to diversity, sustainability, and leadership behavior. Our competency model was revised in line with this. It describes the professional and personal abilities that we as a company expect from our employees and executives. We are firmly convinced that sustainable business activities and diversity are the basis for performance excellence.

Around 80 percent of our employees worldwide receive a regular performance appraisal. 72 percent of the employees appraised

are men, and 28 percent are women. 70 percent are non-exempt employees, and 30 percent are exempt employees. [404-3](#)

**Addressing the shortage of skilled workers**

The intensifying shortage of skilled workers requires us to step up our activities to retain and develop our employees and recruit qualified new employees while they are training or studying. In Germany, our employer branding has therefore started a nationwide campaign to fill vacancies by increasing our online presence and addressing specific target groups.

We also benefit from our long-standing alliances with universities and student networks. Moreover, the Evonik Perspectives retention program for interns helps to build and strengthen contact to students. Alongside established recruitment methods, Evonik increasingly offers on-the-job training and is involved in cooperative projects with other companies on the regional labor market.

**Employees by contractual status**

Around 95 percent of our permanent employees worldwide have permanent contracts. We work with staffing agencies in Germany to cover short-term or temporary bottlenecks. All agencies must provide evidence of a valid operating permit. If agency staff have been used for a job for more than six months, we examine whether it is a permanent job for which a permanent employee can be hired. Alongside appropriate remuneration, we make sure that agency staff are covered by the high social and safety standards applicable for our own staff. Since the chemical industry requires a large number of highly qualified employees, fewer

agency staff are used than in other sectors of manufacturing industry. Evonik had around 583 agency staff in Germany as of December 31, 2022 (2021: 506). That was over 3 percent of our workforce in Germany. The difference is due to higher staffing requirements on the reporting date.

**Employees by contractual status, region, and gender 2022**

2-7

T18

	Employees	of which employees on permanent contracts	of which employees on limited-term contracts	of which apprentices/trainees
Evonik	34,029	31,368	1,605	1,056
EMEA <sup>a</sup>	23,040	21,436	553	1,051
Asia-Pacific	5,277	4,245	1,030	2
Central & South America	725	714	10	1
North America	4,987	4,973	12	2
Women in %	26	26	35	24

<sup>a</sup> EMEA = Europe, Middle East & Africa

**Our progress in 2022**

The global labor market remains dynamic: A high willingness to change employers, a shortage of skilled workers, and the increasing flexibilization of working conditions are changing the demands made on Employer Branding. The focus is shifting to recruitment marketing, positive personal experiences of the

world of work, and employee satisfaction. We have therefore redesigned the global career page on our website and integrated job opportunities worldwide. An improved search function enhances the ability to find content and information on vacancies. Together with the operating units and sites, we have introduced separate themed content for occupations where competition is high. Here, we specifically target engineers, IT experts, chemical operators, power plant operators, and firefighters. A campaign in printed and digital media aligned to the differing regional priorities of our German sites has raised our visibility as an employer and made it easier to fill vacancies quickly. At the same time, we are stepping up our recruiting activities through our established partnerships with student networks. These include, in particular, UNITECH—a network of leading international universities, global companies, and engineering students—and FEMTEC, which focuses on fostering young female employees and talents in STEM professions (science, technology, engineering, mathematics, and IT). To support our growth strategy in North America, especially in the Health Care business line, we work closely with eight universities.

Worldwide, committed employees act as brand advocates for Evonik to give potential employees a feel for the company. That includes a presence on key career sites and in social media, as well as live events. In November 2022, an Evonik employee was named by LinkedIn News DACH as a “top voice” in the area of sustainability for the first time. LinkedIn awards this accolade to German-speaking members who share their expertise and whose contributions initiate valuable discussions.

Inspiring people and empowering them to achieve their potential is one of the core aspects of the True Leadership image campaign. Employer Branding adapted this campaign to target

job applicants and won the Employer Branding Award for the symbiosis of this campaign with its forerunner #WhyWeDolt.



Evonik’s Instagram “The People Behind Our Products,” which focuses on our employees in the USA, won second place at the Rally Awards in the category “Best Careers Social Media Channel.” In the Trendence Awards, our employer brand cockpit and attractiveness index, which measure the perception of the Evonik employer brand, won gold in the “HR Intelligence” category. In 2022, Leading Employees again rated around 100,000 companies in Germany. For the fifth time in succession, we were awarded the “Leading Employer” accolade in Germany.



This cross-sector ranking positions Evonik among the ten most attractive companies in Germany. In China, Evonik was once again listed as one of the ten most popular employers by the Top Employers Institute.

## Employee satisfaction

### Strategy and management

The satisfaction of our employees is the basis for Evonik’s long-term success. Alongside competitive remuneration and attractive development opportunities, our employees benefit from a wide range of offerings to improve their work-life balance as well as preventive health care. The aim is to maintain productivity at a high level and minimize employee turnover. We use a regular group-wide employee survey and annual interim surveys to measure employee satisfaction. From these, we derive specific continuous improvement activities.

In our opinion, the focus on employee satisfaction will become even more important as a result of the dynamic nature of the labor markets. Satisfied employees value their employer, contribute to a positive working atmosphere, and are less likely to change employer. For prospective employees, customers, and colleagues, motivated and committed employees are our most important advocates.

### Employee survey

In our sixth employee survey in November 2021, around 33,000 employees around the world were asked to assess their working conditions. 84 percent of all employees took part. The employee survey provides an insight into how organizational changes and the implementation of our corporate values—performance, openness, trust, and speed—are perceived throughout the Evonik Group. The commitment index, which is calculated from six of the 56 survey items, was 73 percent (for comparison, in 2018 it was 68 percent). Key questions focused on general satisfaction, whether employees would recommend the company as an employer, and behavioral factors such as pride,

confidence, motivation, and commitment. The results are available at team level and are made available to managers via a dashboard. In the communication and follow-up process, we identified more than 2,500 suggestions for specific improvements.

To supplement the extensive employee survey of November 2021, we conducted 30 ad-hoc surveys during the reporting period. Topics included, for example, experience with agile working methods in the Finance function and how candidates experienced the new Evonik Explorer talent program.

### Employee retention

Early turnover and total employee turnover were slightly lower than in previous years. Early turnover decreased from 2.2 percent to 1.9 percent, and the total turnover rate dropped from 7.0 percent to 6.7 percent. We aim to reduce both early turnover and the total turnover rate.

### Length of service 401-1

T19

	2020	2021	2022
Early turnover in %	1.3	2.2	1.9
Total turnover in %	4.4	7.0	6.7
Average length of service in years	14.7	14.5	14.1

### Employee turnover 2022 2-7, 401-1

T20

	Turnover in %	No. of employees who left the company
<b>By region</b>		
Europe, Middle East & Africa	4.9	1,105
Asia-Pacific	8.5	427
Central & South America	12.0	84
North America	12.2	588
<b>By gender</b>		
Female	6.4	545
Male	6.8	1,657
<b>By age</b>		
Under 30 years	7.9	486
30 to 50 years	5.0	811
Over 50 years	8.6	907
<b>Evonik</b>	<b>6.7</b>	<b>2,204</b>
thereof termination by the employee	3.3	1,080

### Attractive remuneration

Attractive, market- and performance-oriented remuneration is anchored in our human resources tools worldwide. The principles we use to structure remuneration, including fringe benefits, are set out in group-wide policies. Remuneration is set on the basis of objective criteria such as responsibility, competencies, and success. In addition, minimum standards defined by law and in collective agreements, such as the local minimum wage, are applied. Personal attributes such as gender, age, etc., play no part in the process, and our policies explicitly forbid discrimination.

 2-20

### Gender pay gap 405-2

Since the introduction of our new HR system at the end of 2021, we have been able to report global remuneration data using a uniform standard. For the ten countries where we have the most employees, we analyzed the gender pay gap—defined as the difference between the average base salary of female employees relative to their male colleagues. This showed that a weighted average pay gap of just under 1 percent. In other words, on average, women earn more than men. These ten countries represent about 90 percent of our workforce. There are plans to extend gender reporting via a cockpit so that specific analyses can also be made available to local and regional management teams at smaller entities.

### Ratio 2-21

The ratio of the total remuneration of the highest paid person in the company to the average total remuneration of the workforce in Germany was around 30 to 1. The ratio was 25 percent lower than in the previous year. This decline was due to lower variable compensation in 2022. This had a strong impact on the remuneration of the chairman of the executive board as it makes up a higher proportion of his total remuneration. [More](#) . If the ratio is determined using the median remuneration of all employees in Germany, the ratio is around 32 to 1.

The average total remuneration of the workforce was calculated on the basis of full-time equivalents (FTE). The average remuneration of the workforce is derived from the remuneration components paid in the fiscal year, excluding any special payments (for example, anniversary bonuses and other bonus payments). Variable remuneration components are included on the basis of the provisions established for fiscal 2022. The relevant workforce comprises permanent employees at all

consolidated companies in Germany, excluding the members of the executive board, apprentices, and interns.

Evonik complies with its obligation to provide information on equal pay for men and women in comparable functions under the German Salary Transparency Act. Four inquiries were received in 2022. Three were rejected on data protection grounds after examining the inquirer's right to information. The fourth inquiry was withdrawn by the employee because the inquiry form was not completed in full.

In 2022, we paid out €2,745 million in wages and salaries.

 202-1, 401-2

#### Personnel expense

T21

in € million	2020	2021	2022
Wages and salaries	2,460	2,668	2,745
Social security contributions	388	409	451
Pension expenses	233	255	227
Other personnel expense	87	76	64
	<b>3,168</b>	<b>3,408</b>	<b>3,487</b>

Collective agreements on remuneration cover 100 percent of our employees in Germany and around 70 percent of our employees worldwide. There are performance- or profit-oriented incentive systems at around 96 percent of our sites and companies. These systems cover around 99 percent of our employees.  2-30

Evonik offers voluntary social benefits in all regions where it has a presence. These are available to more than 99 percent of our employees. Close to 100 percent of our employees have statutory

or company pension insurance and health insurance. As a rule, part-time employees benefit from our performance- and profit-oriented incentive systems and our voluntary social benefits, provided that they meet the minimum working hours prescribed in some regions. In addition, in 2022, we once again offered employees in Germany, the USA, Belgium, and Singapore the opportunity to take part in the "Share" employee share program. The participation rate remained high at around 42 percent (2021: 41 percent).

Evonik offers pension plans in many countries where it is customary to do so. In the past, defined benefit pensions financed solely by the employer were most common. Newer, defined contribution plans are generally based on mandatory or voluntary contributions by employees. Since the structure of pension plans differs by country, there are also differences in the level of contributions made by employees and/or the employer. Examples are the plans available to newly hired employees in Germany and the USA. In Germany, employees can choose to make a personal contribution of 0, 3, 4, or 6 percent of their salary. The contribution made by the employer rises with the personal contribution. In the USA, the pension plan is based on standard employee contributions of 6 percent of their salary, which can be increased or decreased individually. The employee's total contribution is topped up by graduated employer contributions.  201-3

#### Work-life balance

A family-friendly HR policy that is geared to different phases in people's lives is important to Evonik. More than 95 percent of our employees around the world have access to related initiatives. At the heart of this approach are flexible worktime models, support for people caring for close relatives, and assistance with childcare. The PAIRfect initiative offers a job-sharing platform to help our

employees structure their worktime more flexibly by bringing them together with colleagues who want to share a job.

Evonik is also perceived by the general public as a family-friendly employer. Since 2009, we have been audited regularly by the Hertie Foundation for the berufundfamilie certificate. In the reporting period, this audit once again rated our work-life balance offerings as above-average. In 2022, the German women's magazine BRIGITTE once again singled out Evonik as one of the best employers for women.

#### Well@Work 403-6

Alongside work-life balance, the focal areas of our in-house Well@Work initiative are exercise, nutrition, and mental fitness. A wide range of offerings at our sites, supplemented by group-wide digital programs, foster the physical and mental health of our employees. In 2022, this initiative celebrated its tenth anniversary with cross-site anniversary offerings. The formats were very popular and attracted around 1,000 registrations.

#### #SmartWork

#SmartWork is our approach to hybrid working, comprising a balanced mixture of presence in the workplace and mobile working. This project started in April 2022 and was helped by the fact that there were already related policies in various regions. They define when and to what extent a job is suitable for flexible working, along with the technical equipment required. In Germany, agreements had already been signed by employer and employee representatives. In agreement with their manager, employees in Germany can work remotely for up to 50 percent of their worktime. More than 11,000 employees worldwide have now registered for #SmartWork T22  p.106.

**Employee participation in #SmartWork**

T22

Region	Registrations
Europe, Middle East & Africa	9,034
Asia-Pacific	478
Central & South America	388
North America	1,578
<b>Total</b>	<b>11,478</b>

As of: January 17, 2023.

We also expect this project to bring cost savings by reducing the office space required and business travel. Both aspects contribute to a further improvement in Evonik's ecological footprint. In fall 2022, we lowered the threshold for participation in #SmartWork in Germany in light of the energy crisis and rising fuel costs.

**Worktime models**

The regular, contractually defined working hours for more than 74 percent of our employees are based on collective agreements.

We limit employees' working hours to 48 hours a week unless shorter working hours are applicable. Nearly 79 percent of our employees benefit from annual vacation rules that exceed the statutory provisions in their country. Since there is no statutory ruling in the USA, the situation there is based on regional custom.

In Germany, all 19,870 employees, including our 14,657 male employees, have a statutory right to parental leave. 763 employees used this right in 2022. Male employees accounted for around 50 percent. In 2022, they took an average of 1.8 months parental leave, while female employees took an average of 6.6 months. In the reporting period, 562 employees returned to work after parental leave. Here, men accounted for just under 65 percent.

Apart from a few exceptions, all employees who returned to work after parental leave in 2021 were still working for us a year later. As of December 31, 2021, there were 249 employees on parental leave. Of these, 172 (including 23 men) returned to work in 2022, amounting to around 69 percent. Of the employees who did not return to work in 2022, 69 were still on parental leave at

year-end 2022. The proportion remaining in the company is therefore nearly 97 percent.  2-7, 401-2, 401-3

Some employees ask about the possibility of taking paid or unpaid leave for an extended period, for example, to enhance the compatibility of private and professional phases in their lives. However, interest is low. In percentage terms, it is in the low single-digit range based on our total headcount.

About 93 percent of our 34,029 employees have full-time jobs and 7 percent work part-time. 9,009 employees are female. Around 80 percent of them work full-time, compared with 97 percent of male employees. Around 11 percent of employees in the Europe, Middle East & Africa region take up the option of working part-time to improve their work-life balance. By contrast, this option is hardly used in other regions because it has no social relevance there.  2-7, 407-1, 408-1, 409-1

**Parental leave in Germany**

T23

	Total	Women	Men	Women in %	Men in %
Employees entitled to parental leave	19,870	5,213	14,657	26.2	73.8
Employees on parental leave in 2022	763	384	379	50.3	49.7
Average duration of parental leave in months in 2022	4.2	6.6	1.8		
Return from parental leave in 2022	562	198	364	35.2	64.8

**Ability to take extended periods of leave<sup>a</sup>**

T24

	Employees in %
Europe, Middle East & Africa	94
Asia-Pacific	84
Central & South America	100
North America	93

<sup>a</sup> Option to take paid or unpaid leave for more than three months.

### Community Management@Evonik

The trend for employees to share information in internal communities and forums is continuing, with over 4 million views a year testifying to the interest in digital collaboration via social media. The necessary netiquette is supported by advisory and learning offerings provided by our community management. In 2022, the German business newspaper Handelsblatt presented us with the Mindshift Award for our highly innovative internal communication.

### Generation pact and long-term accounts

In response to demographic change, Evonik introduced a generation pact in Germany in 2014. This enables people to retire early and provides a basis for offering employment to qualified apprentices at the end of their training. Around 1,300 employees born between 1959 and 1964 have taken advantage of this since its introduction.

Since the collective agreement of 2019, there have been additional opportunities to make credits to the long-term account and occupational pension plan. The long-term account offers the scope to retire at an earlier age. Around 50 percent of employees in Germany have made use of this scheme since it was introduced.

### Trustful collaboration

Trustful collaboration between representatives of the management and the workforce is an important success factor for Evonik. It takes account of operating conditions and the laws applicable in the various countries. To mark the 100th anniversary

of the introduction of legislation on works councils in Germany, in 2020, Evonik asked the corporate archive to publish a book on codetermination. In this way, Evonik highlighted the value of codetermination for economic prosperity and social cohesion. The accompanying exhibition was postponed for two years due to the coronavirus pandemic. In 2022, it was presented to delegates at the 25th-anniversary session of the Evonik Europa Forum in Brussels. It was also opened to the public at the Ruhr region history museum in Bochum (Germany) during a symposium. There are plans to show this exhibition at further locations in 2023.

Demographic development at our plants also affects codetermination and requires strategic planning of successors. The GBR2026 talent program initiated by the General Works Council to prepare works council members for future leadership roles within the codetermination organization was successfully completed in 2022.

In 2022, some 45 works council members and youth and apprentice representatives attended a conference in Essen (Germany) on sustainable works council work and shaping the transition. They examined the various aspects of sustainability in workshops. Examples were the impact of the climate and gas crises and the role of the works council in the transformation of Evonik.

In Germany, the fundamental rights of our employees and their representatives to be consulted are anchored in statutory

regulations such as the Codetermination Act and legislation on executive staff councils. There are elected bodies representing our employees at all Evonik sites in Germany. Works councils represent exempt and non-exempt employees, while executive staff councils represent our executives. They are consulted in good time on all major changes. That includes processes relating to corporate reorganization and restructuring, as well as agreements on, for example, the introduction of short-time working or similar measures. These take place several weeks or months in advance, depending on the significance of the upcoming changes. During this period, written agreements may be made on the upcoming measures and their impact on our workforce.

 2-9, 402-1

There are comparable rules on the type and scope of consultation and negotiation in many other regions where Evonik has employees. The information and consultation rights of employees on European cross-border issues are represented by the Evonik Europa Forum, which is composed of employer and employee representatives. At company level in Germany, employees' interests are represented by employee representatives on supervisory boards.

Evonik does not restrict employees' rights to freedom of association or the right to collective bargaining. These rights are also respected in countries where freedom of association is not protected by the state. Based on our sites worldwide, there are employee representatives for more than 94 percent of our employees.  2-30

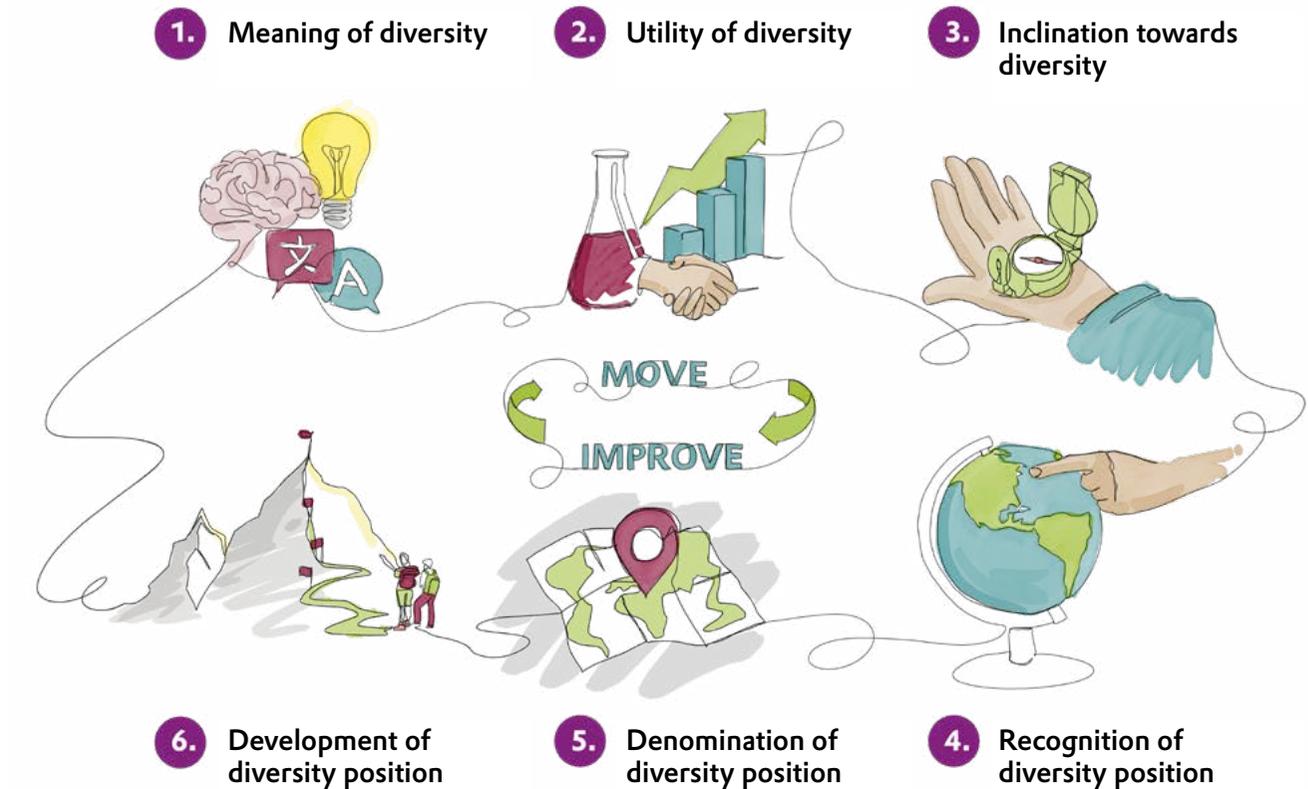
## Diversity and equal opportunity

### Strategy and management

As an international company with a presence in wide-ranging markets, we see diversity as an opportunity. Diversity is not simply a social or political obligation. We see it as a key to business success. Employees with different backgrounds and personalities enrich our teams and our company. We do not tolerate discrimination. Diversity enhances Evonik’s creativity, innovative capability, and proximity to customers. It also has a positive influence on the recruitment of new employees and on staff retention. We actively raise awareness of this issue through our corporate media and regular dialogue formats. In 2022, we asked employees worldwide to nominate their “diversity hero.” In this way, attention was drawn to around 60 people whose commitment shapes diversity within and beyond Evonik.

Our diversity strategy is derived from our corporate strategy. Diversity is a firm element in our corporate values, working principles, and, since 2020, the Evonik competency model. The parameters we use to manage diversity often exceed the legal requirements. The executive board receives quarterly information on the development of important diversity indicators. We inform all employees about the present situation in an annual diversity report.

The role of the diversity council is to embed diversity in our organization and to drive it forward through cross-business criteria. It comprises the members of the executive board, the heads of the divisions, and representatives of the regions and corporate functions. In keeping with our corporate value of openness, the diversity council’s meeting was streamed live for all employees for the first time in the reporting period. The meeting focused on unconscious bias, which is one of the biggest barriers to greater



diversity. Learning sessions were offered in the regions ahead of the meeting to raise awareness of this important topic. The open diversity council meeting was accompanied by a wide range of internal measures such as asking employees to describe a personal diversity moment. Global implementation of the measures adopted by the diversity council is supported by three diversity panels for processes, regions, and communication. In the spirit of

diversity, integrating inclusion issues is important. In 2022, we held our first disability BarCamp, where around 80 participants discussed aspects of disability and inclusion at Evonik.

All measures to foster diversity take a holistic approach: We address the issue from strategic, cultural, and process perspectives. Our executives are required to actively manage diversity with the

aid of specific indicators relating to experience, age, training, nationality, and gender. We also take into account different mentalities and perspectives arising, for example, from religious conviction and sexual orientation.

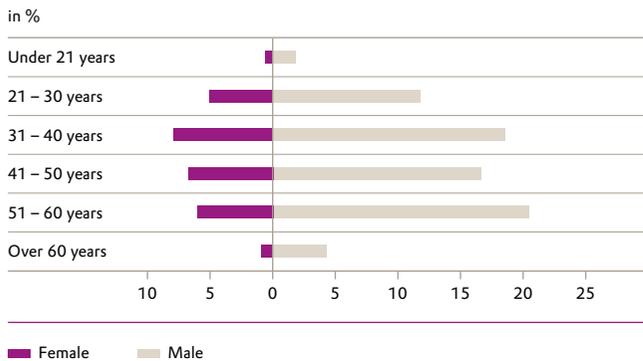
We have set specific targets for dimensions where we want to improve. These are currently gender diversity (T25) and intercultural mix (T27 p.110).

**Dimension 1. Age/generations**

We foster cross-generational collaboration in our teams and give special priority to mental and physical health p.119. Other offerings include LILY (Learning and Individualized Library), an online platform that facilitates lifelong learning. Our reverse mentoring offers different generations an opportunity to learn from one another and actively advance diversity at Evonik.

**Age structure in the Evonik Group 2022**

C32

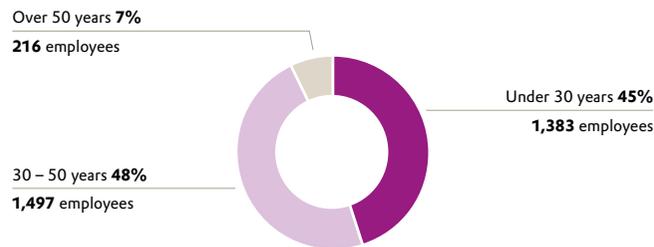


In 2022, the average age of Evonik employees was 43 years. 45 percent of new hires (1,383 employees) were under 30, 48 percent were in the 30- to 50-year age group (1,497 employees), and 7 percent (216 employees) were over 50. Our youngest employees in the reporting period were apprentices aged 15.

**External hires by age 2022**

401-1

C33



**Dimension 2. Competencies and experience**

In line with our corporate purpose, we foster cross-functional collaboration. We network competencies and perspectives. Diversity and opportunities to use various dialogue formats are presented to new employees at virtual onboarding events or as part of the Evonik Starting Kit. The offering comprises learning journeys, reverse mentoring, and diversity BarCamps.

**Dimension 3. Gender**

We aim to increase the proportion of women in our company worldwide and at all levels. The following table provides an overview of our targets:

**Diversity targets: gender**

405-1

T25

in %	Diversity targets 2023	Status 2022
Executives <sup>a</sup>	23	20.3
Senior management <sup>b</sup>	23	17.1
Other management levels <sup>c</sup>	30	29.9

<sup>a</sup> Executives = executive functions, i.e., top management functions in the Evonik Group.  
<sup>b</sup> Senior management = senior management functions, i.e., key functions in the segments, regions, service units, and corporate divisions.  
<sup>c</sup> Other management levels = further management functions.

We take equality of opportunity very seriously in the recruitment of new employees. As a guide, we use the proportion of women studying the disciplines that are relevant for us. Our objective is for women to make up around 40 percent of new management employees.

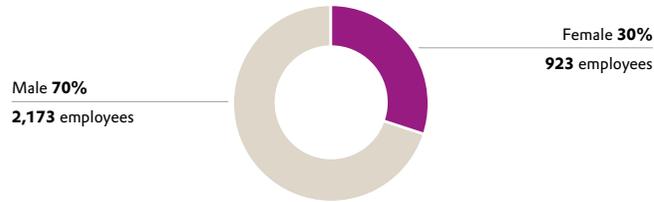
An extensive range of measures supports the attainment of these gender targets. Examples are childcare offerings and vacation programs for kids. We also offer our employees networks such as GroW, an internal network for female employees, and job-sharing options.

Evonik supports social impetus for equality and takes part in the “Chefsache” network in Germany, which aims to achieve a gender balance between men and women in leadership positions.

Since 2021, diversity criteria have been incorporated into the performance appraisal of our employees. That gives us additional leverage to encourage diversity.

External hires by gender 2022  401-1

C34



At present, women make up around 26 percent of our workforce (9,009 employees), and men about 74 percent (25,020 employees). In 2022, 30 percent of external hires were female (923 employees), and 70 percent (2,173 employees) were male. We are seeing an increase in the proportion of women, especially among younger age groups. In the under-40s age group, the proportion of female employees in management is now just over 38 percent. That is an improvement of around 11 percentage points compared with 2011.

Percentage of women in management

T26

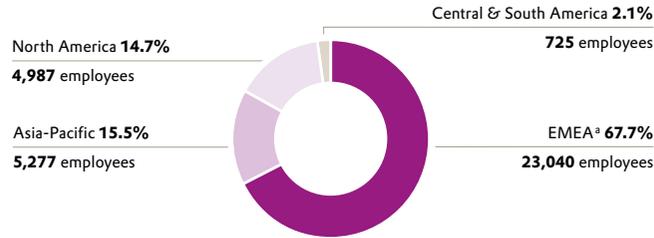
in %	2011 <sup>a</sup>	2021 <sup>b</sup>	2022
Executives	8.2	17.7	20.3
Senior management	8.1	17.6	17.1
Other management levels	17.8	28.7	29.9
<b>Total management</b>	<b>16.6</b>	<b>27.9</b>	<b>29.1</b>

<sup>a</sup> Including the methacrylates business.

<sup>b</sup> As of December 2021, allocation to management functions reflects the target group of the position, rather than personal grade as in the past.

Employees by region 2022

C35



<sup>a</sup> EMEA = Europe, Middle East & Africa

Overall, the proportion of female employees in management functions increased from 17 percent in 2011 to 29 percent in 2022.

Dimension 4. Intercultural mix

#TogetherAsOneEvonik stands for Evonik's commitment to fairness and diversity and the rejection of hatred and discrimination. We offer our employees and managers a wide range of training modules on diversity and inclusive leadership.

Diversity targets: intercultural mix<sup>a</sup>

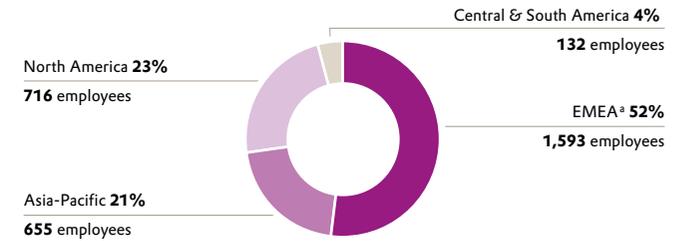
T27

in %	Diversity targets 2023	Status 2022
Executives	20	15.8
Senior management	35	25.5

<sup>a</sup> Employees whose nationality is not German.

External hires by region 2022  401-1

C36



<sup>a</sup> EMEA = Europe, Middle East & Africa

As a result of numerous diversity initiatives, several employee resource groups (ERGs) have been established in the USA and Canada. Examples are the BUILD network for Afro-American employees and the ASPIRE ERG for employees with an Asian background. In Canada and the USA, Evonik introduced two new company holidays following the declaration of these dates as statutory holidays in these countries. Our Canadian employees observed the National Day for Truth and Reconciliation, which honors the victims and survivors of the forced assimilation of indigenous communities. In the USA, Juneteenth is a holiday to commemorate the emancipation of enslaved African Americans. The US women's network groW Americas has an intranet presence to raise awareness of violence against women in Iran and supports female colleagues in Iran and their families in their fight for freedom and equality.

Evonik currently employs people of 108 nationalities at 210 sites in 54 countries. The proportion of managerial employees who do not hold German citizenship is around 46 percent. Group-wide, the proportion in senior management positions is around 26 percent. Chart C37 covers all management levels, i.e., executives, senior management, and other management levels. The data cover our ten largest locations in each region.

External management hires by region 2022 202-2 **C37**



Local Global

Local: Manager's nationality corresponds to the location of the operation.  
Global: Manager's nationality differs from the location of the operation.

<sup>a</sup> EMEA = Europe, Middle East & Africa

**Discrimination**

Our code of conduct and global social policy forbid discrimination on the basis of ethnic origin, skin color, religion or beliefs, age, gender, sexual identity, physical constitution, appearance, or other attributes that are protected by law. Employees who feel

they have been discriminated against have a right to lodge a complaint via our anonymous whistleblower system, which can be accessed both internally and externally.

Information on complaints procedures is available to all employees via internal media and personal discussions in all regions. To prevent discrimination, we have training and activities to raise awareness of our code of conduct p.37.

No cases of discrimination were reported via our whistleblower hotline in 2022. Four cases of discrimination were reported to us in the USA. Evonik investigated all of them and took action to eliminate them. 406-1

**Integrating people with disabilities**

The employment and inclusion of people with disabilities is another way in which we embrace diversity. We focus on providing a working environment where every individual can use their personal strengths optimally for the development of themselves and the company. Evonik was the first company in the sector to sign a policy on occupational inclusion in the chemical industry. Based on this, we want to achieve a better understanding of the needs of people with disabilities and continue to address the future challenges of inclusion in our company.

At disability BarCamps, which were held for the first time in 2022, around 80 participants discussed aspects of disability and inclusion at Evonik. In the reporting period, employees with disabilities accounted for 8.2 percent of Evonik's workforce in Germany.



Apprentice at Evonik's site in Marl (Germany).

**Vocational training and continuing professional development**

Well-trained employees are a key success factor in competition. Our learning strategy and personnel development programs focus on future business needs. Our activities in this area cover both vocational training of young people at the start of their working lives and continuing professional development of our employees. We have a global learning strategy, which we developed together with our employees. Considerable progress with this was made in 2021. The central elements of our learning strategy are:

- Uniform global solutions for training and personnel development, with digital self-directed learning content

- Simplifying the offering of digital learning platforms
- Increasing the acceptance of self-directed digital learning and lifelong learning

Our employees have access to a wide range of learning journeys and digital content for self-directed learning. A global development portal guides users through the wide range of continuing development options. Our FutureZone learning platform administers the participation of employees in mandatory training and e-learning sessions and notifies them of the need to complete them. We measure our success in implementing our learning strategy by the number of active participants, their average learning time, and the total number of people registered to use LILY. Both platforms are available to all employees worldwide, provided they have access to the intranet. 🌐 404-2

Since we have more than 1,000 apprentices as well as a strategy to secure skilled employees, we consider that we are well-prepared for the challenges of demographic change, including production and related areas. To retain young people in the company, all apprentices who are able and willing to take up employment are offered jobs. In addition, we are training around 460 apprentices in cooperation with other companies.

### Our progress in 2022

In 2022, Evonik trained more than 1,500 young people. This figure includes 20 training places funded by RAG-Stiftung and Evonik Industries AG as an additional entry point to vocational training for young people who were exposed to additional training for young people who were exposed to additional uncertainty as a result of the coronavirus pandemic. Our offering covered 22 recognized vocational training courses and combined vocational training and study programs at 16 sites.



Linked by a common cause: more training places thanks to IGBCE, RAG-Stiftung and Evonik.

Apprentices accounted for 5.3 percent of our workforce in Germany, which is still well above the national average of around 5 percent in both the chemical industry and the industrial sector. Overall, we invested around €61 million in vocational training in 2022. Our high commitment is also reflected in good examination results, although the pass rate dropped to 97 percent as a result of the coronavirus pandemic.

The “Start in den Beruf” pre-apprenticeship program has proven very effective preparation for youngsters who are not yet ready for a vocational training course. In the 2021/2022 project year, we offered an additional 30 places in this program, bringing the total to 80. This complementary offering gives young people an insight into the dual training system and the occupations available to help them make a career choice. In Marl (Germany), this pre-apprenticeship program for disadvantaged youngsters celebrated its twentieth anniversary.

Through our involvement with BBNE, a sustainable development education forum, we successfully trialed various project weeks to introduce sustainability into dual training courses in 2022. At interactive workshops, instructors and apprentices reflected on established mindsets and routines and developed competencies that can shape sustainability in company workplaces and learning spaces as well as in private life.

In 2022, Evonik received further awards for the quality of its vocational training. In a study of Germany’s best vocational training companies, Evonik was awarded first place in the specialty chemicals category, positioning it among the top 1 percent of vocational training companies in Germany—across all sectors, sizes of company, and organizational forms. In addition, we were again given a five-star rating by the business magazine Capital for our performance in dual vocational training and combined vocational training and university courses. The new career content for apprentices on Evonik’s website was ranked favorably as part of the Employer Branding Award 2021/2022.



In the reporting period, Evonik invested around €538 per employee in training and continuing professional development. That was a total of €18.32 million. The increase in external training expenses compared with 2021 can be explained by the reduction in coronavirus infections and the (partial) discontinuation of the pandemic-related restrictions. This enabled an increase in face-to-face training.

Our global development programs for executives, the Evonik Leadership Journey and Evonik Leadership Journey Advanced, received the prestigious Brandon Hall Silver Award in the category Best Use of Blended Learning.

In summer 2022, we launched the new nine-month Evonik Explorer development program simultaneously in China, Singapore, Brazil, the USA, and Germany. This program also uses a blend of digital self-directed learning phases, remote group-work, online seminars, and face-to-face sessions.

The aim of the Evonik learning sessions is to try out new methods of collaboration and encourage networking with colleagues from other disciplines. The corresponding community now has around 12,000 members worldwide. The program content, which is developed by the community itself, includes a broad spectrum of topics and speakers.

In the reporting period, employees with electronic access spent an average of 3.5 hours on the digital learning content in the LILY system. 📍 404-1



## Our targets

Below is an overview of the targets set for our employees area of action.

### Target attainment in 2022

- Proportion of women in top and senior management should be 23 percent at each level by 2023 (status 2022: 20.3 percent and 17.1 percent)
- Intercultural mix at executive level should be 20 percent by 2023 (status 2022: 15.8 percent)

### Targets for 2023 and beyond

- Proportion of women in top and senior management should be 23 percent at each level by 2023
- Intercultural mix at executive level should be 20 percent by 2023

- Target not achieved
- Target partially achieved or target horizon extends beyond 2022
- Target achieved

# Safety

*Safety has priority over sales and profits at Evonik. We have a long-established safety culture that allows continuous improvement of our systems and processes. Protecting the health of our employees is also very important to us.*

## MATERIAL TOPICS

- Occupational and plant safety
- Health protection and promotion

## SDGS OF PARTICULAR RELEVANCE FOR EVONIK



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## Safety

- All safety data compiled in ESTER for the first time
- Corporate health promotion: focus on mental fitness
- Further digitalization in the areas of transportation safety and logistics

## Safety

### Strategy and management

Protecting the health, safety, and employability of our employees and preventing accidents and incidents at work and in the operation of our production facilities are of central importance to Evonik. That is also reflected in the UN Sustainable Development Goals of relevance to Evonik. Our high safety standards aim to prevent fatalities, accidents, and damage to health and environment. That includes both our employees and contractors' employees during their working hours, commuting, and transportation of goods. Another goal is to prevent Evonik releasing hazardous substances into the environment and to preclude damage to our production facilities resulting from inadequate safety precautions. We take into consideration both internal and external factors such as extreme weather, manipulation, and terrorist attacks.

The group-wide management of occupational and plant safety at Evonik is based on global policies, processes, and systems. These

are an integral part of our integrated management systems. We use centrally planned internal audits to evaluate the implementation of the applicable rules and regulations and identify any scope for optimization. Our internal processes are supplemented by external audits by certification bodies. The ESHQ function is responsible for the standardization of mission-critical processes for all divisions (see "The environment"  p.80). Requirements and the need for action are defined in binding targets based on performance indicators. Accident frequency is also reflected in the variable remuneration of members of the executive board.

Our ESHQE management handbook sets out our mandatory global rules on the environment, safety, health, quality, and energy. The aim is to continuously optimize our processes, plants, products, and services. That includes minimizing the undesirable influences of our activities on people and nature.

We have developed the Safety at Evonik culture initiative into a group-wide management approach for all aspects of occupational and transportation safety. It defines binding principles of action

that give our managers and employees, including personnel from staffing agencies, reliable guidance on safety-compliant conduct in their daily work. We have supplemented this initiative with Safety at Evonik 2025. The individual elements of this program are being implemented as planned. They include ongoing development of our occupational safety indicators.

Our crisis and incident management are designed to prevent and limit the damage if accidents nevertheless happen. We systematically analyze and simulate incidents with external support. In this way, we aim to further improve our safety performance. We share the findings within the company via our ESHQ Global SharePoint. Successful formats used for this are our safety flyer and safety moments. To build and share experience, we also participate in various national and international networks.

[403-5](#)

In the areas of health protection and health promotion, we concentrate on an integrated, holistic approach. The aims are to maintain and enhance the wellbeing of our employees and their employability.

Safe transportation of goods is very important for Evonik. We use a uniform process to select the logistics service providers for transportation and regularly review their reliability. In keeping with our understanding, this includes evaluating the Responsible Care® performance of all transportation providers. Our aim is to minimize risk at all stages, from loading through transportation to unloading [p. 120](#).

**ESTER targets**

**C38**

**Our progress in 2022**

We continued to roll out and improve our global ESHQ software, ESTER (Evonik Standard Tool ESHQ and Reporting), at all production sites worldwide in the reporting period. Three modules—incident management, hazard assessment, and management of change—are now in use worldwide. ESTER harmonizes processes throughout the Evonik Group, makes workflows leaner, and broadens our database so we can evaluate and improve our safety performance. All relevant indicators and reports are available in a central database (single point of truth), which is updated several times a day. The most important data on our safety performance are available to all employees via an intranet dashboard. Employees can also view the information on their Evonik smartphones.

**Occupational safety**

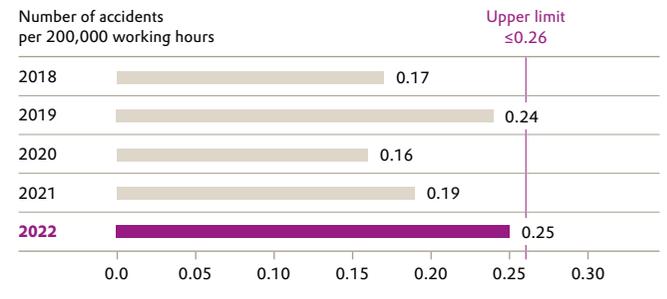
**Strategy and management**

We have always paid special attention to occupational safety, which also includes safety on the way to and from work and the safety of contractors' employees working at our sites. The key performance indicator for occupational safety at Evonik is the lost time injury rate (LTI-R).<sup>1</sup> In 2022, we once again achieved our target of remaining below the defined minimum LTI-R of 0.26 accidents involving Evonik employees<sup>2</sup> resulting in absences of at least one full shift per 200,000 working hours. The LTI-R was 0.25<sup>3</sup> and therefore at a good level relative to the target and back at the pre-Covid level. [403-1, 403-4](#)

Our ESHQ software, ESTER, gives us new ways to evaluate incidents. For example, we identified that 38 percent of injuries in 2022 related to hands and fingers. 1 percent of accidents were caused by contact with electrical energy, and 5 percent were caused by contact with thermal energy.

**Lost time injury rate**

**C39**



<sup>1</sup> All reported work-related accidents (excluding traffic accidents) resulting in absences of at least one full shift per 200,000 working hours.

<sup>2</sup> Evonik employees including employees from staffing agencies as defined in the German legislation on staffing agencies (AÜG).

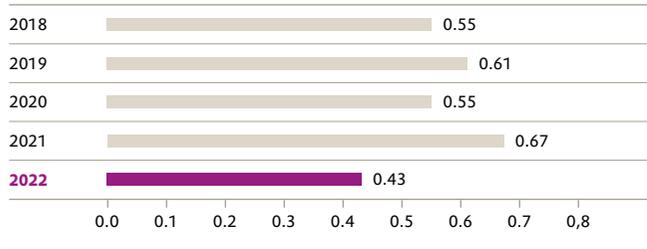
<sup>3</sup> The total number of hours worked by Evonik's employees in the reporting period was around 67 million hours.

The LTI-R for contractors' employees was 0.43, which was far lower than in the previous year. We consider that to be a good development. While accidents caused by workers tripping, slipping or falling were around the same level, only two accidents involved exposure to substances. [403-9](#)

**Lost time injury rate, contractors' employees<sup>a</sup>**

**C40**

Number of work-related accidents involving non-Evonik employees resulting in absence from work per 200,000 working hours



<sup>a</sup> Calculation based on assumptions and estimates.

In 2022, there were no fatal accidents involving our employees or contractors' employees either at our sites or during commuting. Four employees were seriously injured in accidents. However, there were no accidents resulting in more than six months' absence from work. [403-9](#)

**Plant safety**

**Strategy and management**

Safety is the basic precondition for the operation of our facilities and their performance. It is therefore the basis for reliable, effective, and future-oriented production. We set demanding safety standards for the entire life cycle of our plants worldwide. We regard safety as an all-around task, which is established globally through our safety management systems and regularly reviewed.

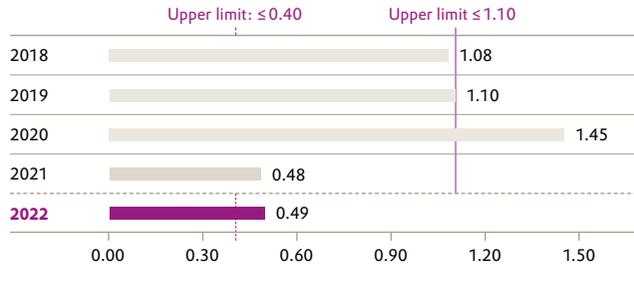
The key performance indicator for plant safety at Evonik is the process safety incident rate (PSI-R). This is used to monitor the number of incidents in production plants involving the release of substances, fire, or explosion (process safety incidents) as defined by Cefic. [403-1](#)

Our PSI-R was 0.49 in the reporting period, so we failed to meet our target of remaining below the upper limit of 0.40. This was mainly attributable to incidents involving the release of substances.

**Process safety incident rate<sup>a</sup>**

**C41**

Number of incidents per 1 million working hours (up to 2020)  
Number of incidents per 200,000 working hours (from 2021)



<sup>a</sup> 2017–2020 in accordance with Cefic 2011, from 2021 in accordance with Cefic 2016.

We work steadily to optimize our safety management system. Our expert circle on plant safety launched several new projects in the reporting period. The focus is on the ongoing development of our plant safety regulations. Furthermore, based on the experience gained with ESTER, we have embarked on further optimization of the management of change process. The leading indicators adopted in the previous year were implemented in the reporting period, enabling us to make specific improvements with respect to mandatory testing and inspection.

**Health protection and promotion**

**Strategy and management**

Global management of health protection and promotion at Evonik takes a long-term, holistic approach, covering employees, the working situation, and the general working environment. Our approach to health protection and promotion includes high-quality medical care as required, applying ergonomic and health-related measures to structure working conditions, and a functioning emergency management system at plant level. Our aim is to meet all statutory requirements on occupational health and safety and avoid high rates of sickness-related absence.

We offer our employees a range of voluntary measures to foster their health. These are bundled in the group-wide Well@Work initiative. In this way, we support a healthy lifestyle. A family-friendly human resources policy that takes account of different phases in employees' lives and supports a good work-life balance is important to Evonik (see "Employees" [p.105](#)). Appropriate offerings are designed to counter a poor work-life balance and the increase in mental health and stress-related illness. Our health protection and promotion measures are also available to all employees, including personnel from staffing agencies.

[403-1, 403-3, 403-4, 403-5, 403-7](#)

The Evonik Global Health Program sets out the main goals of our occupational health strategy, together with data and facts. We use this as the starting point for refining our strategy and adapting it to the latest developments. The main challenges identified for the period 2020 through 2025 are the aging workforce, the global increase in mental health problems, and changes in the working world due to digitalization and Work 4.0. On this basis, priorities have been defined for our occupational health activities.

Our occupational health management policy sets binding world-wide standards for health protection and promotion at Evonik.

**401-2**

In Germany, issues relating to occupational safety and health protection have to be agreed on with the employee representatives. Taking this as our basis, we have worked out policies for our global workforce.

In line with statutory requirements, at our German sites, we have occupational safety committees that meet at least four times a year to discuss issues relating to occupational safety and the protection of health. These committees are composed of employee and employer representatives, safety specialists, safety officers, and occupational medicine specialists. They cover more than 99 percent of our employees in Germany. There are also comparable bodies at other sites Germany. **403-8**

Fulfillment of the relevant requirements is monitored through internal and external environment, safety, and health audits, accompanied by extensive reporting. We recommend or require action to address indications that there is scope for improvement and deviations from the applicable guidelines. As an overriding indicator, we have established an occupational health performance index.

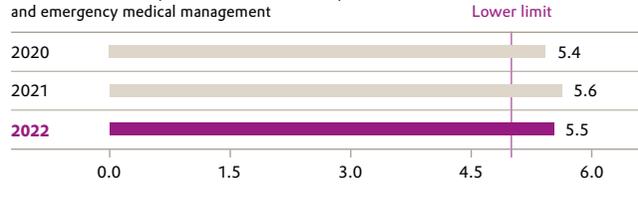
### Occupational health performance index

This index shows the extent to which internal requirements have been implemented and goals achieved. It enables us to measure progress in the area of occupational health and drive forward targeted improvements.

### Occupational health performance index

**C42**

Calculated from occupational medicine, health promotion, and emergency medical management



The index is calculated from two parameters from each of the following areas: occupational medicine, health promotion, and emergency medical management. Both the quality and the scope of the measures are taken into account. The index is calculated annually. In the reporting period, it covered 105 sites and 93 percent of Evonik employees.

We have defined a target of  $\geq 5.0$  for the occupational health performance index. In 2022, the index was 5.5 (maximum: 6.0).

For Germany, we also calculate a health ratio, which was 94.0 percent in 2022 (2021: 95.4 percent). This is the ratio of target working hours less sickness-related hours lost to target working hours.

### Emergency medical management

Evonik's Medical Incident and Emergency Management standard defines binding basic requirements for emergency medical management at all sites worldwide. The exact equipment and human resources required depend on production-related risks and the availability and quality of local medical infrastructure.

Specific procedures have been defined for accidents where employees come into contact with chemicals and special medical treatment is required immediately. Emergency medical management also includes pandemic plans and regular training exercises. An extensive preventive health and risk management program is in place for employees on business trips and foreign assignments.

### Ongoing pandemic-related measures

Occupational health protection was still confronted with special challenges in 2022 as a result of the coronavirus pandemic. There were pandemic plans in place at all sites worldwide. The steering bodies were active at group, regional, and site levels. The Evonik steering committee issued binding global instructions for the group. Based on these, local committees defined measures aligned to their situation. In Germany, the works agreement on coronavirus pandemic concluded with representatives of the workforce was adapted again, and new aspects were added.

Through the defined measures, combined with systematic and extensive case and quarantine management, we were largely able to avoid infection chains and clusters at our sites. Differentiated reporting, our coronavirus pandemic dashboard, regular email updates, and ad-hoc conference calls ensured good communication between the various steering levels. We continued to operate the hotline for employees. In addition, there was an FAQ section in the intranet, along with extensive information on the pandemic and support offers. We used our #TogetherAgainstCorona campaign to appeal to our employees to continue to act responsibly to protect themselves and others.

### Workplace-related preventive healthcare

The results of our hazard assessment help us take suitable preventive measures to avoid work-related illnesses and health problems. Where we identify a risk for specific employees, technical and organizational measures to counter the risk have priority over the use of personal protective equipment. Information and training of employees also play an important part in avoiding health impairments. Such training is mandatory for all employees worldwide. Preventive healthcare includes advice for employees on their individual health risks, including preventive check-ups where necessary. The medical data generated in this process are subject to medical confidentiality and are protected and archived in accordance with national data protection regulations.

📍 403-2, 403-5, 403-7

Evonik regularly reports on occupational illnesses. The indicator used for this is the occupational disease rate (ODR), which is defined as the number of newly identified cases of occupational illnesses per 1 million working hours. The calculation includes all cases recognized in the reporting period, including latent illnesses, which are illnesses where the causes lie well in the past. There were 18 in 2021. The main causes of occupational illness at Evonik are exposure to asbestos and noise. Exposure to asbestos relates to the period prior to 1993, the year Germany banned the production and use of asbestos. Our occupational safety measures endeavor to minimize the risks of sustaining an occupational illness. In view of this, the risk for our employees and contractors' employees working under Evonik's direct supervision is very low. In the reporting period, there were no reported deaths



Evonik's medical service provides preventive healthcare and advice.

of members of our active workforce as a result of work-related illness.

The ODR for 2022 will probably be available in spring 2023 and will be published on our website. In 2021, the ODR for the Evonik Group was 0.28. New occupational illnesses were reported in Germany, North America, and EMEA<sup>1</sup>. The ODR was 0.27 for Germany and 0.5 for both North America and EMEA. The calculation of the ODR does not include contractors' employees, as we do not have access to such data due to data protection regulations. 📍 2-8

### Corporate health promotion

Our Well@Work program centers on three central areas: exercise, a healthy diet, and work-life balance. Mental fitness was added

as a new aspect in 2021. Our corporate health promotion activities center on basic programs with a long-term focus to encourage employees to adopt a healthy lifestyle. These are supplemented by health campaigns, which change every year. At all of our German sites, there are interdisciplinary health task forces to implement Well@Work. The Care & Support program in Germany enables employees to contact the company medical service with private medical questions. They are given advice and support. In the event of illnesses requiring treatment, they are referred to their general practitioner or a specialist physician. 📍 403-6

In view of the ongoing pandemic, we continued our online health promotion offerings in 2022. Alongside online talks on a wide variety of aspects, our #Gesunddurchsjahr offerings for employees in Germany included advice on ergonomics and healthy eating during periods spent working from home, online exercise sessions to encourage activity during lunch breaks, and online get-togethers for personal interaction. We continued to offer coronavirus vaccines and our fall influenza vaccine program. Our health campaign was dedicated to screening for colorectal cancer and high blood pressure. Maintaining the long-term employability and wellbeing of our employees was also at the heart of our fit-for-life seminars, which run over several days. We were able to resume these seminars in 2022 after the pandemic-related break.

Worldwide, around 95 percent of our workforce can seek advice on workplace-related, personal, or family problems from social and employee counseling centers.

<sup>1</sup> EMEA = Europe, Middle East & Africa

## Transportation safety and logistics

### Strategy and management

Our aim is to minimize risk at all stages in the shipping process—from loading right through transportation to unloading. We take special care when shipping dangerous goods. Moreover, our safety standards for especially dangerous products and raw materials go beyond the regulations for such substances. In the reporting period, we systematically continued our focus on sustainability and the use of alternative engine systems in transportation.

To support safe transportation by logistics partners, the use of requirements profiles for logistics service providers, collection by customers, and warehouse service providers is common practice at Evonik in Europe. In addition to quality management, the specific aims of these profiles are to ensure safety, make sure loads are properly secured, and take environmental and sustainability aspects into account in the transportation of chemicals.

### Our progress in 2022

We continued to drive forward digitalization in the fields of transportation safety and logistics in the reporting period. That includes efficient, resource-saving optimization of our forklifter fleet. We started to introduce an automated fleet management

### Outgoing shipments of hazardous goods<sup>a</sup> **T28**

in thousand metric tons	2021	2022
Air	0.9 <sup>c</sup>	0.7
Ocean	589	486
Inland waterway	1,143	942
Rail	726	778
Pipeline <sup>b</sup>	1,078 <sup>c</sup>	996
Road	1,856	1,812
<b>Total</b>	<b>5,394</b>	<b>5,014</b>

<sup>a</sup> Excluding goods collected by customers.

<sup>b</sup> External shipments only.

<sup>c</sup> Corrected data.

### Outgoing shipments of other goods<sup>a</sup> **T29**

in thousand metric tons	2021	2022
Air	8 <sup>c</sup>	6
Ocean	1,273	1,196
Inland waterway	29 <sup>c</sup>	27
Rail	193	214
Pipeline <sup>b</sup>	6	6
Road	2,180	2,257
<b>Total</b>	<b>3,690</b>	<b>3,705</b>

<sup>a</sup> Excluding goods collected by customers.

<sup>b</sup> External shipments only.

<sup>c</sup> Corrected data.

system with a central database, access controls, and various sensors. The aim is to monitor our fleet to meet compliance requirements and significantly reduce the frequency of accidents, damage caused by incorrect use, and consequential damage. Digitalization of our fleet of vehicles allows optimization of logistics processes. We also expect the evaluation of net duration of use and extended intervals between trips to reduce maintenance costs by 20 percent. A pilot phase at the Essen site showed positive results, and the feedback from users was good.

### Prioritizing climate-efficient trucks

Evonik continued its strategic focus on intermodal shipment of packaged goods across Europe in 2022. Priority is still being given to alternative drive systems for road traffic in Europe. Evonik and various logistics companies have set up a joint initiative to show how climate protection can already be put into practice in the transportation of goods. The focus is on the increased use of trucks that run on climate-friendly biogas in order to reduce CO<sub>2</sub> emissions. For example, one of our partners uses two bio-LNG<sup>1</sup> heavy-goods trucks to transport packaged goods from our sites in Wesseling and Marl in Germany to Eastern Europe. LNG trucks are also used for all road shipments of packaged and palletized goods from our Wesseling site to nearby destinations.

<sup>1</sup> LNG = Liquefied natural gas.



Two-tier stacking of drums.

We made progress with an innovative fastening system to allow two-tier stacking of drums during transportation by road. The aim was to develop a method of using a re-usable strap system to improve the utilization of truck capacity by at least 25 percent. A ready-to-use system was developed and road-tested in the first half of 2022. In summer 2022, it was certified by an independent expert. This method can avoid the transportation of one in five full truckloads.

### OT security

OT stands for operational technology. At Evonik it relates to our production network (control units and process control systems). We have introduced mechanisms to further enhance the safety of our operational technology. That includes specialist expertise in our Logistics unit on pipeline security (see "Governance and compliance" p.39).

### Evonik Caretaker Ocean (ECO)

In the past, Evonik did not have a central unit to identify, evaluate, and address ocean freight challenges. The establishment of an ECO team within our European logistics operations has closed this gap. It supports internal and external partners in a wide range of aspects related to export deliveries by ocean freight. These range from support in operational questions such as securing ocean-going loads to the strategic development of transportation concepts for the future. ECO has also helped improve the resilience of supply chains that are dependent on ocean freight, especially outside Europe. Following the successful introduction of this concept for Europe, we have now rolled out ECO in Canada, the USA, and Mexico. Introduction in the Asia-Pacific region is also underway.

We evaluate accidents in the shipment of goods using the criteria set out in section 1.8.5 ADR.<sup>1</sup> The aim is to increase transparency and align Evonik to this international standard. No reportable incidents involving dangerous goods listed in section 1.8.5. ADR occurred in the reporting period.

## Our targets

**Below is an overview of the targets set for our safety area of action.**

### Target attainment in 2022

- Lost time injury rate (LTI-R)<sup>1</sup> 0.25
- Process safety incident rate (PSI-R)<sup>2</sup> 0.49
- Occupational health performance index 5.5

### Targets for 2023 and beyond

- Lost time injury rate (LTI-R)<sup>1</sup> ≤ 0.26
- Process safety incident rate (PSI-R)<sup>2</sup> ≤ 0.40
- Occupational health performance index ≥ 5.0

- Target not achieved
- Target partially achieved or target horizon extends beyond 2022
- Target achieved

<sup>1</sup> New reference parameter from 2021 aligned to international practice.

<sup>2</sup> Calculation modified from 2021.

<sup>1</sup> ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route, English: European Agreement concerning the International Carriage of Dangerous Goods by Road.

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**1:€5.36<sup>1</sup>**

Every €1 value added by Evonik creates a total of €5.36 added value for society<sup>2,3,4</sup>

**1:13.5 jobs<sup>1</sup>**

1 Evonik employee secures an average of 13.5 jobs in the value chain<sup>2,3,4</sup>

**1:€1.90<sup>1</sup>**

Every €1 value added by Evonik results in public revenue of €1.90<sup>2,3,4</sup>

<sup>1</sup> Since the high inflation in 2022 is not yet adequately reflected in the statistics-based models used for the impact valuation, the calculations for 2022 contain some uncertainty. (2021: Every €1 value added by Evonik created €4.12 added value for society; one Evonik employee secured 10.5 jobs; every €1 value added by Evonik resulted in public revenue of €1.90.)

<sup>2</sup> Impact valuation of our business in 2021 along the supply chain covering Germany, rest of Europe, USA, Canada, Mexico, Asia-Pacific, Middle East & Africa, and Central & South America on the basis of currently available data.

<sup>3</sup> Disclosures outside the scope of the auditor’s limited assurance engagement.

<sup>4</sup> The total includes Evonik’s direct impact.

## Further elements of our sustainability management

### Organization and management

The executive board bears overall responsibility for sustainability and all climate-related aspects at Evonik. Direct responsibility is assigned to the chief human resources officer. Responsibility for sustainability management is defined in a corporate policy. The supervisory board also regularly addressed sustainability issues in 2022 (see "Governance and compliance" p.30). 2-9, 2-14

In view of the increasing relevance of sustainability for the management of the Evonik Group, we integrated further ESG aspects into our governance framework in the reporting period. Since September 2022, our **sustainability council** has met at the executive board level, chaired by the chairman of the executive board. To strengthen the alignment with our businesses, alongside the executive board, members include the heads of the divisions.

### Sustainability governance structure at Evonik

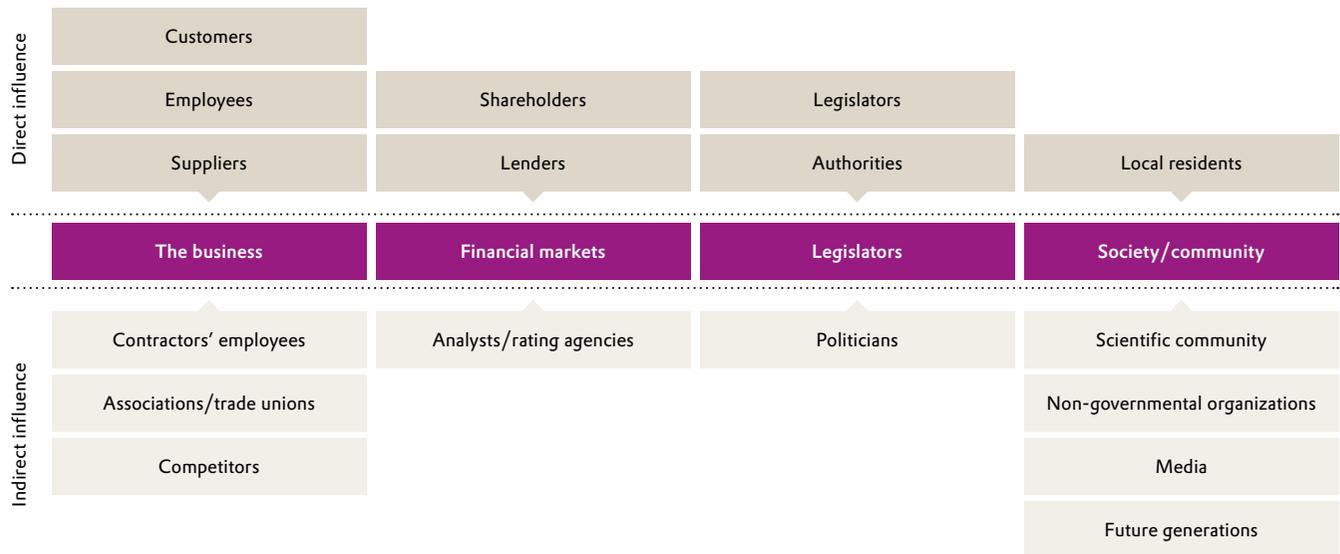
C43



<sup>a</sup> Since fall 2022, part of an extended executive board meeting.

### Stakeholder groups and their influence on Evonik 2-29

C44



The sustainability council is responsible for the management of sustainability-related aspects and the associated decisions. Following approval by the executive board, the measures are implemented by the operational units in close consultation with the relevant functions, for example, Strategy, Sustainability, Research, Development & Innovation, and Procurement. The decisions taken by the sustainability council are prepared by the **sustainability circle**, which comprises representatives of the functions and departments of relevance for sustainability. The sustainability circle is chaired by the chief human resources officer, who is the executive board member responsible for sustainability. Among other things, in the reporting period, both the sustainability council and the sustainability circle considered the results

of the sustainability analysis of our business, the EAGER project to reduce greenhouse gas emissions at our sites, and the establishment of sustainability data management.

Moreover, starting in 2023, further sustainability aspects will be integrated into the long-term remuneration of the executive board and senior executives (see "Strategy and growth" p.18).

### Engaging with our stakeholders

We are convinced that only companies that act responsibly, enjoy people's trust, and are open to continuous improvement can be successful. That includes listening very carefully to how we are perceived by our stakeholders. In this way, we want to

strengthen the trust of our most important stakeholders—for example, customers, suppliers, and shareholders. [2-29](#)

Dialogue with our stakeholders is important to give us a better understanding of different perspectives and regularly review our own positions. It enhances our understanding of present and future societal challenges. In addition, we use our stakeholder engagement to improve our insight into the impact of new market trends and developments on our business. That makes it easier for us to identify possible opportunities and risks at an early stage and position Evonik more resiliently. We use the following criteria to define and prioritize our stakeholder groups:

- Type of influence (direct, indirect)
- Impact cluster (for example, business, financial market)
- Characterization (for example, suppliers, employees, customers).

Chart [c44](#) [p. 123](#) shows the stakeholder groups of relevance for Evonik and their influence on our company.

In our materiality analysis 2022, we reviewed the stakeholder groups we had defined and added contractors' employees, future generations, and trade unions. This was partly in connection with the recommendations of the new GRI 3 Material Topics 2021. Our dialogue with stakeholders is a continuous process—both in the operating business and at group level—and includes a wide range of topics and events. Chart [c45](#) provides an overview of the main communication channels we use for this.



Delegates from Bündis 90/Die Grünen visited the Hanau site in Germany to find out more about hydrogen.



Kids painted their vision of the future during Evonik's vacation program.



"Sustainability opens doors"—an outreach event for local citizens.

**Stakeholder communication channels<sup>a</sup>**

**C45**

	Personal or remote discussions	Townhall meetings, workplace/ staff meetings	Open days, site visits	Whistleblower system (compliance, human rights)	Surveys	Sustainability reporting	Evonik website, social media
Customers	✓		✓	✓	✓	✓	✓
Suppliers, contractors, business partners	✓		✓	✓	✓	✓	✓
Employees	✓	✓	✓	✓	✓	✓	✓
Local residents, general public	✓		✓	✓	✓	✓	✓
Investors and shareholders	✓		✓	✓		✓	✓
Authorities, legislators, regional and national politicians	✓		✓	✓		✓	✓

<sup>a</sup> Stakeholders with direct influence.

Every year, our dialogue with stakeholders takes place through a wide range of topics and events (C46 “Stakeholder engagement 2022”). The insights gained are shared within the company.

Our approach to engaging with our stakeholders includes the involvement of the Evonik regions. In general, we take care to achieve the widest possible coverage of operational, political, social, and community perspectives. [More](#) .

**Stakeholder engagement 2022**  2-12, 2-29

C46

Stakeholder groups <sup>a</sup>	Examples of stakeholder engagement	Stakeholder groups <sup>a</sup>	Examples of stakeholder engagement
Customers	<ul style="list-style-type: none"> <li>Exchange with cosmetics manufacturers on life cycle assessments and green hydrogen peroxide</li> <li>Discussions on various aspects of sustainability with customers from, e.g., the consumer goods, automotive, and construction industries</li> </ul>	Legislators	<ul style="list-style-type: none"> <li>Dialogue with members of the European Parliament</li> <li>Dialogue with regional and national politicians in Germany</li> <li>Site visits by German MPs (Rheinfelden, Lülldorf, Herne)</li> </ul>
Employees	<ul style="list-style-type: none"> <li>Establishment of a network of sustainability ambassadors for the Active Oxygens business line</li> <li>Regular sustainability dialogue with the Evonik regions on various topics</li> <li>Internal social media platforms (“communities”)</li> <li>Meet &amp; greet: workplace/staff meetings</li> <li>Learning sessions on various topics</li> </ul>	Authorities	<ul style="list-style-type: none"> <li>Talks with authorities and regular exchange on various topics and permits</li> <li>Inspections by authorities with a focus on production incidents and the environment</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>Workshop with strategic suppliers on climate-friendly raw materials and carbon capture and storage</li> <li>Supplier Day in the Asia-Pacific, Americas<sup>b</sup>, and EMEA<sup>c</sup> regions on Sustainability@Procurement</li> <li>Road &amp; Rail Supplier Day for logistics providers in the EMEA region</li> </ul>	Local residents <sup>d</sup>	<ul style="list-style-type: none"> <li>Sustainability-related invitation to the Hanau site</li> <li>Support for local projects and activities worldwide</li> </ul>
Shareholders	<ul style="list-style-type: none"> <li>Virtual shareholders’ meeting</li> <li>Capital Markets Day: Next Generation Evonik—Strategy, Portfolio &amp; Culture</li> <li>Roadshows, conferences</li> </ul>	Lenders	<ul style="list-style-type: none"> <li>Continuous dialogue on sustainability issues</li> </ul>

<sup>a</sup> Only includes stakeholder groups with a direct influence. | <sup>b</sup> Americas = North America, Central & South America. | <sup>c</sup> EMEA = Europe, Middle East & Africa.  
<sup>d</sup> Around Evonik sites.



Evonik Perspectives stakeholder conference (from left to right): Martin Bornholdt (managing director of DENEFF)<sup>1</sup>, Saskia Schmaus (Global Head of Diversity, Equity & Inclusion, Henkel AG & Co. KGaA), Conny Czymoch (moderator).

We have developed various formats for social dialogue. These help us engage with both direct and indirect stakeholders. As a result of the ongoing coronavirus pandemic, in the reporting period we were not able to use these formats as we normally would.

Our large annual stakeholder conference, Evonik Perspectives, has been held digitally since 2021. Evonik Perspectives, which is organized with our cooperation partner DENEFF, the German enterprise initiative on energy efficiency, has become established as an expert forum and a platform for informed debate on key aspects of sustainable development.

<sup>1</sup> Until end of 2022.



## Advocacy

Evonik gets involved in public debate and is a discussion partner in opinion-forming processes at regional, national, European, and international level. Our offices in Berlin and Brussels play an important role in this. Our employees network with politicians, the general public, and trade associations: They provide input to shape political conditions and are actively involved in consultations, hearings, and discussions. The areas of strategic relevance for Evonik are environmental policy, environmental regulation, energy, the climate, circular economy, industrial policy, agriculture, and the bioeconomy. We have established extensive monitoring in these areas and have entries in the German and European lobby registers to safeguard transparency.

The coronavirus pandemic, the Russian invasion of Ukraine, and energy and raw material shortages represent a turning point for our industry. Dealing with these crises was at the center of our advocacy activities in 2022, especially in the areas of the environment, the climate, and energy policy. Together with the German chemical industry association VCI, we campaigned, among other things, for the prioritization of planned legislation, especially at European level. At the same time, we pressed for business conditions that strengthen the social market economy and industry in this challenging situation.



Visitors in the dome of the Reichstag building.

## Our positions

In the area of environmental policy and regulation, our interaction with politicians covers the digitalization of permitting processes, especially in connection with legislation to ensure a reliable planning base. Here, the priorities are safeguarding know-how and protection against cyberattacks.

Through the planning modernization task force, we advocate for planning and permitting legislation to increase the speed, digitalization, and efficiency of existing workflows. Similarly, we are campaigning for the development of an "Online Access Act 2.0." Another relevant aspect for us is the possible classification of certain silicones as persistent organic pollutants. We take part in the corresponding discussions together with the European chemical industry council, Cefic.

Evonik supports the objectives of the Paris Agreement on Climate Change. The EU Commission aims to make Europe the first climate-neutral continent by 2050. Since 2022, we have been actively involved in the European wind energy association WindEurope, where we contribute to the topics sustainability, circular economy, and energy transition. In the reporting period, Evonik signed long-term power purchase agreements for energy from the He Dreiht offshore wind farm in the German North Sea. These agreements alone will enable us to cover over one-third of our power requirements in Europe with renewable energy from 2026 (see "The environment" [p.87](#)).

In Marl (Germany), which is Evonik's largest site worldwide, the renewal of the energy infrastructure was completed in 2022 when the new gas and steam turbine power plants

came into service. As a consequence of the Russian invasion of Ukraine, we immediately had to reduce the dependence of our German sites on natural gas. This has been achieved through partial substitution with liquefied petroleum gas and by temporarily continuing to operate the coal-fired power plant in Marl. In this context, we were involved in advocacy for Germany's energy industry legislation. Through our involvement in the Get H2 Nukleus project, we are working to secure sufficient availability of green hydrogen at our site in Marl.

We want our products and solutions to contribute to a circular economy for plastics and to higher recycling rates. Here, we are advocating for a legal framework based on open technology that includes and allows a variety of processes. We regard the revision of the EU Directive on Packaging and Packaging Waste as particularly relevant for this. At the same time, we are monitoring the EU Chemicals Strategy for Sustainability (see "Value chain and products" [p.56](#)) and European industrial policy.

The farm-to-fork strategy included in the EU Commission's Green Deal is designed to make the entire food chain more sustainable. In agriculture and bioeconomy, Evonik supports the approaches aligned to sustainable nutrition of agricultural livestock, which make a contribution to improving animal welfare and food quality, as well as reducing surplus feed in the environment.

Information on donations to political parties and anti-corruption measures can be found in "Governance and compliance" [p.26](#).

**Procedure for the materiality analysis 2022**

We conducted another extensive materiality analysis in the reporting period. This was based on the GRI Sustainability Reporting Standards 2021 and, in some aspects, on the EFRAG<sup>1</sup> working papers of January 2022, ESRS 1 “Double materiality conceptual guidelines for standard-setting” and ESRS 4 “Sustainability material impacts, risks, and opportunities.” Similarly, we took into account certain content from the exposure drafts<sup>2</sup> of April 2022.

In accordance with these regulations, we evaluated actual and potential positive and negative impacts of our business on our area of activity (inside-out perspective) and the impact of external factors on our business activities (outside-in perspective). In addition, we addressed the following questions in the context of double materiality:

- **Impact materiality:** How do our business activities impact the economy, the environment, and society (including human rights)?
- **Financial materiality:** Do sustainability aspects represent opportunities or risks for our business activities in terms of cash flow and enterprise value?

We performed our materiality analysis in five steps.

**1 Analysis/description of Evonik’s environment**

First, we examined Evonik’s business environment using the list of criteria specified by GRI. This enabled us to identify actual and

potential positive and negative impacts. To this end, we took into account, among other things, our business model, our sustainability strategy, key performance indicators, and our collaboration with stakeholders.

**2 Identification of impacts**

The heart of the second step was the identification of impacts. For this, we evaluated a wide range of internal and external data sources. In addition, questions from major sustainability rankings and reporting frameworks such as GRI, SASB, and TCFD were considered. In this way, we covered both the business perspective and the stakeholder perspective. The impacts identified were bundled in a long list of 67 impacts.

**Materiality analysis process 2022<sup>a</sup>**  2-14, 3-1

C47

1 Analysis/description of Evonik’s environment <sup>b</sup>	2 Identification of impacts <sup>c</sup>	3 Assessment of the significance of impacts	4 Cut-off, clustering, prioritization	5 Validation of material topics <sup>e</sup>
<ul style="list-style-type: none"> <li>• Purpose, key figures, business model, markets, sustainability strategy, regions, stakeholder groups, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Outside-in and inside-out perspectives to identify impacts</li> <li>• Compile long list of impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Develop an evaluation sheet based on the long list for distribution to relevant experts at Evonik</li> <li>• Assessment of the evaluation sheet<sup>d</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Materiality thresholds</li> <li>• Clustering of impacts by topic, followed by prioritization</li> </ul>	<ul style="list-style-type: none"> <li>• Validation by internal and external experts/stakeholders</li> <li>• Approval by the executive board member responsible for sustainability</li> <li>• Definition of reporting boundaries</li> </ul>

<sup>a</sup> Based on GRI 3: Material Topics 2021, ESRS 1: Double materiality conceptual guidelines for standard-setting (working paper), January 2022 and ESRS 4: Sustainability material impacts, risks and opportunities (working paper), January 2022.

<sup>b</sup> Based on GRI 3: Material Topics 2021.

<sup>c</sup> Actual and potential positive and negative impacts.

<sup>d</sup> Including comparison with opportunity and risk management.

<sup>e</sup> Step 5 in accordance with GRI 3: Material Topics is part of step 4. Additional detail to improve structure and transparency.

<sup>1</sup> EFRAG = European Financial Advisory Group.

<sup>2</sup> ESRS 1: General principles (exposure draft), April 2022; ESRS 2: General, strategy, governance and materiality assessment (exposure draft), April 2022.

### 3 Assessment of the significance of the impacts

Based on this long list, we generated an evaluation sheet to determine the impact materiality and financial materiality. We sent this to a broad spectrum of specialist colleagues around the world—in various functions, divisions, and regions. In this, we paid attention to a balanced mixture of gender and professional experience.

The impacts were assessed using different criteria and scales. This impact materiality assessment was performed using the criteria defined by GRI and EFRAG on severity (scale, scope, remediability) and likelihood. Financial materiality was assessed using the EFRAG scale.<sup>1</sup>

### 4 Cut-off, clustering, and prioritization

The analysis of the evaluation sheets led to four impact rankings, subdivided into impact materiality and financial materiality—and further subdivided in each case into positive and negative impacts. To permit a comparison of the positive and negative impacts, we derived average values and defined a materiality threshold on the basis of significance.

The result of these four process steps was the total amount of material impacts in the categories impact and financial materiality. By clustering these impacts in accordance with EFRAG and GRI, we identified the material topics. These were then re-examined

in light of company-specific and external conditions. As a result, diversity was added as an additional topic in the prioritization process.

### 5 Validation of the material topics

We presented the results of the materiality analysis to selected internal and external sustainability and financial experts who had not previously been involved in the evaluation. The outcome was the list of 15 material topics following the prioritization and validation steps. This list was then approved by the member of Evonik's executive board who is responsible for sustainability.

As the final step, we used this as the basis to define the reporting content and boundaries, with a focus on the top topics. The material impacts and topics resulting from this process define the structure and depth of our sustainability report 2022. We have bundled these topics in six areas of action, which correspond to the chapters in this report.

A compact overview of the conduct of our materiality analysis 2022 can be found on our website. [More](#) .

We will review the materiality analysis annually to make sure it is complete and up-to-date. We aim to perform a full materiality analysis roughly every three to four years. In the interim period, we drive forward the content of the topics identified. [2-14, 3-1](#)

### Impact valuation<sup>2</sup>

Since Evonik is an industrial company, it is important to monitor the impact of our business activities. We use an impact valuation to regularly measure and analyze the direct and indirect impacts from an economic, ecological, and social perspective. This supplements our established analytical approaches. We anticipate that this will allow early identification of potential future opportunities and risks, make our business model more resilient, and improve our understanding of the long-term value that our business activities create for society. [2-12](#)

This procedure provides an insight into

- the scale of the positive and negative ecological, social, and macroeconomic impact of our corporate activities;
- Evonik's benefits for society as a whole; and
- the key levers to reduce negative impacts and maximize positive impacts along our value chain.

Our impact valuation is based on the input-output-outcome-impact (IOOI) model, which takes account of the input of resources and the measurable outcomes of corporate activity. In addition, short- and long-term impacts are identified, measured along the value chain, and evaluated.

<sup>1</sup> ESRG 1: Double Materiality conceptual guidelines for standard-setting (working paper), January 2022, page 19, paragraph 114.

<sup>2</sup> The impact analysis was outside the scope of the auditor's limited assurance engagement.

Monetary impact valuation

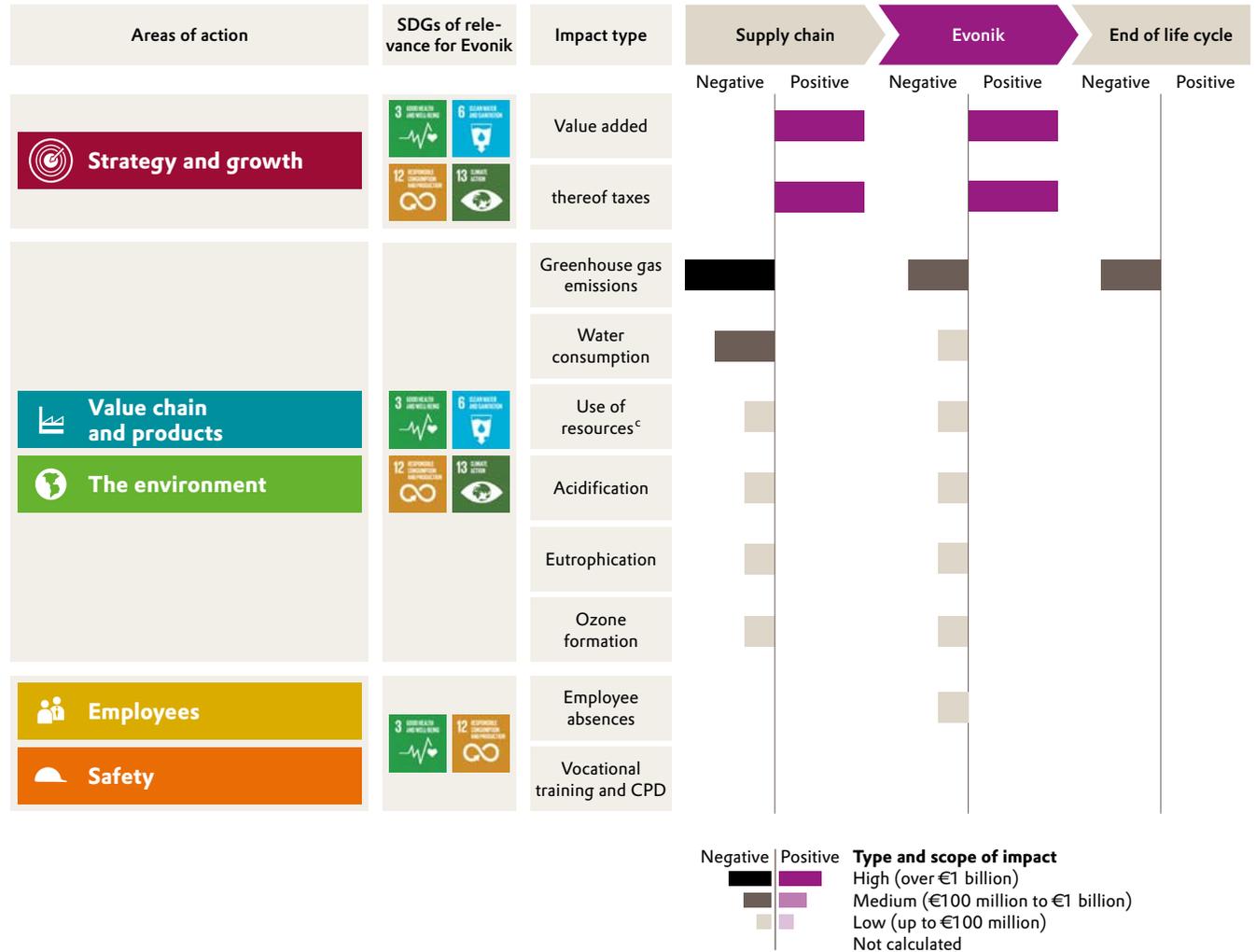
We aim to assign a monetary value to individual indicators such as vocational training and continuing professional development of employees, employment impacts, and global warming so they can be compared. Most of the factors used for this are publicly available. They are based on the work of the relevant economic, environmental, and social research institutes.

Chart C48 “Monetary impact valuation of our business activities” shows the results of the impact valuation, based on the figures for 2022. Our business activities are associated with ecological impacts at many points. The main negative impacts are greenhouse gas emissions and water consumption in the supply chain. These are countered by strongly positive macroeconomic impacts, both along the supply chain and by our own production activities. [303-1, 306-1](#)

Evonik markets a range of products whose use makes a positive ecological and social contribution compared with conventional alternatives. Examples of the avoidance of greenhouse gas emissions with our products are outlined in “Strategy and growth” [p.23](#). The impact analysis presented here only looks at the absolute impact of our business activities. It does not include the impact of the use of our products or a comparison with alternatives.

C48

Monetary impact valuation of our business activities<sup>a,b</sup>



<sup>a</sup> The impact analysis was outside the scope of the auditor’s limited assurance engagement. Chart C48 shows Evonik’s impact along the value chain, excluding induced effects, which were calculated separately. | <sup>b</sup> It is not possible to calculate all monetary impacts along the value chain as not all data are available. | <sup>c</sup> The impact of raw materials and supplies used in production is taken into account in supply chain/raw materials “upstream.”

## Sustainability indicators for the Evonik Group

### Sustainability indicators 2022

T30

	2019	2020	2021	2022	
 STRATEGY AND GROWTH	Value added in € million	5,994	4,067	4,688	4,609
	Women at the first management level below the executive board in %	26.1	26.9	26.9	38.5
	Women at the second management level below the executive board in %	24.1	26.3	29.2	31.0
 GOVERNANCE AND COMPLIANCE	Training rate <sup>a</sup> anti-money laundering in %	--	82	96	97
	Training rate <sup>a</sup> antitrust law in %	82	88	83	85
	Training rate <sup>a</sup> fighting corruption in %	91	88	92	91
	Training rate <sup>a</sup> code of conduct in %	89	89	89	89
	Internal investigations	113	130	136	142
	Disciplinary measures <sup>b</sup>	60	110	152	168
	Procurement volume in € billion	9.4	8.0	10.4	13.6
 VALUE CHAIN AND PRODUCTS	Production output in million metric tons	9.16	8.93	9.54	8.81
	Use of renewable resources in production in %	7.9	8.5	9.7	11.1
	Raw material suppliers covered by TfS assessments <sup>c</sup>	66	73	69	66
	No. of sustainability audits (TfS)	309	258	284	378
	No. of sustainability audits (Evonik)	26	31	16	11
	No. of sustainability assessments (TfS)	1,043	1,148	1,345	1,545
	No. of sustainability assessments (Evonik)	117	186	176	108
	R&D expenses in € million	428	433	464	461
	Scope 1 greenhouse gas emissions in million metric tons <sup>d</sup>	4.9	4.9	4.4 <sup>e</sup>	4.1
	Scope 2 greenhouse gas emissions in million metric tons <sup>f</sup>	0.6	0.6	1.9 <sup>e</sup>	1.9
Scope 3 greenhouse gas emissions in million metric tons <sup>g</sup>	17.8	20.0 <sup>h</sup>	23.4	21.7	
Reduction in greenhouse gas emissions (scope 1/2) in %	-42 <sup>i</sup>	-43 <sup>i</sup>	-43 <sup>i</sup>	-6 <sup>j</sup>	
 THE ENVIRONMENT	Early employee turnover in %	0.9	1.3	2.2	1.9
	Continuing professional development per employee in hours <sup>k</sup>	8	12 <sup>l</sup>	5	4
	Female managers in % <sup>m</sup>	25.2	26.1	27.9	29.1
 EMPLOYEES	Lost time injury rate (LTI-R) <sup>n</sup>	1.18	0.80	0.19	0.25
	Process safety incident rate (PSI-R) <sup>o</sup>	1.10	1.45	0.48	0.49
 SAFETY	Occupational health performance index <sup>p</sup>	5.5	5.4	5.6	5.5

The following overview contains the main indicators for our six sustainability areas of action. You can find more detailed information in the relevant chapters.

<sup>a</sup> The training rate is defined as the number of training candidates with a valid certificate relative to the total number of training candidates as of December 31, 2022.

<sup>b</sup> In some cases, more than one measure was taken in connection with an investigation.

<sup>c</sup> Annual procurement volume > €100 thousand.

<sup>d</sup> CO<sub>2</sub> equivalents.

<sup>e</sup> Revised presentation based on the GHG Protocol Standard.

<sup>f</sup> CO<sub>2</sub> equivalents, net (market-based).

<sup>g</sup> CO<sub>2</sub> equivalents, differences in the totals are due to rounding.

<sup>h</sup> Data corrected due to changes in the methodology and improved data availability.

<sup>i</sup> For the target 2008 – 2015.

<sup>j</sup> For the target 2021 – 2030.

<sup>k</sup> Since 2016, excluding apprentices in Germany.

<sup>l</sup> Previous years: face-to-face training only; from 2020 face-to-face and online training.

<sup>m</sup> Management circles 1 – 3.

<sup>n</sup> This indicator contains all work-related accidents (excluding traffic accidents) resulting in absences of at least one full shift per 200,000 working hours (from 2021).

<sup>o</sup> Number of incidents per 200,000 working hours (from 2021).

<sup>p</sup> Max. 6.0 (index takes account of key aspects of occupational medicine, health promotion, and emergency medical management).

## Status of our sustainability targets for 2022

2-22

### Target attainment in 2022

This table shows the targets we set for the reporting period. The traffic lights show progress towards achieving the targets.

You can find details of the exact status in the relevant chapters and the table "Sustainability indicators for the Evonik Group" [p.130](#).

T31

#### Strategy and growth [p.14](#)

- Substantial increase in sales generated with Next Generation Solutions by 2030

#### Governance and compliance [p.25](#)

- 30 percent women at both the first and the second management level below the executive board by year-end 2024
- Perform an initial risk analysis using a new IT tool, starting with compliance with the German legislation on due diligence in the supply chain
- 100 percent of all raw materials suppliers where annual procurement volume is >€100 thousand to be covered by TfS assessments by year-end 2025

#### Value chain and products [p.47](#)

- Generate more than €1 billion in additional sales<sup>a</sup> in our six innovation growth fields by 2025
- Generate more than €350 million in additional sales with solutions for the circular plastics economy from 2030
- Solutions for around 400,000 metric tons of recyclable plastics by 2025
- Add substances/products from acquisitions<sup>b</sup> to CMS/CMS<sup>PLUS</sup> and process them by the end of 2023

- Target not achieved
- Target partially achieved or target horizon extends beyond 2022
- Target achieved

<sup>a</sup> With products introduced in or after 2015.

<sup>b</sup> Since 2017.

<sup>c</sup> Due to our commitment to SBTi, we set new climate targets in the reporting period. These replace the previous targets.

<sup>d</sup> Scope 3 emissions comprise all upstream categories and the category "Downstream transportation and distribution."

<sup>e</sup> Exact target: 11.07 percent.

<sup>f</sup> This target was refined in the reporting period.

<sup>g</sup> New reference parameter from 2021 aligned to international practice.

<sup>h</sup> Calculation modified from 2021.

#### The environment <sup>c</sup> [p.79](#)

- Reduce absolute scope 1 and scope 2 emissions by 25 percent between 2021 and 2030
- Reduce absolute scope 3 emissions<sup>d</sup> by 11 percent<sup>e</sup> between 2021 and 2030
- Reduce both absolute and specific energy consumption by 5 percent between 2020 and 2025
- Develop site-specific action plans for sites that are potentially exposed to water stress as part of a global water management system<sup>f</sup>
- Reduce specific freshwater intake by 3 percent relative to production volume between 2021 and 2030
- Reduce the specific volume of production waste by 10 percent relative to production volume between 2021 and 2030

#### Employees [p.98](#)

- Proportion of women in top and senior management should be 23 percent at each level by 2023
- Intercultural mix at executive level should be 20 percent by 2023

#### Safety [p.114](#)

- Lost time injury rate (LTI-R)<sup>g</sup> 0.26
- Process safety incident rate (PSI-R)<sup>h</sup> 0.49
- Occupational health performance index 5.5

## About this report

### Sustainability report 2022

This is the 15th full sustainability report published by Evonik. It supplements the financial report 2022 and the combined non-financial statement in the management report by reporting on further ecological and social issues. The aim is to give our stakeholders an insight into how we run our business and drive forward sustainability in the Evonik Group. The report covers the period from January 1 to December 31, 2022, except where otherwise indicated. Our previous sustainability report on 2021 was published in March 2022. The next sustainability report covering 2023 will be published in spring 2024. [2-3](#)

### Method

The report continues our digital, strategic sustainability reporting, focusing on material topics. We conducted an extensive new materiality analysis in 2022. This was based on the revised GRI Sustainability Reporting Standards 2021 and, in some aspects, on EFRAG's working papers of January 2022, ESRS 1 "Double materiality conceptual guidelines for standard-setting" and ESRS 4 "Sustainability material impacts, risks, and opportunities." Similarly, we took into account certain content from the exposure drafts<sup>1</sup> of April 2022. We submitted the results of our materiality analysis to selected in-house sustainability and finance experts. The external validation was undertaken by representatives of industrial unions, trade associations, NGOs, sustainability consultancies, and the financial sector.

We identified 15 material topics for Evonik. These are bundled in six areas of action, which define the structure and depth of this report. The three most important material topics—green energy, portfolio transformation, and circular economy—are presented in detail. Topics that were no longer identified as material in our materiality analysis but which we consider to be highly relevant to Evonik as a specialty chemicals company are still contained in this report. These are waste management, vocational training and continuing professional development, transportation safety and logistics, and research, development, & innovation. We are retaining our reporting on these topics but will not extend it in the future. The general passage on digitalization, which is no longer classified as material, has been omitted. However, individual aspects such as digital energy management are included as an overarching topic.

In keeping with the GRI Sustainability Reporting Standards, we have written new texts on the management approach for each of the 15 material topics. These include positive, negative, actual, and potential impacts of and on Evonik's activities. In connection with the materiality analysis, we revised our stakeholder management concept. [More](#) .

The strategic messages on sustainability are contained in the chapter headed "Strategy and growth." Further elements of our sustainability management are set out for the first time in the "Basis of reporting." This contains a detailed description of our sustainability governance, our stakeholder management concept, and the process used for our materiality analysis.

One central theme running through this report is the transformation of Evonik. We made further substantial progress with this in 2022. For example, we joined SBTi<sup>2</sup>, set new targets to reduce our footprint and increase our handprint, issued a second green bond, and updated our sustainability governance. The sustainability council now takes the form of an extended executive board meeting and reports directly to the CEO. A chart in the chapter "At a glance"  p.4 shows milestones in the transformation of Evonik since 2015, and a special magazine section provides information on our focus projects in 2022. Our contributions to a sustainable transformation are grouped in four SFAs: fight climate change, drive circularity, safeguard ecosystems, and ensure health & wellbeing. That sharpens our businesses' awareness of the most important sustainability requirements in their markets and facilitates dialogue with customers on these topics.

To further enhance the user-friendliness of this report, we have brought together the information on our handprint and footprint. The content of the former sections "Sustainable products and solutions for our customers" and "CO<sub>2</sub>eq avoided by using Evonik products" can now be found in the chapter headed "Strategy and growth." In the sustainability analysis of our business we outline the core process for strategic portfolio management from a sustainability perspective. The information on scope 3 emissions previously contained in "Governance and compliance" has been relocated to "The environment," where we report on scope 1, 2, and other emissions.

<sup>1</sup> ESRS 1: General principles (exposure draft), April 2022; ESRS 2: General, strategy, governance and materiality assessment (exposure draft), April 2022.

<sup>2</sup> Validation of the targets by SBTi not yet completed.

We link our six areas of action to the Sustainable Development Goals (SDGs) and our own targets. The most important sustainability targets and their status are summarized in a table at the beginning of the report and highlighted in a chart at the end of each chapter. Evonik supports the SDGs and has systematically taken them into account for several years. We have mapped the GRI content index to the 17 SDGs, and the section titled “Basis of reporting” contains an index with the most important SDGs for the Evonik Group, including relevant sub-targets. In addition, we disclose the proportion of sales with which our chemicals businesses contribute to achieving the four SDGs of relevance to Evonik (SDG 3, SDG 6, SDG 12, SDG 13; see “Strategy and growth” [p.19](#)).

In recent years, we have systematically optimized the processes used to compile our sustainability data. Following adaptation of the processes for simultaneous publication of the sustainability report and the financial report (2018), we accelerated the collection of data on the Evonik Carbon Footprint (2020) and the impact valuation (2021). In this report, we present the results of the sustainability analysis of our business for 2022, so there is no longer a one-year time lag. That gives our stakeholders an even more up-to-date view of our sustainability performance.

Transparency, rapid access to data, and a clear structure are important to us. In view of this, we have included overviews of our key sustainability indicators, target attainment, and future targets. The information content has been further enhanced by additional charts. Examples are “Our contribution to the circular economy along the value chain” [c22 p.51](#) and “Our levers to reduce GHG emissions along the value chain”

[c25 p.81](#). The charts “Resources and value contributed by Evonik” [c04 p.13](#) and “Monetary impact valuation of our business” [c48 p.129](#) contain information on the impact of our business activities.

At Evonik, the executive board bears overall responsibility for sustainability, and direct responsibility is assigned to the chief human resources officer. He approved the content of this report and confirmed that it addresses all material sustainability topics of relevance for Evonik and its stakeholders.

You can find information about our commitment to society (corporate citizenship) on our Sustainability website. [More](#)

This report is published in English and German and is available solely in electronic form. It can be downloaded from the Sustainability section of Evonik’s website. [More](#). A multimedia version of the report is also available. [More](#).

[2-4, 2-7, 3-2, 302-1, 302-4, 305-1, 305-2, 305-3, 305-4, 305-5, 305-6, 305-7, 306-1, 306-2, 306-3, 306-4, 306-5](#)

### Data capture, scope of reporting, and limits

Our data cover the relevant companies worldwide that were included in the scope of consolidation<sup>1</sup> for the consolidated financial statements of Evonik Industries AG for the period from January 1 through December 31, 2022. The consolidated financial statements are prepared in accordance with the International Financial Reporting Standards (IFRS). Alongside Evonik Industries AG, they include all material German and foreign subsidiaries directly or indirectly controlled by Evonik Industries AG. Material associates and joint ventures are recognized at equity if Evonik is

able to exert a significant influence. Initial consolidation or deconsolidation takes place as of the date on which the company gains or loses its controlling influence. [2-2, 3-1](#)

In 2022, the Evonik Group comprised 34 German and 129 foreign companies. Relevant data on personnel and social indicators are based largely on the global SAP HR information system. For supplementary information, we use the HR Information Collector (SAP notes management). The focus of our reporting and the reporting boundaries are based principally on the sustainability topics derived from our materiality analysis.

The ecological data in this report comprise emissions and consumption data for 104 production sites in 27 countries. Since 2016, the data have been compiled and evaluated using sustainability reporting software developed specifically for this purpose (SuRe software 2.0). The data for 2022 were also compiled using the SuRe software. By contrast, data analysis and reporting were performed for the first time via the environment module of our global server platform ESTER. Occupational safety data include further small production sites and non-production locations (mainly administration sites), so the data here cover 278 locations in 53 countries. [2-1](#)

Since the sustainability report and the financial report are now published on the same date, the closing date for the environmental data was September 30, 2022. The HR data from the HR Information Collector are also based on the actual data as of the closing date, September 30, 2022. Only the number of hours of continuing professional development has been projected for a twelve-month period.

<sup>1</sup> An overview of all companies included in the consolidated financial statements and all shareholdings pursuant to section 313 paragraph 2 of the German Commercial Code (HGB) is presented in the list of shareholdings. [More](#)

All reporting units are clearly coded to allocate them to organizational and business entities and geographical region. This allows consolidation at management and legal entity levels as well as a more detailed regional analysis of the data. The key data in this report are rounded in line with standard commercial practice. In some cases, this may mean that individual values do not add up exactly to the totals given, and percentages are not an exact reflection of the values stated.

### Material portfolio changes

The production of methionine at our site in Wesseling (Germany) was shut down as of March 31, 2022. At the end of 2021, Evonik Wynca (Zhenjiang) Silicon Material Co., Ltd., a joint venture with the Chinese company Wynca, started up a new production facility for AEROSIL® fumed silica in Zhenjiang (Jiangsu Province, China). This facility was included in our reporting for the first time 2022.

The other portfolio changes, including acquisitions and divestments, did not have a material impact on the environmental data for 2022. [📍 2-4](#)

### Fast close process and corrections

Since the financial report and the sustainability report are published on the same date, we have used a fast close process for our environmental reporting since 2018. For this, we extended our quarterly reporting, and the remaining annual reporting was brought forward to September 30, the Q3 closing date. The annual reporting mainly comprises emissions into the air (excluding CO<sub>2</sub>) and wastewater loads. Quarterly reporting focuses on energy, CO<sub>2</sub>, production volumes, waste, and water requirements, especially with reference to the progress towards attaining our environmental targets.

For the data that is compiled only once a year, the environmental impact is calculated or estimated on a decentralized basis on September 30 for the remainder of the year, i.e., for the fourth quarter. Data input by the sites takes into account any deviations from regular operations in the fourth quarter, such as maintenance shutdowns, seasonal effects, and production forecasts. For the data compiled quarterly, the ESHQ function calculates the fourth quarter (Q4) data centrally on the basis of the data for the first three quarters. Additional, targeted questions on material environmentally relevant facilities are used for this. The Q4 data requests are forwarded to the sites/facilities as usual.

In the first quarter, the ESHQ function compares the actual Q4 data entered in the system with the data forecast or calculated for the fast close report, analyzes any discrepancies, and takes steps to continuously improve calculation methods and processes as necessary. If the difference between the actual and published data is more than 5 percent, the data are corrected in the next report, and a comment is included in the relevant tables.

Naturally, projections for the three months of the fourth quarter are dependent on specific aspects of the environmental topics. In particular, fluctuations and discontinuities may arise in water requirements due to higher consumption in the summer months than in fall and winter, and the volume of waste is affected by cyclical construction activities at our sites. In the future, we therefore want to avoid such projections by optimizing our fast close process. Following the complete implementation of our new ESTER software, we plan to transition stepwise to actual Q4 data, which will enable us to present complete ESHQ data as of year-end in the future. For Q4 2022, we therefore report the actual data on water, waste, and oil for the first time.

Irrespective of the data validation in the fast close process, our ESHQ data are subject to a wide range of internal and external audits and official monitoring. [📍 303-1, 303-2, 303-3, 303-4, 303-5](#)

### GRI

This report has been prepared in accordance with the GRI Sustainability Reporting Standards.

### SASB

In addition, for fiscal 2022, we include a separate index based on the SASB Chemicals Sustainability Reporting Standard [📍 p.146](#).

### TCFD

We closely follow the objectives of the Task Force on Climate-related Financial Disclosures (TCFD). In keeping with our participation in CDP Climate Change, in 2022, we again published detailed strategies, data, and development paths on climate change. In this sustainability report, an overview of key climate-related information is presented using the TCFD structure, divided into the categories governance, strategy, risk management, and metrics and targets [📍 p.135](#).

### External assurance

To ensure that this report is up-to-date, we have included all relevant data available to us as of the editorial deadline on February 21, 2023.

The chapters titled “Strategy and growth,” “Governance and compliance,” “Value chain and products,” “The environment,” “Employees,” “Safety,” and “Further elements of our sustainability management,” and the sections headed “Business model,” “Fiscal 2022,” and “TCFD index” were subject to a limited assurance review by KPMG AG Wirtschaftsprüfungsgesellschaft—with the exception of the information indicated as being outside the scope of this review. The independent practitioner’s limited assurance report is printed on [📍 p.148](#). [📍 2-5](#)

## TCFD index

We continue to closely follow the objectives of the Task Force on Climate-related Financial Disclosures (TCFD). A cross-functional working group regularly examines the TCFD requirements. In keeping with its participation in CDP Climate Change, in 2022 Evonik again published detailed strategies, data, and development paths on climate change. [www.evonik.com/CDP-ClimateChange](https://www.evonik.com/CDP-ClimateChange). Key climate-related information is presented in the following overview using the TCFD structure, divided into the categories governance, strategy, risk management, and metrics and targets.

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### Climate-related information by category

You can find further information here:

#### Governance

Climate change is a matter of the utmost importance for the entire executive board. Direct responsibility for implementing our group-wide sustainability and climate strategy, monitoring, and reporting is assigned to the member of the executive board responsible for sustainability. The head of the Environment, Safety, Health and Quality function regularly reports to the executive board on climate-related issues.

In view of the increasing relevance of sustainability for the management of the Evonik Group, we integrated further ESG aspects into our governance in 2022. For example, the sustainability council—which is responsible for guidance and decision-making on sustainability topics—is now chaired by the chairman of the executive board. Other members, alongside the executive board members, are the heads of the divisions to ensure close alignment with the businesses. The decisions taken by the sustainability council are prepared by the sustainability circle, which comprises representatives of the functions and departments of relevance for sustainability.

The supervisory board addressed sustainability issues at several meetings in 2022, including climate-related aspects and the related disclosures on the EU taxonomy.

The ongoing strategic development of sustainability management at Evonik is also reflected in the remuneration of the executive board and corporate executives: From 2023, the attainment of sustainability targets such as the reduction in our scope 1 and 2 emissions is included as an additional long-term component.

Combined management report, section 5.5 The environment  
[Financial report](#), p. 62 ff.

Sustainability report, chapters The environment (Strategy and management) [p. 80 ff.](#), and chapter Further elements of our sustainability strategy (Organization and management) [p. 123](#)

2022 CDP Climate Change response: Chapter Governance  
<https://www.evonik.com/CDP-ClimateChange>

### Climate-related information by category

You can find further information here:

#### Strategy

Climate and sustainability aspects are integrated into all aspects of our corporate strategy—portfolio management, innovation, and corporate culture. That is illustrated, for example, by our commitment to SBTi. We are committed to the SBTi target “well below 2 °C.” In this way, we support the Paris Agreement on Climate Change.<sup>a</sup>

In the upstream value chain, we consider both our “raw material backpack” and scope 1 and 2 emissions from our production facilities. Measures to reduce our scope 1 and 2 emissions include exiting coal-fired power generation at our site in Marl<sup>b</sup> (Germany), ongoing global development of production processes and infrastructure (Next Generation Technologies), and the transition to renewable energies. Downstream, our products improve our customers’ CO<sub>2</sub> profile. In view of the increasing climate awareness, we expect demand to rise further, with a correspondingly positive impact on our business. Our goal is to increase the proportion of our products with a pronounced sustainability profile (Next Generation Solutions) from 43 percent in 2022 to over 50 percent by 2030.

Climate change involves considerable opportunities and risks for Evonik. We have identified short-, mid- and long-term transformation risks and physical risks. You can find an extensive description of the individual risks in our CDP Climate Change response.

Our contributions to a sustainable transformation are grouped in four Sustainability Focus Areas (SFAs), which include “fight climate change.” Each SFA addresses specific sustainability requirements.

Combined management report, section 1.2 Principles and objectives  
[Financial report](#), p. 19 ff.

Evonik Carbon Footprint  
[www.evonik.com/sustainability](https://www.evonik.com/sustainability)

Sustainability report, chapter The environment (Mitigating climate change) [p. 81 ff.](#), chapter Strategy and growth (Measurability and management) and (Portfolio transformation) [p. 20 ff.](#)

2022 CDP Climate Change response: Chapter Business Strategy  
<https://www.evonik.com/CDP-ClimateChange>

<sup>a</sup> Validation of the targets by SBTi not yet completed.

<sup>b</sup> As a result of the geopolitical situation, we were not able to decommission our coal-fired power plant in Marl as planned in 2022. The effects of the Russian invasion of Ukraine have forced us to keep the capacity in service for the time being to ensure the general reliability of supply.

Climate-related information by category

You can find further information here:

**Risk management**

In keeping with the executive board's overall responsibility, the chief financial officer (CFO) is responsible for ensuring the correct functioning of risk management. To ensure this, we use an integrated, multidisciplinary opportunity and risk management system, which explicitly includes climate-related opportunities and risks. The short- and mid-term opportunities and risks are taken into account in our financial planning. Furthermore, our risk management system includes extreme risks, which are partly due to climate change. Opportunities and risks are identified and evaluated group-wide and measures are taken to control and monitor them.

The risk committee chaired by the CFO meets quarterly. The corporate risk officer reports regularly to the executive board on the opportunities and risks for the Evonik Group, including climate-related risks.

To strengthen the focus on sustainability-related risks and opportunities in our risk identification and reporting, we use our annual risk coordinator conference to raise the awareness of our risk coordinators of the rising significance of these aspects. In many cases, the time horizon for sustainability risks goes well beyond the mid-term period used in our conventional risk management. Therefore, we are currently working on an approach to identify long-term sustainability-related risks and opportunities so that we can define adequate targets and measures to address them. We want to include these opportunities and risks even more effectively in our portfolio and innovation management and our investment activity in the future.

Combined management report, section 6. Opportunity and risk report  
[Financial report](#), p. 81 ff.

2022 CDP Climate Change response: Chapter Risks and opportunities  
<https://www.evonik.com/CDP-ClimateChange>

Sustainability report, chapter Governance and compliance (Opportunity and risk management)  
[p. 31 ff.](#)

Climate-related information by category

You can find further information here:

**Metrics and targets**

Evonik and its predecessor companies have defined ambitious environmental targets since 2004. As a member of SBTi, we have given a commitment to reduce absolute scope 1 and 2 emissions by 25 percent between 2021 and 2030.<sup>a</sup> To achieve our ambitious targets, a wide range of measures are planned. We also aim to reduce scope 3 emissions by 11 percent<sup>b</sup> by 2030. Furthermore, we want to reduce both absolute and specific energy consumption by 5 percent between 2020 and 2025.

Calculation of our CO<sub>2</sub>eq<sup>c</sup> emissions is based on the Greenhouse Gas Protocol.

In 2022, our CO<sub>2</sub>eq emissions were:

- Scope 1: 4.1 million metric tons
- Scope 2: 1.9 million metric tons
- Scope 3: 21.7 million metric tons

Combined management report, section 1.2 Principles and objectives,  
[Financial report](#), p. 19 ff.  
 5.5 The environment  
[Financial report](#), p. 62 ff.

Sustainability report, chapter The environment (Mitigating climate change)  
[p. 81 ff.](#)

2022 CDP Climate Change response: Chapter Targets and performance  
<https://www.evonik.com/CDP-ClimateChange>

<sup>a</sup> Validation of the targets by SBTi not yet completed.

<sup>b</sup> Exact target: 11.07 percent.

<sup>c</sup> CO<sub>2</sub> equivalents.

## SDG index

### Reporting on the targets for the SDGs of relevance for Evonik

Evonik supports the United Nations 17 Sustainable Development Goals (SDGs). Using our own methodology (see “Strategy and growth” [p.19](#)) we have identified the four SDGs that are especially relevant for Evonik.

An SDG is relevant for us if there is a significant positive or negative influence on or by Evonik. Our products and solutions help to achieve the relevant SDGs. We are always aware that our business activities can have critical impacts in some cases. The most relevant SDGs for Evonik are:



### Targets for the SDGs of relevance for Evonik

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Relevant targets	Reference in sustainability report 2022
<b>SDG 3—Ensure healthy lives and promote well-being for all at all ages</b>	
3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination	<ul style="list-style-type: none"> <li>● Strategy and growth <a href="#">p.14, 19</a></li> <li>● Value chain and products <a href="#">p.47</a></li> <li>● The environment <a href="#">p.79, 81, 93</a></li> </ul>
<b>SDG 6—Ensure availability and sustainable management of water and sanitation for all</b>	
6.3: By 2030, improve water quality by reducing pollution, eliminating dumping, and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and substantially increasing recycling and safe reuse globally	<ul style="list-style-type: none"> <li>● The environment <a href="#">p.79, 90</a></li> </ul>
6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawal and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	<ul style="list-style-type: none"> <li>● The environment <a href="#">p.79, 90</a></li> </ul>
6.6: By 2030, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes	<ul style="list-style-type: none"> <li>● The environment <a href="#">p.79, 23</a></li> </ul>
<b>SDG 12—Ensure sustainable consumption and production patterns</b>	
12.2: By 2030, achieve the sustainable management and efficient use of natural resources	<ul style="list-style-type: none"> <li>● Strategy and growth <a href="#">p.14, 22, 23, 19</a></li> <li>● Value chain and products <a href="#">p.47, 54, 56</a></li> <li>● The environment <a href="#">p.79, 81, 87, 90, 93</a></li> </ul>
12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water, and soil in order to minimize their adverse impacts on human health and the environment	<ul style="list-style-type: none"> <li>● Strategy and growth <a href="#">p.14, 19</a></li> <li>● Value chain and products <a href="#">p.47, 56</a></li> <li>● The environment <a href="#">p.79, 81, 87, 90, 93</a></li> </ul>
12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse	<ul style="list-style-type: none"> <li>● Value chain and products <a href="#">p.47, 56</a></li> <li>● The environment <a href="#">p.79, 93</a></li> </ul>
12.6: Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	<ul style="list-style-type: none"> <li>● Strategy and growth <a href="#">p.14, 19</a></li> <li>● Governance and compliance <a href="#">p.25, 32</a></li> <li>● Value chain and products <a href="#">p.22, 47</a></li> </ul>
<b>SDG 13—Take urgent action to combat climate change and its impacts</b>	
13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	<ul style="list-style-type: none"> <li>● Governance and compliance <a href="#">p.26</a></li> </ul>
13.2: Integrate climate change measures into national policies, strategies, and planning	<ul style="list-style-type: none"> <li>● Strategy and growth <a href="#">p.14, 19</a></li> <li>● The environment <a href="#">p.79, 81</a></li> </ul>
13.3: Improve education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning	<ul style="list-style-type: none"> <li>● Strategy and growth <a href="#">p.13, 15</a></li> <li>● The environment <a href="#">p.79, 81</a></li> </ul>

## GRI content index, including the 17 UN Sustainable Development Goals

The following GRI content index is based on the topics of material relevance to Evonik and therefore on the structure of the chapters in this report. The aim is to enhance readability and ensure that topics can be located easily. In the description of the management approaches, we have also increased the focus on topics of relevance to us. Consequently, the GRI indicators are not necessarily presented in ascending order. Instead, they are presented on the basis of our areas of action: strategy and growth, governance and compliance (including an additional management approach on human rights), value chain and products,

the environment, employees, and safety. This report has been prepared in accordance with the GRI Sustainability Reporting Standards. In its Content Index Essentials review, GRI Report Services reviewed that the GRI content index is clearly presented and the references for disclosures 2-1 through 2-5, 3-1, and 3-2 align with the appropriate sections of the report. The review by GRI was based on the German version of this report. Since 2019, we have mapped the 17 UN Sustainable Development Goals to the GRI disclosures.



### GRI content index

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Statement of use	Evonik Industries AG has reported in accordance with the GRI Standards for the period January 1, 2022 to December 31, 2022.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	None

Relevant SDG	GRI Standard/Other Source	Disclosure	Location <sup>a</sup>	Omission		
				Requirement(s) omitted	Reason	Explanation
<b>General Disclosures</b>						
	GRI 2: General Disclosures 2021	2-1	Organizational details	8, 133, 151, 155		
		2-2	Entities included in the organization's sustainability reporting	133. <a href="#">More</a>		
		2-3	Reporting period, frequency, and contact point	132, 155		
		2-4	Restatements of information	16, 17, 133, 134		
		2-5	External assurance	134, 148, 149		
		2-6	Activities, value chain, and other business relationships	11, 24, 42		
8, 10		2-7	Employees	102, 104, 106		
		2-8	Workers who are not employees	102, 119		

<sup>a</sup> Page no. in sustainability report (page no. in financial report. [More](#) ).

Relevant SDG	GRI Standard/Other Source	Disclosure	Location <sup>a</sup>	Omission		
				Requirement(s) omitted	Reason	Explanation
5, 16		2-9 Governance structure and composition	20, 107, 123			
5, 16		2-10 Nomination and selection of the highest governance body	30			
16		2-11 Chair of the highest governance body	30			
16		2-12 Role of the highest governance body in overseeing the management of impacts	30, 125, 128, (81, 98, 106, 108)			
		2-13 Delegation of responsibility for managing impacts	30			
		2-14 Role of the highest governance body in sustainability reporting	9, 123, 127, 128, 133			
16		2-15 Conflicts of interest	30, 41, (98, 111)			
		2-16 Communication of critical concerns	34, 35, 38, 123			
		2-17 Collective knowledge of the highest governance body	30, (113, 115)			
		2-18 Evaluation of the performance of the highest governance body	30, (98). More			
		2-19 Remuneration policies	18, 31, 101. More			
16		2-20 Process to determine remuneration	18, 31, 104. More			
		2-21 Annual total compensation ratio	104			
		2-22 Statement on sustainable development strategy	5, 10, 15, 16			
16		2-23 Policy commitments	26, 27, 32, 44, 123			
		2-24 Embedding policy commitments	26, 28, 33, 34, 35, 36, 37			
		2-25 Processes to remediate negative impacts	28, 33, 34, 35			
16		2-26 Mechanisms for seeking advice and raising concerns	16, 28, 32, 34, 36			
16		2-27 Compliance with laws and regulations	36			
		2-28 Membership of associations	26			
		2-29 Approach to stakeholder engagement	123, 124, 125			
8		2-30 Collective bargaining agreements	105, 107			
<b>Material topics</b>						
	GRI 3: Material Topics 2021	3-1 Process to determine material topics	16, 17, 127, 128, 133			
		3-2 List of material topics	16, 17, 133			

<sup>a</sup> Page no. in sustainability report (page no. in financial report. More ).

Relevant SDG	GRI Standard/Other Source	Disclosure	Location <sup>a</sup>	Omission		
				Requirement(s) omitted	Reason	Explanation
<b>STRATEGY AND GROWTH</b>						
<b>• Portfolio transformation<sup>b</sup></b>						
<b>Economic performance</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	12, 26, 27, 28, 29, 123, 124			
8, 9	GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	12			
13		201-2 Financial implications and other risks and opportunities due to climate change	20, 84, (81, 91)			
		201-3 Defined benefit plan obligations and other retirement plans	105			
		201-4 Financial assistance received from government	49		Confidentiality constraints	We only report on financial assistance received from the EU and Germany.
<b>Market presence</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 103, 123, 124			
1, 5, 8	GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	105			
8		202-2 Proportion of senior management hired from the local community	111			
<b>Indirect economic impacts</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	20, 26, 27, 28, 29, 123, 124			
5, 9, 11	GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	13, 20			
1, 3, 8		203-2 Significant indirect economic impacts	13, 20, (35)			
<b>GOVERNANCE AND COMPLIANCE</b>						
<b>• Responsible management/human rights • Cybersecurity • Responsibility in the supply chain</b>						
<b>Procurement practices</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 42, 123, 124			
8	GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	43			
<b>Anti-corruption</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 123, 124			

<sup>a</sup> Page no. in sustainability report (page no. in financial report. [More](#) ).

<sup>b</sup> Material topic(s).

Relevant SDG	GRI Standard/Other Source	Disclosure	Location <sup>a</sup>	Omission		
				Requirement(s) omitted	Reason	Explanation
16	GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	32, 33, 37			
16		205-2 Communication and training about anti-corruption policies and procedures	37			
		205-3 Confirmed incidents of corruption and actions taken	38			
<b>Anti-competitive behavior</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 123, 124			
16	GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	36			
<b>Tax<sup>c</sup></b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 40, 123, 124			
1, 10, 17	GRI 207: Tax 2019	207-1 Approach to tax	40			
1, 10, 17		207-2 Tax governance, control, and risk management	40			
1, 10, 17		207-3 Stakeholder engagement and management of concerns related to tax	40			
<b>Supplier environmental assessment</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 42, 123, 124			
	GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	45			
		308-2 Negative environmental impacts in the supply chain and actions taken	45			
<b>Non-discrimination</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 108, 123, 124			
5, 8	GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	45, 111		Legal prohibitions	For data protection reasons, it is not possible for us to make all the disclosures required by the GRI.
<b>Freedom of association and collective bargaining</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 42, 103, 123, 124			
8	GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	33, 44, 45, 106			
<b>Child labor</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 123, 124			
8, 16	GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	33, 44, 45, 106			

<sup>a</sup> Page no. in sustainability report (page no. in financial report. More .

<sup>b</sup> Material topic(s).

<sup>c</sup> Voluntary disclosure because this is not a material topic according to the latest materiality analysis.

Relevant SDG	GRI Standard/Other Source	Disclosure	Location <sup>a</sup>	Omission		
				Requirement(s) omitted	Reason	Explanation
<b>Forced or compulsory labor</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 123, 124			
8	GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	43			
<b>Supplier social assessment</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 42, 123, 124			
5, 8, 16	GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	45			
5, 8, 16		414-2 Negative social impacts in the supply chain and actions taken	45			
<b>Public policy</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 41, 123, 124			
16	GRI 415: Public Policy 2016	415-1 Political contributions	41			
<b>Customer privacy</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 40, 123, 124			
16	GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	40, (81, 108)			
<b>VALUE CHAIN AND PRODUCTS</b>						
• Circular economy • Product stewardship <sup>b</sup>						
<b>Materials</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 51, 123, 124			
8, 12	GRI 301: Materials 2016	301-1 Materials used by weight or volume	52			
8		301-3 Reclaimed products and their packaging materials	52			
<b>Customer health and safety</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 56, 123, 124			
	GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	56			
16		416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	56, (81, 108)			
<b>Marketing and labeling</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 56, 123, 124			
12	GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	56			
16		417-2 Incidents of non-compliance concerning product and service information and labeling	56, (81, 108)			

<sup>a</sup> Page no. in sustainability report (page no. in financial report. [More](#) ).

<sup>b</sup> Material topic(s).

Relevant SDG	GRI Standard/Other Source	Disclosure	Location <sup>a</sup>	Omission		
				Requirement(s) omitted	Reason	Explanation
<b>THE ENVIRONMENT</b>						
• Green energy • Mitigating climate change • Biodiversity • Water management <sup>b</sup>						
<b>Energy</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 80, 87, 123, 124			
7, 8, 12, 13	GRI 302: Energy 2016	302-1 Energy consumption within the organization	88, 89, 90			
7, 8, 12, 13		302-3 Energy intensity	90			
7, 8, 12, 13		302-4 Reduction of energy consumption	89, 90			
7, 8, 12, 13,		302-5 Reductions in energy requirements of products and services	90			
<b>Water and effluents</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 80, 90, 123, 124			
6, 12	GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	91, 92, 129			
6		303-2 Management of water discharge-related impacts	91, 92			
6		303-3 Water withdrawal	91, 92	Points b and c	Information unavailable/incomplete	Data are not available
6		303-4 Water discharge	91, 92	Points b and c	Information unavailable/incomplete	Data are not available
6		303-5 Water consumption	91, 92	Points b and c	Information unavailable/incomplete	Data are not available
<b>Biodiversity</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 80, 95, 123, 124			
6, 14, 15	GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	96			
<b>Emissions</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 80, 81, 123, 124			

<sup>a</sup> Page no. in sustainability report (page no. in financial report. More ).

<sup>b</sup> Material topic(s).

Relevant SDG	GRI Standard/Other Source	Disclosure	Location <sup>a</sup>	Omission		
				Requirement(s) omitted	Reason	Explanation
3, 12, 13, 14, 15	GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	82, 85, 88			
3, 12, 13, 14, 15		305-2 Energy indirect (Scope 2) GHG emissions	82, 85, 88			
3, 12, 13, 14, 15		305-3 Other indirect (Scope 3) GHG emissions	85, 86			
13, 14, 15		305-4 GHG emissions intensity	85, 88			
13, 14, 15		305-5 Reduction of GHG emissions	85, 86, 88			
3, 12		305-6 Emissions of ozone-depleting substances (ODS)	85, 87, 88			
3, 12, 14, 15		305-7 Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other significant air emissions	85, 87, 88			
<b>Waste</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 80, 93, 123, 124			
3, 6, 11, 12	GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	94, 129			
3, 6, 11, 12		306-2 Management of significant waste-related impacts	51, 54, 94			
3, 11, 12		306-3 Waste generated	94			
3, 11, 12		306-4 Waste diverted from disposal	93, 94			
3, 11, 12		306-5 Waste directed to disposal	94			
<b>EMPLOYEES</b>						
• Attractiveness as an employer • Employee satisfaction • Diversity and equal opportunity <sup>b</sup>						
<b>Employment</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 99, 100, 103, 108, 123, 124			
5, 8, 10	GRI 401: Employment 2016	401-1 New employee hires and employee turnover	104, 109, 110			
3, 5, 8		401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	105, 106, 118			
5, 8		401-3 Parental leave	106			
<b>Labor/management relations</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 99, 100, 103, 123, 124			
8	GRI 402: Labor/Management Relations 2016	402-1 Minimum notice periods regarding operational changes	107			
<b>Training and education</b>						
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 99, 111, 123, 124			

<sup>a</sup> Page no. in sustainability report (page no. in financial report. [More](#) ).

<sup>b</sup> Material topic(s).

Relevant SDG	GRI Standard/Other Source	Disclosure	Location <sup>a</sup>	Omission			
				Requirement(s) omitted	Reason	Explanation	
4, 5, 8, 10	GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	113				
8		404-2 Programs for upgrading employee skills and transition assistance programs	112				
5, 8, 10		404-3 Percentage of employees receiving regular performance and career development reviews	102				
<b>Diversity and equal opportunity</b>							
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 99, 108, 123, 124				
5, 8	GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	30, 109, (113, 115)				
5, 8, 10		405-2 Ratio of basic salary and remuneration of women to men	104				
<b>SAFETY</b>							
• Occupational and plant safety • Health protection and promotion <sup>b</sup>							
<b>Occupational health and safety</b>							
	GRI 3: Material Topics 2021	3-3 Management of material topics	26, 27, 28, 29, 115, 116, 117, 123, 124				
8	GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	116, 117				
8		403-2 Hazard identification, risk assessment, and incident investigation	32, 33, 117				
8		403-3 Occupational health services	117				
8, 16		403-4 Worker participation, consultation, and communication on occupational health and safety	116, 117				
8		403-5 Worker training on occupational health and safety	116, 117, 119				
3		403-6 Promotion of worker health	105, 119				
8		403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	117, 119				
8		403-8 Workers covered by an occupational health and safety management system	118				
3, 8, 16		403-9 Work-related injuries	116, 117		Point b, iii to iv and points c. and d.	Confidentiality constraints	We do not give figures for accidents and hours worked by contractors' employees.
3, 8, 16			403-10 Work-related ill health	119			

<sup>a</sup> Page no. in sustainability report (page no. in financial report. [More](#) ).

<sup>b</sup> Material topic(s).

## SASB content index

Evonik uses the Sustainability Accounting Standards Board (SASB) Content Index to provide structured information for investors on SASB-relevant topics. In the industry classification system provided by SASB, Evonik is assigned to the SASB Resource Transformation Chemicals industry standard. The SASB Content Index refers to Evonik’s sustainability report, which has been prepared in accordance with the GRI Standards [p. 138](#).

### SASB index

T35

SASB topic & accounting metric	SASB code	Category	GRI disclosure number	Reference point sustainability report
<b>Greenhouse Gas Emissions</b>				
Gross global scope 1 emissions, percentage covered under emissions-limiting regulations	RT-CH-110a.1	Quantitative	305-1	Greenhouse gas emissions ( <a href="#">p. 81 – 87</a> )
Discussion of long-term and short-term strategy or plan to manage scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	RT-CH-110a.2	Discussion and analysis	305	Strategy and management ( <a href="#">p. 80</a> ), Environmental targets ( <a href="#">p. 82</a> ), Climate change ( <a href="#">p. 81</a> ), Our targets ( <a href="#">p. 97</a> )
<b>Air Quality</b>				
Air emissions of the following pollutants: 1. NO <sub>x</sub> (excluding N <sub>2</sub> O) 2. SO <sub>x</sub> 3. Volatile organic compounds (VOC) and 4. Hazardous air pollutants (HAPs)	RT-CH-120a.1	Quantitative	305-7	Other emissions into the air (T10 <a href="#">p. 87</a> )
<b>Energy Management</b>				
1. Total energy consumed 2. Percentage grid electricity 3. Percentage renewable 4. Total self-generated energy	RT-CH-130a.1	Quantitative	302-1-7	Energy data (C28 <a href="#">p. 89</a> ), Energy inputs (T11 <a href="#">p. 90</a> )
<b>Water Management</b>				
1. Total water withdrawn 2. Total water consumed, percentage of each in regions with high or extremely high baseline water stress	RT-CH-140a.1	Quantitative	303-3, 303-5	Water data (C29 <a href="#">p. 92</a> ), Water intake by source (T12 <a href="#">p. 91</a> )
Number of incidents of non-compliance associated with water-quality permits, standards, and regulations	RT-CH-140a.2	Quantitative	307-1, 419-1	Fines and other sanctions ( <a href="#">p. 36</a> ), Internal investigations into compliance violations ( <a href="#">p. 37</a> )
Description of water management risks and discussion of strategies and practices to mitigate those risks	RT-CH-140a.3	Discussion and analysis	303	Water management ( <a href="#">p. 90–92</a> )
<b>Hazardous Waste Management</b>				
Amount of hazardous waste generated, percentage recycled	RT-CH-150a.1	Quantitative	306-2	Waste (T15 <a href="#">p. 94</a> ), Waste management (T14 <a href="#">p. 93</a> )

SASB topic & accounting metric	SASB code	Category	GRI disclosure number	Reference point sustainability report
<b>Community Relations</b>				
Discussion of engagement processes to manage risks and opportunities associated with community interests	RT-CH-210a.1	Discussion and analysis	413-1 und 413-2	How we create value for society (C04 <a href="#">p.13</a> ), Sustainability analysis of our business ( <a href="#">p.20–22</a> ), Impact valuation (C48 <a href="#">p.129</a> ), Stakeholder engagement (C46 <a href="#">p.125</a> ), Voluntary commitments (C08 <a href="#">p.26</a> ), Biodiversity ( <a href="#">p.95–96</a> ), Product stewardship ( <a href="#">p.56–61</a> ), Responsibility within the supply chain ( <a href="#">p.42–46</a> )
<b>Workforce Health &amp; Safety</b>				
1. Total recordable incident rate (TRIR) and 2. Fatality rate for(a) direct employees and (b) contract employees	RT-CH-320a.1	Quantitative	403-9	Lost time injury rate (C39 <a href="#">p.116</a> and G40 <a href="#">p.117</a> )
Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	RT-CH-320a.2	Discussion and analysis	403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-10	Health protection and promotion ( <a href="#">p.117–119</a> ), Product stewardship ( <a href="#">p.56</a> ), Safety ( <a href="#">p.114–121</a> )
<b>Product Design for Use-Phase Efficiency</b>				
Revenue from products designed for use-phase resource efficiency	RT-CH-410a.1	Quantitative		2021 and 2022 findings ( <a href="#">p.20–22</a> ), CO <sub>2</sub> eq avoided by using Evonik products ( <a href="#">p.23</a> ), Portfolio transformation ( <a href="#">p.22</a> ), Sustainability analysis of our business ( <a href="#">p.20–22</a> ), Circular economy ( <a href="#">p.51</a> ), Efficient use of scarce resources ( <a href="#">p.54</a> )
<b>Safety &amp; Environmental Stewardship of Chemicals</b>				
1. Percentage of products that contain Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances 2. Percentage of such products that have undergone a hazard assessment	RT-CH-410b.1	Quantitative		Product stewardship ( <a href="#">p.56</a> )
Discussion of strategy to 1. Manage chemicals of concern and 2. Develop alternatives with reduced human and/or environmental impact	RT-CH-410b.2	Discussion and analysis		Product stewardship ( <a href="#">p.56</a> )
<b>Genetically Modified Organisms</b>				
Percentage of products by revenue that contain genetically modified organisms (GMOs)	RT-CH-410c.1	Quantitative		Product stewardship ( <a href="#">p.61</a> )
<b>Management of the Legal &amp; Regulatory Environment</b>				
Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	RT-CH-530a.1	Discussion and analysis		Our positions ( <a href="#">p.126</a> ), Opportunity and risk management ( <a href="#">p.31</a> ), Opportunity and risk report in the financial report ( <a href="#">p.81</a> )
<b>Operational Safety, Emergency Preparedness &amp; Response</b>				
Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	RT-CH-540a.1	Quantitative	306-2	Process safety incident rate (C41 <a href="#">p.117</a> )
Number of transport incidents	RT-CH-540a.2	Quantitative		Transportation safety and logistics ( <a href="#">p.120</a> )

## Independent Practitioner's Limited Assurance Report

2-5

### Limited Assurance Report of the Independent Auditor Regarding the Sustainability Report

#### To the Executive Board of Evonik Industries AG, Essen:

We have performed an independent limited assurance engagement on the Chapters and Sections marked , except for the disclosures marked as "non-audited", in the Sustainability Report (hereinafter, "SR") of Evonik Industries AG, Essen (hereinafter, "Evonik"), for the period from January 1, 2022 to December 31, 2022.

The contents of the Sub-Section "Impact Analysis" contained in the Section "Further elements of our sustainability management" in the chapter "Basis of reporting" are excluded from the assurance engagement and are marked accordingly as "non-audited" in the SR.

#### Management Responsibilities

The legal representatives of Evonik are responsible for the preparation of the SR in accordance with the reporting criteria.

The reporting criteria comprise in particular:

- The principles and disclosures set out in the Global Reporting Initiative (GRI) Universal Standards 2021 on sustainability reporting.

- The Corporate Accounting and Reporting Standard (Scope 1 and 2) of the World Resources Institute (WRI)
- The GHG Protocol Standard of the World Resources Institute (WRI) and of the World Business Council for Sustainable Development (WBCSD), in which the Methodology for accounting for greenhouse gas emissions along the value chain (Scope 3) is closely aligned
- Article 8 of REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (hereinafter, "EU Taxonomy Regulation") and the supplementing Delegated Acts as well as the interpretation of the wordings and terms contained in the EU Taxonomy Regulation and in the supplementing Delegated Acts by the Company as disclosed in the Section "Sustainable finance" in the chapter "Strategy and Growth" of the SR

The responsibility of the legal representatives includes the selection and application of appropriate methods to prepare the SR and the use of assumptions and estimates for individual disclosures which are reasonable under the given circumstances. Furthermore, the legal representatives are responsible for the internal controls they deem necessary for the preparation of the SR that is free of – intended or unintended – material misstatements.

The EU Taxonomy Regulation and the supplementing Delegated Acts contain wordings and terms that are still subject to substantial uncertainties regarding their interpretation and for which not all clarifications have been published yet. Therefore, the legal representatives have included a description of their interpretation

in the section "Sustainable finance" in the SR. They are responsible for the validity of this interpretation. Due to the innate risk of diverging interpretations of vague legal concepts, the legal conformity of these interpretations is subject to uncertainty.

#### Practitioner Responsibilities

It is our responsibility to express a conclusion with limited assurance on the Chapters and Sections marked with , except for the disclosures marked as "non-audited" in the SR of Evonik.

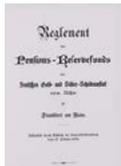
We conducted our work in the form of a limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information", published by IAASB. Accordingly, we have to plan and perform the assurance engagement in such a way that we obtain limited assurance as to whether any matters have come to our attention that cause us to believe that the company's Chapters and Sections marked  (except for the disclosures marked as "non-audited") in the SR for the reporting period from January 1, 2022 to December 31, 2022, have not been prepared, in all material respects, in accordance with the reporting criteria. We do not, however, issue a separate conclusion for each disclosure. As the assurance procedures performed during a limited assurance engagement are less comprehensive than in a reasonable assurance engagement, the level of assurance obtained is substantially lower. The determination of assurance procedures is subject to the auditor's own judgement.



**Responsibility—an integral part of our business for more than 140 years** 📍 2-6

Sustainability has deep roots in the commitment of our predecessor companies. At first, the focus was on **social policy and codetermination**.

- 1875** Insurance coverage for sickness and permanent incapacity to work<sup>a</sup>
- 1884** Introduction of the eight-hour workday<sup>a</sup>
- 1886** Establishment of a pension fund<sup>a</sup>
- 1898** First staff committee<sup>a</sup>



In the 1970s, the focus shifted to **environmental protection and safety**.

- 1979** Introduction of an environmental hotline for employees and local residents<sup>c</sup>
- 1995** Joined Responsible Care®<sup>a</sup>
- 2002** All executives in operating units agree targets for occupational safety<sup>d</sup>
- 2004** Ambitious environmental targets since 2004<sup>d</sup>
- 2013** Start of Safety at Evonik to establish a safety culture



Evonik's first full sustainability report



Extensive **governance and compliance activities**.

- 2004** Code of Conduct<sup>e</sup>
- 2014** Code of Conduct for Suppliers
- 2016** Executive Board Policy Statement on Human Rights
- 2017** Externally run whistleblower system

- 2011** Founding member of the Together for Sustainability initiative

**Dialogue with stakeholders** is becoming increasingly important.

- Since **2011**, various formats have been introduced for dialogue with stakeholders
- 2016** Start of the Evonik Perspectives stakeholder conferences

- 2018** Sustainability Strategy 2020+



- 2017** First impact valuation evaluates the impact of our business from an economic, ecological, and social perspective

**1:13.5 jobs**  
One Evonik employee secures an average of **13.5 jobs** in the value chain



**Employee engagement and creativity** have always been important.

- 1939** Introduction of mailboxes for suggestions on improvements<sup>b</sup>
- 2009–2019** 1,100 ideas submitted by our employees lead to savings of €15 million in the cost of energy, wastewater, waste disposal, and raw materials



Sustainability becomes a **business activity** and unlocks opportunities for growth.

- 1994** Rising demand for products with a reduced environmental impact such as hydrogen peroxide or silica and silanes for "green" tires<sup>a</sup>
- 2016** First sustainability analysis of our business

Evonik is involved in major **sustainability networks and initiatives**.

- 2002** Member of the World Business Council for Sustainable Development
- 2009** Signature of the UN Global Compact
- 2013** Start of involvement in the Chemie<sup>3</sup> initiative



- 2017** First analysis of Evonik's contribution to the UN Sustainable Development Goals (SDGs)

- 2019** Executive board adopts the Sustainability Strategy 2020+, including ambitious environmental targets

- 2020** Integration of sustainability into the strategic management process

- 2022** Next Generation Evonik—Start of the next phase of the strategic transformation

<sup>a</sup> Former Degussa AG (Frankfurt am Main). | <sup>b</sup> Evonik Röhm GmbH. | <sup>c</sup> Former Hüls GmbH. | <sup>d</sup> Former "new" Degussa AG (Düsseldorf). | <sup>e</sup> Replaced the previous Compliance Rules. All elements of this chart are provided as examples.

Principal locations<sup>a</sup> 2-1

T36

No. of employees		2020	2021	2022
<b>Europe, Middle East &amp; Africa</b>				
Marl	Germany	7,098	6,996	7,143
Hanau	Germany	3,335	3,271	3,335
Essen (Goldschmidtstr.)	Germany	1,851	1,934	2,074
Darmstadt	Germany	1,286	1,282	1,351
Rheinfelden	Germany	1,190	1,176	1,146
Antwerp	Belgium	1,024	1,049	1,065
Wesseling	Germany	1,087	1,016	1,020
Essen (Rellinghauser Str.)	Germany	821	836	859
Lülsdorf	Germany	524	527	562
Krefeld	Germany	487	473	495
Herne	Germany	396	396	405
Witten	Germany	264	253	258
Slovenská Ľupča	Slovakia	219	229	242
Steinau	Germany	221	228	236
Ham	France	186	216	222
Lenzing	Austria	161	187	210
Dossenheim	Germany	175	179	186
Offenbach	Germany	166	169	175
Arifiye	Turkey		123	131
Weiterstadt	Germany	114	116	115
Künsebeck	Germany	102	102	107
<b>Asia-Pacific</b>				
Shanghai Xingzhuang	China	719	734	831
Shanghai MUSC	China	414	413	429
Nanning	China	350	351	355
Banyan Ave	Singapore			339
Nanping	China	343	335	327
Selangor	Malaysia	215	277	306
Dombivli	India	277	274	265
IBP	Singapore			216

No. of employees		2020	2021	2022
Taoyuan	Taiwan	157	159	161
Mumbai (Bombay)	India	140	152	158
Changchun	China	139	133	154
Tokyo	Japan	143	138	143
Liaoyang	China	140	138	137
Yokkaichi	Japan	141	140	136
Nanjing	China	111	113	130
Qingdao	China	109	108	102
Singapore	Singapore	637	613	
<b>North America</b>				
Mobile, AL	USA	792	745	745
Lafayette, IN	USA	658	679	681
Parsippany, NJ	USA	296	218	263
Allentown, PA	USA	262	239	260
Birmingham, AL	USA	167	171	220
Greensboro, NC	USA	147	159	171
Mapleton, IL	USA	165	160	142
Etowah, TN	USA	141	137	138
Richmond, VA	USA	132	109	129
Blair, NE	USA	107	105	118
Tonawanda, NY	USA	116	106	114
Hopewell, VA	USA	121	122	104
Philadelphia, PA	USA	114		
Little Rock, AR	USA	111		
Bayport, TX	USA	106		
<b>Central &amp; South America</b>				
São Paulo	Brazil	190	189	197
San José	Costa Rica	104	117	141
Americana	Brazil	123	131	139
Castro - Parana	Brazil	103	103	

As of December 31 of the respective year.

<sup>a</sup> Based on Evonik's region model. Contains locations with >100 employees and covers 85 of the workforce.

## Ratings and indices



Morgan Stanley Capital International (MSCI) has awarded Evonik an AA rating for its sustainability performance. Evonik is therefore in the leader category. We scored particularly highly on corporate governance.



An analysis by the Sustainalytics rating agency ranks Evonik's sustainability performance among the top 10 percent of the roughly 130 chemical companies evaluated.



CDP Climate Change again awarded us a grade of A-, and CDP Water Security awarded us a grade of B. We also participated in CDP Forest, where we were awarded a grade of B. In addition, Evonik was ranked as a CDP Supplier Engagement Leader in 2022.

[www.evonik.com/CDP-ClimateChange](http://www.evonik.com/CDP-ClimateChange)



Evonik's sustainability performance is rated B- by ISS-ESG. Evonik therefore retains its prime status, the highest level awarded, ranking it among the top 10 percent of companies in the chemical sector.



As a founding member of the Together for Sustainability (TfS) initiative, Evonik drives forward transparency and sustainability in the supply chain and is subject to annual assessments. In 2022, the EcoVadis rating agency, a partner of TfS, also awarded us platinum status for our sustainability performance.



Evonik is a member of the FTSE4Good Europe Index and the FTSE4Good Developed Index. These index families of the London-based FTSE Group rate companies in categories such as environmental management, human and labor rights, health and safety, sustainability in the supply chain, and corporate governance.



Evonik is listed in the STOXX® Global ESG Leaders Index. This index lists the best 25 percent of sustainable companies in the investment universe on transparency in environmental, social, and governance performance.



In the Euronext index family of VigeoEiris, which evaluates corporate ESG performance, Evonik is included in the Europe 120 and Eurozone 120 indices. The evaluation is based on up to 330 indicators covering 38 sustainability criteria.



Evonik is included in the Solactive Europe Corporate Social Responsibility Index. The composition of this index is reviewed every six months using the Vigeo Eiris ESG methodology. This covers ecological and social aspects and corporate governance.

## Sustainability awards



The communications team at Evonik's site in Hanau-Wolfgang (Germany) won third place in the national Responsible Care® competition "Dialogue—Our contribution to transparency" organized by the German chemical industry association (VCI).



Evonik won the Ringier Coating Technology Innovation Award 2022 for its new defoamer TEGO® Foamex 812, which was developed specifically for aqueous paint and printing ink formulations.



The League of American Communications Professionals (LACP) presented Evonik with the Vision Award in platinum for its sustainability report 2021.



At the ARC Awards, Evonik's sustainability report 2021 was awarded silver in the PDF category and honors in the microsite category.



Evonik's sustainability report 2021 won gold in the FOX Award and FOX Visuals.

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## List of abbreviations

<b>CAP</b>	Cyberattack protection	<b>GHG</b>	Greenhouse gas	<b>RD&amp;I</b>	Research, Development & Innovation
<b>Cefic</b>	Conseil Européen des Fédérations de l'Industrie Chimique	<b>GHS</b>	Global harmonized system	<b>REACH</b>	Registration, Evaluation, Authorisation, and Restriction of Chemicals
<b>CLP</b>	Classification, Labelling and Packaging of Substances and Mixtures	<b>GPS</b>	Global Product Strategy	<b>RSPO</b>	Roundtable on Sustainable Palm Oil
<b>CMS</b>	Chemicals Management System	<b>GRI</b>	Global Reporting Initiative	<b>SASB</b>	Sustainability Accounting Standards Board
<b>CSS</b>	Chemicals Strategy for Sustainability	<b>ICCA</b>	International Council of Chemical Associations	<b>SBTi</b>	Science Based Targets initiative
<b>EAGER</b>	Evonik Assessment of Greenhouse Gas Emission Reduction	<b>IDW</b>	German Institute of auditors	<b>SDG</b>	UN Sustainable Development Goal
<b>EFRAG</b>	European Financial Reporting Advisory Group	<b>IED</b>	Industrial Emissions Directive	<b>SFA</b>	Sustainability Focus Area
<b>EnMS</b>	Energy Management System	<b>ILO</b>	International Labour Organization	<b>SSbD</b>	Safe and Sustainable by Design
<b>ESHQ</b>	Environment, Safety, Health & Quality	<b>IOOI model</b>	Input-output-outcome-impact model	<b>TCFD</b>	Task Force on Climate-related Financial Disclosures
<b>ESHQE</b>	Environment, Safety, Health, Quality and Energy	<b>LILY</b>	Learning and Individualized Library	<b>Tfs</b>	Together for Sustainability
<b>ESPR</b>	Ecodesign for Sustainable Products Regulation	<b>MAF</b>	Mixture assessment factor	<b>TNFD</b>	Task Force on Nature-related Financial Disclosures
<b>ESRG</b>	European Sustainability Reporting Guidelines	<b>MTBE</b>	Methyl-tert-butylether	<b>VCI</b>	German chemical industry association
<b>ESRS</b>	European Sustainability Reporting Standards	<b>OT</b>	Operational technology	<b>VOC</b>	Volatile organic compounds
<b>ESTER</b>	Evonik Standard Tool ESHQ and Reporting	<b>PARC</b>	Product-application-region combination	<b>WBCSD</b>	World Business Council for Sustainable Development
		<b>PPA</b>	Power purchase agreement		
		<b>PSA</b>	Portfolio Sustainability Assessment		

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As of: February 21, 2023.

