

# SUSTAIN ABILITY REPORT 2019

Leading Beyond Chemistry

# CONTENTS



## INTERACTIVE PDF

Optimized for use with Adobe Acrobat.

### 3 AT A GLANCE

- 3 Top 10 sustainability targets
- 4 Foreword
- 5 Short profile of Evonik
- 6 History of sustainability at Evonik
- 7 Our business model
- 8 Fiscal 2019



### STRATEGY AND GROWTH 10

- 11 Our Sustainability Strategy 2020+
- 12 How Evonik creates value for society
- 17 UN Sustainable Development Goals of relevance for Evonik
- 18 Engaging with our stakeholders
- 21 Our materiality analysis
- 22 Our targets



### GOVERNANCE AND COMPLIANCE 24

- 25 Responsible corporate governance and human rights
- 32 Our targets



### VALUE CHAIN AND PRODUCTS 33

- 34 Responsibility within the supply chain
- 37 Research & development/innovation
- 39 Efficient use of scarce resources/circular economy
- 43 Sustainable products and solutions for our customers
- 45 Product stewardship
- 48 Our targets



### THE ENVIRONMENT 49

- 50 Strategy and management
- 52 Climate change
- 56 Water management
- 58 Waste management
- 59 Biodiversity
- 60 Our targets



### EMPLOYEES 61

- 62 Strategy and management
- 63 Appeal as an employer
- 66 Diversity and equal opportunity
- 68 Vocational training and continuing professional development
- 69 Health protection and promotion
- 71 Our targets



### SAFETY 72

- 73 Strategy and management
- 74 Occupational safety
- 74 Plant safety
- 75 Transportation safety and logistics
- 76 Our targets

### 77 COMMITMENT TO SOCIETY

#### 80 BASIS OF REPORTING























- 80 Overview of sustainability indicators for the Evonik Group
- 81 Status of our sustainability targets for 2019
- 82 About this report
- 85 TCFD index
- 86 SDG index
- 87 GRI content index
- 97 Independent practitioner's limited assurance report


#### 99 FURTHER INFORMATION

- 99 Principal locations
- 100 Ratings and indices 2019
- Sustainability awards
- 101 List of tables and charts
- 102 Credits

Top 10 sustainability targets  102-14, 102-15

C01

Sustainability areas of action	SDGs of relevance for Evonik	Top 10 strategy targets	KPIs for each area of action	Status 2019
<p> <b>Strategy and growth</b></p> <p>Sustainable business activities and responsible conduct are cornerstones of our business model.</p>	   	<ul style="list-style-type: none"> <li>Complete the sustainability analysis of our business 2.0 by year-end 2020</li> </ul>	<ul style="list-style-type: none"> <li>No. of PARCs where analysis has been completed</li> </ul>	60 <sup>a</sup>
<p> <b>Governance and compliance</b></p> <p>Reliable and responsible management of the company is the basis for our long-term business success, fair competition, and acceptance by society.</p>	 	<ul style="list-style-type: none"> <li>27.3 percent women at the first management level below the executive board and 25.0 percent at the second management level by year-end 2020</li> </ul>	<ul style="list-style-type: none"> <li>Women at the first and second management levels below the executive board</li> </ul>	26.1%/24.1%
<p> <b>Value chain and products</b></p> <p>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.</p>	  	<ul style="list-style-type: none"> <li>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</li> <li>Increase sales of products and applications developed in the past five years to 16 percent in the mid term</li> <li>Establish a risk estimate for &gt;99 percent of substances placed on the market in quantities of &gt; 1 metric ton p.a. by year-end 2020</li> </ul>	<ul style="list-style-type: none"> <li>Suppliers of raw materials covered by TFS assessments<sup>b</sup></li> <li>Sales generated with products and applications developed in the past five years</li> <li>Risks estimates for substances placed on the market in quantities of &gt;1 metric ton p.a.</li> </ul>	66% 13% 85%
<p> <b>The environment</b></p> <p>Maintaining the natural basis of life for future generations is part of our corporate responsibility.</p>	   	<ul style="list-style-type: none"> <li>Reduce absolute scope 1 and scope 2 emissions by 50 percent by 2025 (reference base: 2008)</li> <li>Reduce absolute scope 3 emissions from the upstream value chain—principally from the “carbon backpack”—by 15 percent by 2025 (reference base: 2020)</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in greenhouse gas emissions (scope 1/2)</li> <li>Reduction in scope 3 emissions</li> </ul>	-42% --
<p> <b>Employees</b></p> <p>Our employees are the basis of our success. Their professional qualifications and commitment are their key attributes and make Evonik strong.</p>		<ul style="list-style-type: none"> <li>Occupational health performance index ≥ 5.0</li> </ul>	<ul style="list-style-type: none"> <li>Occupational health performance index</li> </ul>	5.5%
<p> <b>Safety</b></p> <p>Safety has priority over sales and profits at Evonik.</p>	 	<ul style="list-style-type: none"> <li>Accident frequency rate should be ≤ 1.30 Target for 2020 and subsequent years</li> <li>Incident frequency rate should be ≤ 1.10 Target for 2020 and subsequent years</li> </ul>	<ul style="list-style-type: none"> <li>Accident frequency rate</li> <li>Incident frequency rate</li> </ul>	1.18 1.10

You can find an overview of Evonik’s principal sustainability indicators in the chapter “Basis of reporting”  p. 80.

<sup>a</sup> Total PARCs at year-end 2019: 229. | <sup>b</sup> Annual procurement volume >€1,000 thousand.

## Foreword

102-14, 102-32

### Ladies and gentlemen:

As a leading global specialty chemicals company, we made a promise to you: We will strive to be a best-in-class specialty chemicals company and to earn money with products and solutions that provide answers to tomorrow's pressing problems. Our aspiration extends well beyond today. We stand by it, especially in the face of the powerful transformation affecting all areas of our lives as a result of progressive digitalization and the transition to climate-neutral production methods and forms of consumption.

That entails significant challenges for our company. Challenges that are linked to high expectations. Because chemistry has always been an enabler of progress in many other sectors. Our innovations help ensure that electric cars drive, and wind turbines rotate. They are vital to ensure future generations inherit a planet that provides a decent basis for life. That includes protecting the climate and the environment, as well as maintaining prosperity and social stability.

To make sure this is not simply empty talk but is translated into action, we need metrics and ambitious targets. In the reporting period, we worked intensively on both of these aspects. At the beginning of 2019, we adopted a climate and sustainability policy that sets the bar for Evonik even higher than the German government's plans for the country as a whole. We want to halve absolute emissions between 2008 and 2025, and greatly increase the sales generated with particularly sustainable products. To achieve this, we have refined the tool used for the sustainability analysis of our portfolio and integrated it into our ongoing strategy dialogues.

We are doing this because we are convinced that there are close links between environmental protection and sustainability, growth and prosperity. Rising efficiency improves profitability, while innovative strength makes us fitter for the future. That is most effective when networking links people with different capabilities in meaningful ways, when new elements are created at the interface between disciplines and markets that were previously viewed in isolation, when today's decisions anticipate tomorrow's needs.



**CHRISTIAN KULLMANN**  
Chairman of the Executive Board



**THOMAS WESSEL**  
Chief Human Resources Officer

For us, being a best-in-class specialty chemical company does not simply mean creating new molecules. It means improving life for as many people as possible. Day by day. Today and for the future.

That aspiration is highlighted by the title of Evonik's twelfth full sustainability report. And it is not simply the title of our report; it also expresses our pledge as a company:

### Leading beyond chemistry

Christian Kullmann

Thomas Wessel

# We accept responsibility

We are convinced that only companies that act responsibly and create value for society can be successful in the long term. Our products and solutions help our customers meet their sustainability goals and position themselves for the future. For that we rely, above all, on our innovative capability. Sustainability has long been a growth driver in many of our businesses. We achieve above-average growth rates with those products and solutions that offer particular sustainability benefits.

**€13.1** billion sales

**€2.15** billion adjusted EBITDA

approx. **32** thousand employees

## Shareholder structure

C02

Free float 41.1%

thereof sustainability investors = 14%

RAG-Stiftung 58.9%



As of January 2020

## Living better with Evonik

102-7

We do quite a lot to make things better. What exactly?  
Here are some examples.  
We make ...



**CAR TIRES**  
more fuel efficient



**TABLETS**  
more effective



**GASOLINE ENGINES**  
more efficient



**INSULATING MATERIALS**  
thinner



**FOOD**  
healthier



**HAIRCARE**  
gentler



**AIRPLANES**  
lighter



**DETERGENTS**  
more effective



**WIND TURBINES**  
more durable



**BRIDGES**  
more weatherproof

If you'd like to know what else gets better with Evonik specialty chemicals:  
[www.better-with-evonik.com](http://www.better-with-evonik.com)

**Responsibility—an integral part of our business for more than 140 years** 102-12

C03

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

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

**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

- 2017** First impact valuation evaluates the impact of our business from an economic, ecological, and social perspective



Evonik's first full sustainability report



- 2011** Founding member of the Together for Sustainability initiative



**1:7.9 jobs**  
One Evonik employee secures an average of 7.9 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)

**Sustainability Strategy 2020+** adopted.

- 2019** Integration of sustainability into Evonik's strategic management processes. Ambitious CO<sub>2</sub> target for 2025. Introduction of carbon pricing for investments

<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.

## Our 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, and working closely with customers.

Around 80 percent of sales come from **market-leading positions**<sup>1</sup>, which we are systematically expanding. Our strong competitive position is based on close collaboration with customers, high 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 our customers enables us to build up a **deep knowledge** of their business, so we can offer products tailored to their specifications. Our technology centers and customer competence centers play an important role in this around the world.

Market-oriented research and development is a key driver of profitable growth. This is based on our strong **innovation culture**, which is rooted in our innovation management and management development.

Highly trained **employees** are a key success factor. They drive forward the company on a daily basis through their hard work and identification. 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.

### Corporate structure

C04

Segments	Nutrition & Care	Resource Efficiency	Performance Materials	Services	Evonik Group <sup>a</sup>
Sales (in € million)	4,582	5,685	2,043	763	13,108
Employees	8,090	10,153	1,622	12,091	32,423

<sup>a</sup> Including others/consolidation.


As preconditions for Evonik's future viability, **sustainable business activities and responsible conduct** are cornerstones of our business model. We drive forward our sustainability activities along the value chain in intensive dialogue with our stakeholders. As well as our own production processes and the products we market, we always consider the supply chain and the product benefits for our customers and their customers. We have observed rising demand for products that demonstrate a good balance of economic, ecological, and social factors. That opens up a broad spectrum of future-oriented business opportunities for Evonik in attractive markets.

In the light of this, we are systematically implementing our new Sustainability Strategy 2020+. Key elements are integrating sustainability into strategic management processes, carbon pricing for all investments, and ambitious targets for the reduction of CO<sub>2</sub> emissions and the introduction of global water management.

### New corporate structure

In the reporting period, our specialty chemicals operations were divided into three chemical manufacturing segments. The **Nutrition & Care** and **Resource Efficiency** segments operate principally in attractive markets. Both segments offer customers customized, innovation-driven solutions and the aim is for them to achieve above-average, profitable growth through innovations, investments, and acquisitions.

The **Performance Materials** segment 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. Our strategic goal for this segment is to contribute earnings to finance the growth of the Evonik Group. Investments and, where appropriate, alliances concentrate on securing and extending our good market positions.

As of July 1, 2020, our corporate structure will be reorganized and aligned to our four growth engines: Specialty Additives, Animal Nutrition, Health & Care, and Smart Materials. The size and profitability of the new chemical divisions will be more balanced and they will be easier to manage thanks to a clearer alignment to technology platforms.  [102-15](#), [102-6](#)

### Digitalization contributes to profitable growth


Digitalization includes fundamental changes to processes in the chemical industry. For example, it is altering processes in the procurement of raw materials, the operation of production facilities, in marketing and sales, and research and development. The use of artificial intelligence, for instance, the planning and optimization of production facilities, offers potential for an enormous improvement in efficiency and effectiveness.

<sup>1</sup> We define these as ranking 1st, 2nd, or 3rd in the relevant markets.



Evonik is driving forward digitalization throughout the Group. We regard digitalization as a structural task and are networking the various decentralized initiatives to make sure that different organizational units and their digital projects can learn from each other and to promote the growth of broadly based digital expertise at Evonik.

Our activities are grouped in four clusters (#CognitiveSolutions, #DigitalBusiness, #SmartOperations, #HumanWork). These are all geared to raising the efficiency of our processes and utilizing opportunities. Our guiding principles for digitalization set out how we intend to embrace digitalization.

The role of Evonik Digital GmbH is to test new business models and solutions quickly and flexibly in order to evaluate their benefits. In particular, it develops powerful e-commerce solutions and platforms and digital service offerings. These projects are the basis for establishing, bundling, and expanding digital expertise and agile working methods. Great importance is attached to upskilling our employees for the digital world. You can find information about how digital networking is changing the way we work in the chapter "Employees"  p. 62.

Digitalization is strengthening our competitiveness through new business models and solutions. For example, Evonik wants to use a knowledge- and data-based approach to improve health, animal welfare, and productivity in poultry farming. Linking our competencies in animal nutrition and digital technologies enables us to support our customers in livestock farming by offering extensive recommendations based on detailed data analyses.

## Fiscal 2019

**Evonik held up well in a challenging economic environment and achieved its forecast for key performance indicators. Demand for our specialty chemical products remained strong worldwide.**

In all, **sales** slipped 1 percent to €13,108 million, with volumes and selling prices down slightly. **Adjusted EBITDA** was around the prior-year level at €2,153 million. Positive effects came from cost-cutting measures and the initial application of IFRS 16 Leases. However, earnings were held back by price erosion in the Nutrition & Care and Performance Materials segments. The **adjusted EBITDA margin** improved to 16.4 percent (2018: 16.2 percent), but was nevertheless below the target mid-term range of 18 percent to 20 percent. ROCE declined, principally as a consequence of lower EBIT, accompanied by an increase in capital employed to 8.6 percent, and ROCE was below the cost of capital.

Our **financial profile** is still very good: Evonik has a solid investment grade rating. Net financial debt was reduced significantly.

### Total value added

Value added is calculated from sales and other revenues less the cost of materials, depreciation, amortization, and other expenses. Overall, value added increased 26 percent to €5,994 million in 2019. The largest share of value added—53 percent (2018: 69 percent)—went to our employees. 8 percent (2018: 6 percent) was paid to the state in income and other taxes. A further 4 percent (2018: 4 percent) went on interest payments. Shareholders of Evonik Industries AG received 35 percent of value added (2018: 20 percent).

## AT A GLANCE

Fiscal 2019

### Breakdown of value added


T01

in € million	2018	2019
Total value added	4,740	5,994
<b>Split</b>		
Employees	3,279	3,156
State	307	490
Creditors	200	221
Non-controlling interests	22	21
<b>Net income</b>	<b>932</b>	<b>2,106</b>

### Major events

On July 31, 2019, we divested the **methacrylates business** to Advent International Corporation, Boston (Massachusetts, USA). This business comprised large-volume monomers such as methyl-methacrylate (MMA), various specialty monomers, and the PLEXIGLAS® brand of PMMA molding compounds and semi-finished products. Most of the business was allocated to the Performance Materials segment, and a small part was allocated to the Resource Efficiency segment.

At the end of 2018, Evonik signed an agreement with One Equity Partners to acquire the US company PeroxyChem. **PeroxyChem** is a manufacturer of hydrogen peroxide and peracetic acid and is well-positioned in high-margin specialty applications. The acquisition of PeroxyChem was planned for summer 2019 but was delayed by a lawsuit filed by the Federal Trade Commission (FTC) in the USA. The case was dismissed in January 2020, and the US\$640 million acquisition was closed on February 3, 2020.

 [102-2](#), [102-7](#), [102-10](#), [102-15](#), [103-2](#), [201-1](#)





CASE STUDY

## Evonik is expanding its business with environment-friendly oxidation agents

Hydrogen peroxide and peracetic acid are two of the most versatile and environment-friendly oxidation agents on the market. Evonik is acquiring PeroxyChem to strengthen its activities in this field.

PeroxyChem is a manufacturer of hydrogen peroxide ( $H_2O_2$ ) and peracetic acid (PAA) and is well-positioned in high-margin specialty applications, for example, in the environmental, food processing, and electronics sectors where cyclical demand is low. The company is headquartered in Philadelphia (Pennsylvania, USA) and employs around 600 people worldwide. Evonik successfully completed the acquisition of PeroxyChem in early February 2020.

The market for  $H_2O_2$  and PAA is currently benefiting from the trend towards environmentally friendly products and solutions.  $H_2O_2$  is a sustainable, resource-efficient chemical used in oxidation reactions, bleaching processes in the pulp, paper, and textile industries, the treatment of wastewater and exhaust gases, and various disinfectant applications. During processing, hydrogen peroxide only splits into hydrogen and water. Consequently, it is often referred to as a genuinely "green" chemical.

$H_2O_2$  and PAA are two of the most versatile, reliable, and environment-friendly oxidation agents.

The decomposition product of PAA is acetic acid, which is readily biodegradable in water. Moreover, it is not bioaccumulative. Against this backdrop, PeroxyChem successfully started up a wastewater treatment plant using PAA in Memphis (Tennessee, USA) in 2019 and signed a long-term supply agreement with the City of Memphis.



$H_2O_2$  and PAA are used for oxidation, sterilization, and disinfection.

### Fast-growing and innovative

Hydrogen peroxide is one of Evonik's oldest products. It is also one of the fastest-growing and most innovative areas of business. Evonik is a world-leading manufacturer of  $H_2O_2$ , PAA, and persulfates with 18 production facilities and capacity of more than 1 million metric tons a year. In recent years, Evonik has steadily extended its business with  $H_2O_2$  and related products. One example is the innovative hydrogen peroxide to propylene oxide (HPPO) process developed by Evonik in collaboration with thyssenkrupp. This is a cost-effective and environment-friendly method of synthesizing propylene from hydrogen peroxide and propylene using a special Evonik catalyst. Propylene is a starting product for polyurethane, which is used in insulating walls, mattresses, and car upholstery.

**i** **SUSTAINABLE PRODUCTS**  
.....  
According to our stakeholders, sustainable products/solutions for our customers is one of the three most important sustainability issues for Evonik.<sup>1</sup>

<sup>1</sup> See our materiality analysis in the chapter "Strategy and growth" p.21 f.

## STRATEGY AND GROWTH ✓



Evonik aims to be a best-in-class specialty chemical company. Our Sustainability Strategy 2020+ is an expression of this aspiration, including ambitious environmental targets and an understanding of how to translate sustainability into profitability.



SDGs of particular relevance for Evonik

### KEY TOPICS ▶

- Strategy and growth
- Digitalization<sup>1</sup>

**1:€4.27**    **1:7.9 jobs**    **1:€1.82**

Every €1 value added by Evonik creates a total of €4.27 added value for society<sup>2,3</sup>

Each Evonik employee secures an average of 7.9 jobs in the value chain<sup>3</sup>

Every €1 value added by Evonik results in public revenue of €1.82<sup>3,4</sup>

<sup>1</sup> See chapter "At a glance" p.7 f.

<sup>2</sup> Impact valuation of our business in 2019 along the value chain (excluding the methacrylates business) 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> Data outside the scope of the limited assurance review.

<sup>4</sup> The total includes Evonik's direct impact.



## STRATEGY AND GROWTH

- |           |   |   |
|-----------|---|---|
| <b>11</b> | <b>Our Sustainability Strategy 2020+</b>                        | <b>1</b> 103-1, 103-2, 102-18, 102-19, 102-20, 102-22, 102-29, 102-32 |
| 11        | Organization and management                                     |   |
| <b>12</b> | <b>How Evonik creates value for society</b>                     | <b>1</b> 103-1, 102-7, 102-15, 102-29, 201-1, 203-2                   |
| 12        | Resources and value contributed                                 |   |
| 12        | Impact valuation  |   |
| 14        | Sustainability analysis of our business 2.0                     |   |
| 17        | Life cycle assessments  |   |
| <b>17</b> | <b>UN Sustainable Development Goals of relevance for Evonik</b> |   |
| <b>18</b> | <b>Engaging with our stakeholders</b>                           | <b>1</b> 102-40, 102-42, 102-43, 102-44, 102-21, 102-37               |
| <b>21</b> | <b>Our materiality analysis</b>                                 | <b>1</b> 102-44, 102-46, 102-47, 102-48, 102-49                       |
| <b>22</b> | <b>Our targets</b>  | <b>1</b> 102-14, 102-15   |

## Our Sustainability Strategy 2020+

**We developed our Sustainability Strategy 2020+ in constant dialogue with our stakeholders. Their views are also included in our materiality analysis and the determination of the UN Sustainable Development Goals (SDGs) of relevance for Evonik.**

Evonik's aim is to be a best-in-class specialty chemicals company. Our Sustainability Strategy 2020+ is an expression of this aspiration, including ambitious environmental targets and an understanding of how to translate sustainability into profitability. More and more customers expect us to support them in the development of resource-saving applications and help them achieve their sustainability goals.

The Sustainability Strategy 2020+ was adopted by the executive board in February 2019. Since then, the development of the further details of this strategy and its implementation have focused on the following building blocks:

- New environmental targets (see chapter "The environment" [p. 51](#)).
- Integrating sustainability into strategic management processes (sustainability analysis of our business 2.0, [p. 14 ff.](#), business line strategy dialogues).
- Systematic focus on the impact of our business activities along the value chain (impact valuation [p. 12 ff.](#)) and on the UN Sustainable Development Goals (see [p. 17](#)).
- Continuous improvement of our sustainability reporting (see "About this report" [p. 82 ff.](#)).
- Giving sustainability a firm place in Evonik's market proposition and purpose.

## STRATEGY AND GROWTH

Our Sustainability Strategy 2020+

Extensive transparency and soundly based analytical methods are our response to the growing interest shown by key stakeholders in corporate sustainability. Alongside potential future opportunities and risks, this highlights the value created for society by Evonik's business activities. Overall, that is a key factor in ensuring acceptance of new technologies and industrial production.

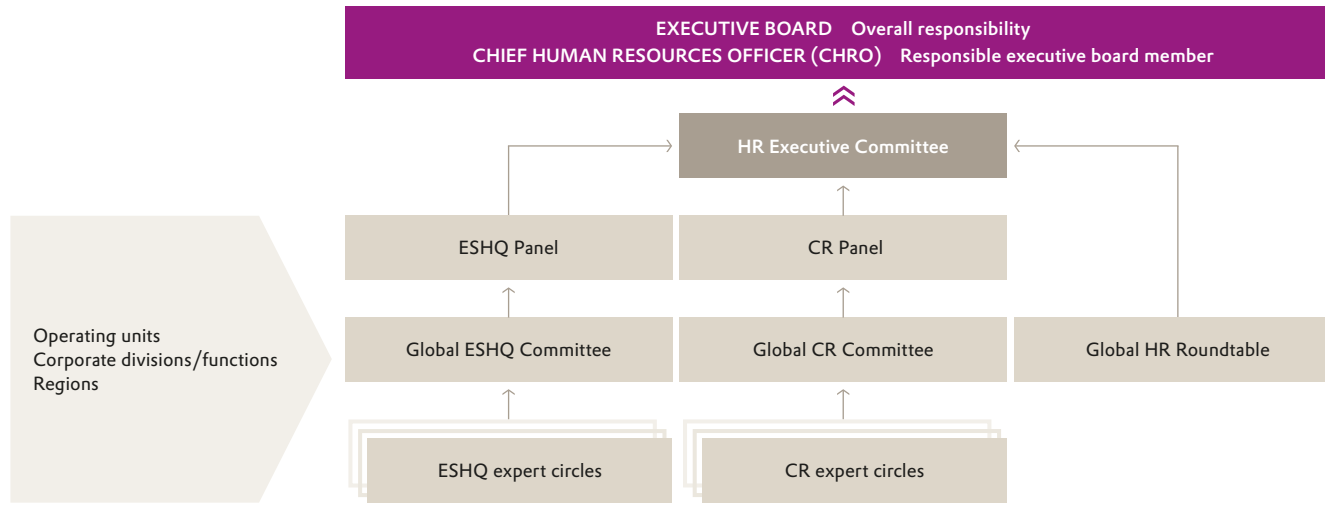
### Organization and management

The executive board bears overall responsibility for sustainability at Evonik. Direct responsibility is assigned to the chief human resources officer, who is also responsible for all climate-related aspects. The Corporate Responsibility division sets the strategic framework for sustainability management and coordinates group-wide implementation in close collaboration with other central functions and the operating segments.

Responsibility for sustainability management at Evonik is set out in a corporate policy. The HR Executive Committee monitors the global implementation of Evonik's sustainability strategy. The committee comprises the chief human resources officer, the industrial relations directors of the segments, and the heads of Corporate ESHQ, Corporate Responsibility, and Corporate Human Resources.

Sustainability governance structure at Evonik 102-22, 103-2

C05



ESHQ = Environment, Safety, Health and Quality  
 CR = Corporate Responsibility  
 HR = Human Resources

Decision-making competence for group-wide sustainability projects is delegated to the CR Panel, which is chaired by the head of Corporate Responsibility. The members are the strategic CR partners of the segments, the corporate functions, and representatives of the workforce. As defined in its rules of procedure, the CR Panel meets at least twice a year. The work of the CR Panel is supported by the global corporate responsibility committee, which is responsible for the operational realization and promotion of sustainability aspects. Where necessary, specialist input is provided by project-based CR expert circles.

## How Evonik creates value for society

**The aim of our sustainability strategy is to gain a precise understanding of the principal influences and impacts on the value created by Evonik. In recent years, we have systematically extended our view to include the entire value chain.**

### Resources and value contributed

In 2017, we conducted the first workshops with individual product managers to analyze the potential opportunities and risks of the value chains of relevance for their business. The focus was on scenarios involving potential disruptive developments in the markets examined, especially in respect of the changing expectations of our customers' customers.

<sup>1</sup> Outside the scope of the limited assurance review by PwC.

Chart C06 (see p.13) shows the resources and value contributed by Evonik along the value chain. In the reporting period, we intensified these observations and summarized them by comparing the resources required for our business activities, on the one hand, and specific value contributions on the other.

### Impact valuation<sup>1</sup>

As an industrial company, it is important for Evonik to intensively monitor the impact of its own business activities. We use an impact valuation to regularly measure and analyze the direct and indirect impact of our business activities from an economic, ecological, and social perspective. This analysis is designed to supplement established internal strategic business analyses. Early identification of future opportunities and risks makes our business model more resilient and sharpens understanding of the long-term value that our activities create for society. 102-29

This procedure provides an insight into

- the scale of the ecological, social, and macroeconomic impact of our corporate activities;
- Evonik's benefits for society as a whole; and
- the key levers to reduce unwanted impacts and maximize desirable impacts along our value chain.

We pay special attention to the macroeconomic contributions and ecological and social impact of our business activities in our regions.



Resources and value contributed in 2019  203-1, 203-2

Our resources >>

Society

**32,423** employees  
**approx. 29,000** customers  
**approx. 30,000** suppliers

The environment

**63.49 PJ** energy inputs  
**534 million m<sup>3</sup>** water intake

Employees

**101** nationalities  
**25.7%** female employees (Evonik Group)  
**26.1%/24.1%** female managers at the 1st/2nd management level below the executive board

Financials

**€6,435 million** property, plant and equipment  
**€842 million** capital expenditures

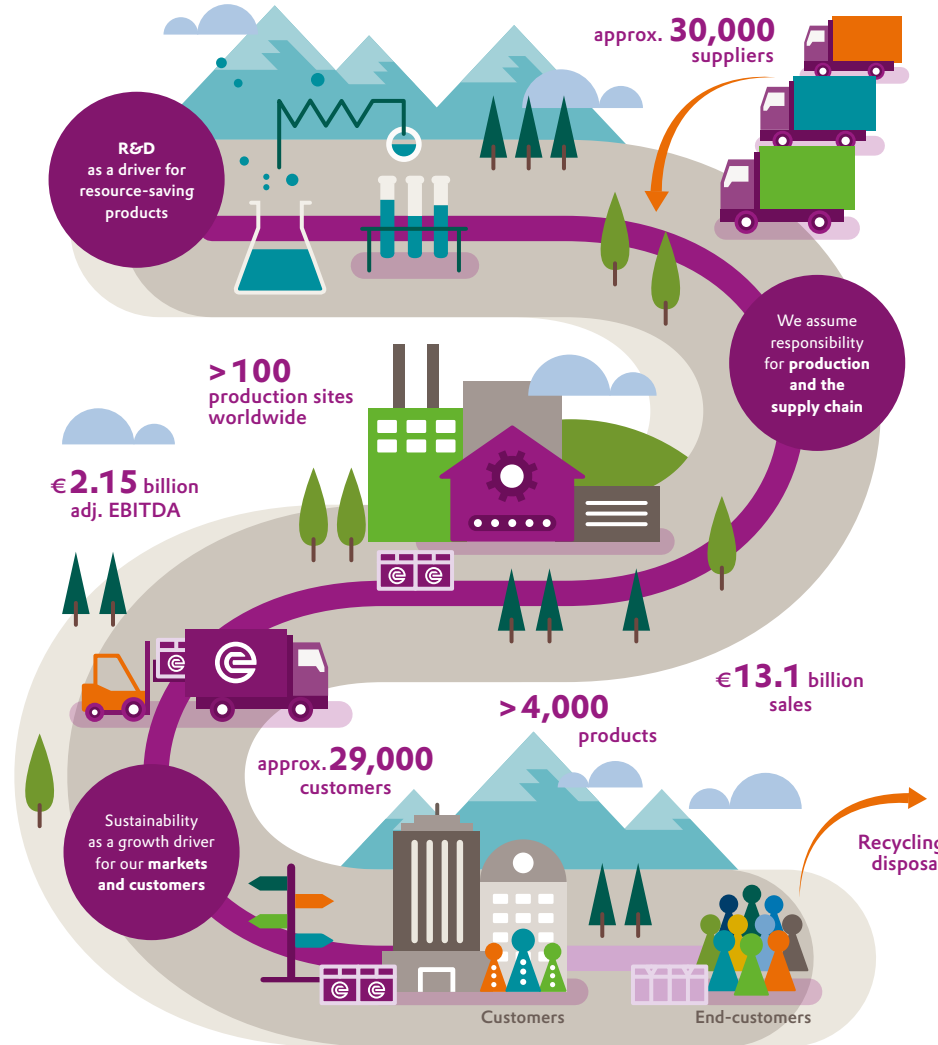
Knowledge

**approx. 24,000** patents  
**approx. 2,560** R&D employees  
**€428 million** R&D expenses

Production

**€9.4 billion** procurement volume  
**9.24 million metric tons** raw material inputs  
**7.9%** renewable raw materials

Our business >>



SDGs of relevance for Evonik:



Value contributed >>

Society

**approx. €2.5 billion** wages and salaries  
**€3.7 million** donations and sponsorship<sup>a</sup>

The environment

**5.5 million metric tons** CO<sub>2</sub> emissions (scope 1 and 2)  
**12 million m<sup>3</sup>** water consumption<sup>b</sup>

Employees

**0.9%** early employee turnover  
**€76 million** vocational and advanced training  
**1.18** accident frequency

Financials

**4.1%** dividend yield  
**€180 million** income taxes  
**€64 million** interest and other taxes

Knowledge

**approx. 225** new patents and patent applications  
**13%** sales with products and applications developed in the past five years  
**47%** patent-driven sales (based on total sales)<sup>c</sup>

Production

**1.10** accident frequency  
**97.1%** of all sites are certified in conformance with ISO 14.001/9001  
**9.16 million metric tons** output

<sup>a</sup> Outside the scope of the limited assurance review by PwC.

<sup>b</sup> For further water data, see chart C21.

<sup>c</sup> Product sales are patent-driven if there is at least one relevant global patent.

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 along the value chain. In addition, short- and long-term impacts are derived, measured along the value chain, and evaluated. Chart **c07** Impact of Evonik’s business activities shows the positive and negative impacts of Evonik’s business activities.

**Monetary valuation**

A monetary value is assigned to individual indicators such as continuing development of employees, global warming, and so on, so they can be compared. Most of the factors used for this

are publicly available and have been developed by well-known economic, environmental, and social research institutes.

Chart **c08** Monetary impact valuation of our business activities in 2019 (see [p.15](#)) shows the results of the impact valuation, based on the figures for fiscal 2019. In particular, this shows that our business activities impact the environment. Within the value chain, the impacts mainly relate to the supply chain/raw materials. This is countered by strongly positive macroeconomic impacts, both along the supply chain and by our own production activities. The impact valuation was outside the scope of the limited assurance review by PwC.

In the intermediate term, we want to merge the methodology used in our impact valuation with the sustainability analysis of our business described below.

**Sustainability analysis of our business 2.0**

Evonik products offer customers resource-saving and energy-efficient solutions for a wide range of applications. In this way we play a part in meeting the rising sustainability requirements of our markets. At the same time, we utilize opportunities for new business and additional profitable growth.

**Impact of Evonik’s business activities**

**C07**

		Supply chain	Evonik	Application
<b>Economic</b>	+	Indirect impacts: employment, value added, fiscal effects	Direct impacts: employment, value added, fiscal effects	Induced effects: employment, value added, fiscal effects
<b>Ecological</b>	-	Societal impacts resulting from water consumption, abiotic consumption of resources, acidification, eutrophication, global warming, and ozone formation	Societal impacts resulting from water consumption, abiotic consumption of resources, acidification, eutrophication, global warming, and ozone formation	Societal impacts caused by global warming
<b>Social</b>	+		Social impacts due to vocational training and continuing professional development of employees	
	-		Societal impacts related to industrial health and safety	

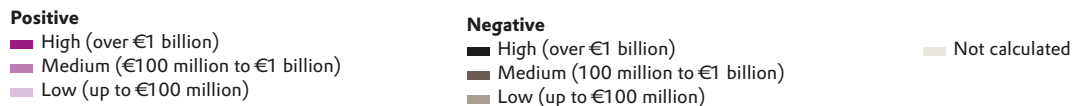


Monetary impact valuation of our business activities in 2019<sup>a</sup>

C08



Type and scope of impact



<sup>a</sup> The impact valuation was outside the scope of the limited assurance review. Chart C08 shows Evonik’s impact along the value chain in 2019, excluding induced effects, which were calculated separately.

<sup>b</sup> The impact of raw materials and supplies used in production is taken into account in supply chain/raw materials “upstream.”

Our sustainability analysis helps our operational units develop their businesses and products in the relevant markets. It supplements our strategic business analyses and identifies opportunities and risks along the value chain. We applied our sustainability analysis 2.0 for the first time in 2019 on the basis of the enhanced methodology developed and externally audited in the previous year. This analysis covers 99 percent of sales and thus almost all of Evonik’s continuing chemicals operations<sup>1</sup> in 2018.

The sustainability analysis provides insight into

- our contribution and leverage to reduce our ecological footprint and maximize positive effects along the value chain;
- approaches to developing resource-saving products and solutions for our customers that also play a part in overcoming societal challenges; and
- the exposure of our business to issues that are critical for their reputation.

Methodology

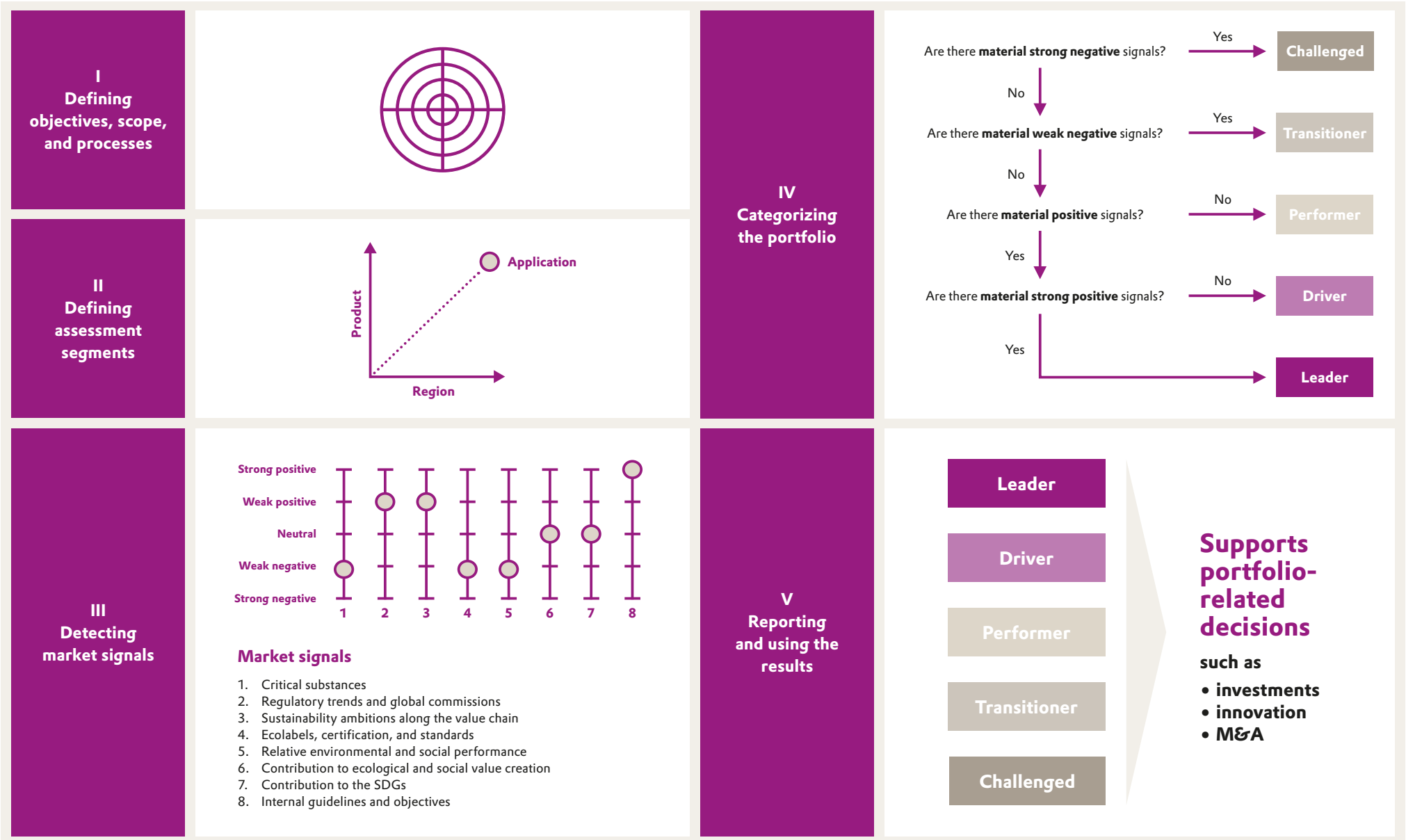
The core elements of our sustainability analysis are the sustainability criteria along the value chain which Evonik classifies as being relevant. These are closely based on the principles and content of the WBCSD Portfolio Sustainability Assessments (PSA), which Evonik was actively involved in developing. The framework for our sustainability analysis comprises the five process steps outlined in chart C09 Sustainability analysis of our business (see [p.16](#)). All chemical businesses are analyzed at the level of PARCs<sup>2</sup>. [102-8, 103-2, 201-2, 203-1, 203-2](#)

<sup>1</sup> Excluding the methacrylates business.

<sup>2</sup> PARC = product-application-region combination (an element of the PSA method developed by the World Business Council for Sustainable Development, WBCSD).

Sustainability analysis of our business

C09



As a first step, PARCs were defined and prioritized in 2019. The criteria selected are based principally on strategically relevant indicators such as sales. The analysis then focused on the PARCs with the highest priority (priority A). The prioritization and selection were undertaken by our operating units on the basis of their significance for sustainability and the business. In the reporting period, these priority A PARCs were examined using various signal categories. These categories include, for example, expected regulatory trends, relative ecological and social sustainability performance—such as energy and water savings, reductions in CO<sub>2</sub> emissions—and contribution to the SDGs.

The findings are used in a structured overall evaluation of the sustainability performance of our businesses, resulting in allocation to the performance category Leader (A++), Driver (A+), Performer (B), Transitioner (C-), or Challenged (C--)<sup>1</sup> on the basis of the PARCs analyzed.

We plan to complete our sustainability analysis 2.0 by the end of 2020. Our goal is for at least 30 percent of products to be allocated to the performance categories Leader (A++) and Driver (A+). The aim is to increase this proportion in subsequent years.

### Life cycle assessments

Life cycle assessments are another focal area of our sustainability analysis. The high expertise and strong operational involvement of the life cycle management group plays a key role in ensuring that Evonik has wide-ranging knowledge of the environmental impact of its operations. Our procedure comprises a broad spectrum of methods, including life cycle assessments (LCA), which comprise either a cradle-to-gate<sup>2</sup> or a cradle-to-grave<sup>3</sup> analysis. Another tool is the life cycle-based calculation of the carbon

footprint of our products. In addition, we use cross-referencing approaches, where findings, for example from existing LCAs, are used to evaluate similar products.

## UN Sustainable Development Goals of relevance for Evonik

**The Sustainable Development Goals provide guidance for companies that align their business activities to sustainable development. Evonik supports these goals and has intensively examined its own positive and negative contributions for a number of years.**

### In-house methodology

In 2017, we started to document the positive contributions made by our products to achieving the SDGs and publish them on our website <https://corporate.evonik.de/en/responsibility>. In the course of this, it became clear that many of our products with distinct sustainability benefits are also clear growth drivers.

Building on this, in 2018 we developed our own methodology to identify the SDGs that are especially relevant for Evonik. In this context, we paid special attention to the sub-targets of the 17 SDGs. An SDG is relevant for us if there is a significant positive or negative influence on or by Evonik.

For the businesses defined at the PARC level, we have determined the positive and negative impacts along the value chain. In a multi-step process, the relevant PARCs are weighted on the

### STRATEGY AND GROWTH

UN Sustainable Development Goals of relevance for Evonik

basis of sales and corporate strategy (inclusion in our growth engines and innovation growth fields). We also take account of the views of our external stakeholders and the results of our materiality analysis.

This evaluation resulted in the following ranking of the SDGs that are particularly relevant for Evonik (ranked by significance from left to right).



You can find information on how our activities relate to the SDGs of relevance to Evonik throughout this report and, for the first time, an SDG index in the section on the basis of reporting [p.86](#), as well as the mapping of the 17 SDGs to the Global Reporting Initiative (GRI) content index [p.87](#).

### SDGs and sustainability analysis of our business

Our sustainability analysis 2.0 confirms that the PARCs with the highest priority (priority A) have a particularly strong sustainability profile.

<sup>1</sup> Position in the implementation of the requirements for sustainable business within the Evonik benchmark system.

<sup>2</sup> From product development through raw material and energy inputs to production.

<sup>3</sup> Covering the entire life cycle, including subsequent use and disposal.

## 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 in the long term. That includes listening very carefully to the concerns of our stakeholders.**

📍 102-40, 102-42, 102-44

We actively seek interaction so we can respond rapidly to key future trends, global developments, and changing market requirements.

Consequently, we once again ensured there was plenty of scope for dialogue with our stakeholders in 2019.

Stakeholders are individuals or groups that influence Evonik’s decisions and activities and/or are influenced by them. We use the following criteria to define and prioritize our stakeholder groups:

- Type of influence (direct, indirect)
- Impact cluster (e.g., business, financial market)
- Characterization (e.g., suppliers, employees, customers)

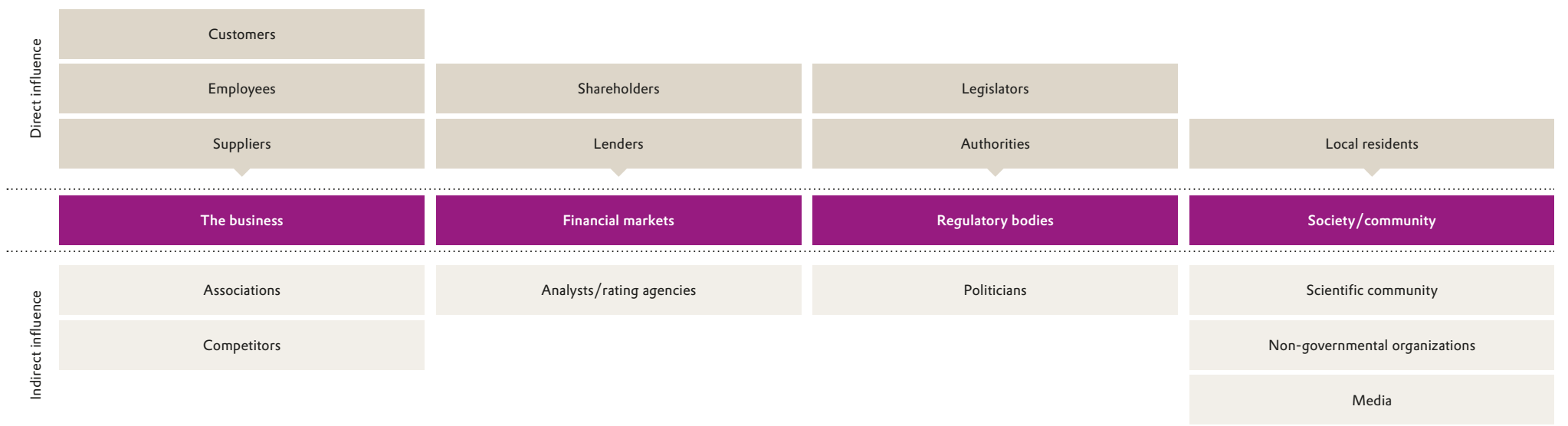
Chart C10 shows the stakeholder groups of relevance for Evonik and their influence on our company.

We have developed various formats for our dialogue with stakeholders. These help us engage with both direct and indirect stakeholders. One example is the Evonik Perspectives stakeholder forum in Berlin, which we organized for the fourth time in 2019 (see “Intensive dialogue in 2019” 📄 p.19). 📍 102-48

Our approach to stakeholder engagement includes Evonik’s regions and their wide-ranging contacts. In general, we take care to ensure the widest possible coverage of operational, political, social, and community perspectives. 📍 102-21, 103-2, 102-29

Stakeholder groups and their influence on Evonik 📍 102-40

C10



When choosing topics for our specific dialogue formats, we are guided by our materiality analysis. We also use these events to validate our materiality analysis and confirm and, where relevant, fine-tune the relevance of issues. Regular reviews are used to continuously improve and develop our stakeholder engagement. Chart c11 Stakeholder engagement in 2019 (see [p.20](#)) summarizes the topics and the formats used in the reporting period.

### Advocacy

Evonik plays an active part in many societal debates and is a partner in opinion-forming processes at a regional, national, European, and international level. Our offices in Berlin and Brussels are important interfaces for dialogue between representatives of politics and public life. Our employees there network closely with politicians, trade associations, and the general public, support them in shaping political conditions, and take up issues in the areas of the environment, sustainability, climate protection, energy, research and development, agricultural policy, and digitalization. On this basis, we took part in consultations, hearings, and discussions in 2019. In the environmental area, activities concentrated on the draft version of the German Clean Air Act (TA-Luft). In addition, we concentrated on papers relating to European plastics strategy and sustainable finance. The German government's climate package and carbon pricing dominated our activities in the area of climate policy. In the area of energy policy, we concentrated on legislation to exit coal.



Evonik Perspectives (from left: state secretary Dr. Heinrich Bottermann (Ministry of Environment, Agriculture, Conservation and Consumer Protection, federal state of North Rhine-Westphalia), Prof. Martina Schraudner (head of the Fraunhofer Center for Responsible Research and Innovation; member of the executive board of acatech—National Academy of Science and Engineering), Michael Jedelhauser (NABU), Karl-Josef Kuhn (head of the Power-to-X and Storage technology field, Siemens AG)).

### Intensive dialogue in 2019

[102-40](#), [102-42](#), [102-43](#), [102-47](#)

The circular economy opens up new opportunities. Companies benefit from attractive future markets and the possibility to differentiate themselves favorably from their competitors. But what strategies and innovations are needed? And how can their contribution to a circular economy be measured? Those were the questions discussed by more than 150 representatives of politics, trade associations, non-governmental organizations, scientists, customers, and suppliers at Evonik's stakeholder conference 'Making the future go round—The circular economy as an opportunity for Germany as a business center.' As well as attending workshops and panel discussions, participants at the **Evonik Perspectives** forum in Berlin could participate actively throughout the event via a web-based system. The feedback will be used for the work of the expert circle on circular economy.

This expert circle will also use the results of 'No time to waste,' **Evonik's brainstorming workshop** in Brussels, which centered on chemical recycling of plastics as an effective complement to mechanical recycling. In particular, experts from politics and business discussed the preconditions that need to be created for this in Europe. The workshop proved helpful for the work of our Functional Solutions business line.

Acceptance is vital for innovation. So how can we achieve this at a time when industrial progress is often equated with the deconstruction of our natural environment? For Evonik, as a highly innovative company, this is a key question. It was taken up by selected guests from politics, science, and society at our **stakeholder dialogue** 'Start-up to the Moon—The fascination of innovation' in Bochum (Germany).



Stakeholder engagement in 2019  102-43, 102-44

C11

Stakeholder groups <sup>a</sup>	Examples of stakeholder engagement	Key issues	Stakeholder groups <sup>a</sup>	Examples of stakeholder engagement	Key issues
Customers	<ul style="list-style-type: none"> <li>• Talks with customers, reports, analyses</li> <li>• Stakeholder dialogue 'Making the future go round—The circular economy as an opportunity for Germany as a business center.'</li> <li>• 2nd Fuchs-Evonik Forum</li> <li>• Sustainability dialogue with leading tire manufacturers</li> <li>• 'Evonik Catalyst Days' in India</li> <li>• Meetings with customers at trade shows such as Evonik in-cosmetics 2019 and ICAT 2019—Industrial Catalysis Conference</li> <li>• 3rd Evonik School of Animal Nutrition</li> </ul>	<ul style="list-style-type: none"> <li>• Quality, reliability of supply, prices</li> <li>• R&amp;D/innovation</li> <li>• Responsible management and human rights</li> <li>• Support to help customers achieve their sustainability targets</li> </ul>	Legislators	<ul style="list-style-type: none"> <li>• Stakeholder dialogue 'Making the future go round—The circular economy as an opportunity for Germany as a business center'</li> <li>• Brainstorming workshop 'No time to waste' (chemical recycling of plastics)</li> <li>• Dialogue with national politicians</li> </ul>	<ul style="list-style-type: none"> <li>• Responsible management and human rights</li> <li>• Plant safety, occupational safety, transportation safety/logistics</li> <li>• Climate change; water management</li> <li>• Appeal as an employer</li> </ul>
Employees	<ul style="list-style-type: none"> <li>• Employee development reviews</li> <li>• Intranet, blogs, employee magazine</li> <li>• Internal social media platforms ("communities")</li> <li>• Roundtable discussions and networks (Evonik's groW network for women)</li> <li>• Interactive careers website with the #HumanChemistry social media platform</li> <li>• Works festival in Hanau</li> <li>• Evonik learning hour</li> </ul>	<ul style="list-style-type: none"> <li>• Wages and salaries</li> <li>• Vocational and advanced training</li> <li>• Plant safety, occupational safety, transportation safety/logistics</li> <li>• Work-life balance</li> <li>• Leadership quality</li> <li>• Current business development</li> <li>• In-house changes</li> <li>• Customer focus</li> <li>• Diversity and equal opportunities</li> <li>• Digitalization</li> </ul>	Authorities	<ul style="list-style-type: none"> <li>• Stakeholder dialogue 'Making the future go round—The circular economy as an opportunity for Germany as a business center'</li> <li>• Stakeholder dialogue 'Start-up to the moon—The fascination of innovation'</li> <li>• Talks with public authorities</li> </ul>	<ul style="list-style-type: none"> <li>• Climate change; water management</li> <li>• Plant safety, occupational safety, transportation safety/logistics</li> <li>• Permitting processes</li> <li>• Responsible management and human rights</li> <li>• Appeal as an employer</li> <li>• Efficient use of scarce resources/circular economy</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>• Supplier Day Asia organized by Together for Sustainability (TfS) in Shanghai (China)</li> <li>• TfS corrective action plan (CAP) webinar for suppliers in China</li> </ul>	<ul style="list-style-type: none"> <li>• Price, quality, payment practice</li> <li>• Responsible management and human rights</li> <li>• Plant safety, occupational safety, transportation safety/logistics</li> <li>• Climate change; water management</li> </ul>	Local residents <sup>b</sup>	<ul style="list-style-type: none"> <li>• Magazines for local residents</li> <li>• Environmental and neighborhood hotlines</li> <li>• Dialogue with local residents at Marl Chemical Park</li> <li>• 3rd apprenticeship evening in Hanau (Germany)</li> <li>• Open days at various sites around the world, e.g., in Shanghai (China) and Pandino (Italy)</li> </ul>	<ul style="list-style-type: none"> <li>• Plant safety, occupational safety, transportation safety/logistics</li> <li>• Appeal as an employer</li> <li>• Local activities</li> <li>• Current business development and outlook</li> <li>• Changes at the company</li> </ul>
Shareholders	<ul style="list-style-type: none"> <li>• Annual shareholders' meeting</li> <li>• Roadshows/conferences</li> </ul>	<ul style="list-style-type: none"> <li>• Attractive dividend policy</li> <li>• Current business development and outlook</li> </ul>	Lenders	<ul style="list-style-type: none"> <li>• Talks with rating agencies</li> <li>• Talks with lenders</li> </ul>	<ul style="list-style-type: none"> <li>• Ratings and rankings</li> <li>• Current business development and outlook</li> </ul>

<sup>a</sup> Only includes stakeholders with a direct influence.<sup>b</sup> Around Evonik sites.



## Our materiality analysis

**Our sustainability activities are systematically aligned to materiality. The results of our materiality analysis are grouped in six areas of action, which also provide the basic structure for this report.**

The last extensive review of our materiality analysis was in 2018. This comprised asking our stakeholders about the most important sustainability issues for Evonik. A distinction was made between stakeholders with direct and indirect influence. The participants at our stakeholder dialogues formed the basis for our survey. In addition, we asked internal experts, employee representatives, and specialists from the Evonik regions for their opinions. Particular attention was paid to both positive and negative impacts of Evonik’s business activities along the value chain. [102-40, 102-42, 102-43, 102-46, 102-48, 102-49](#)

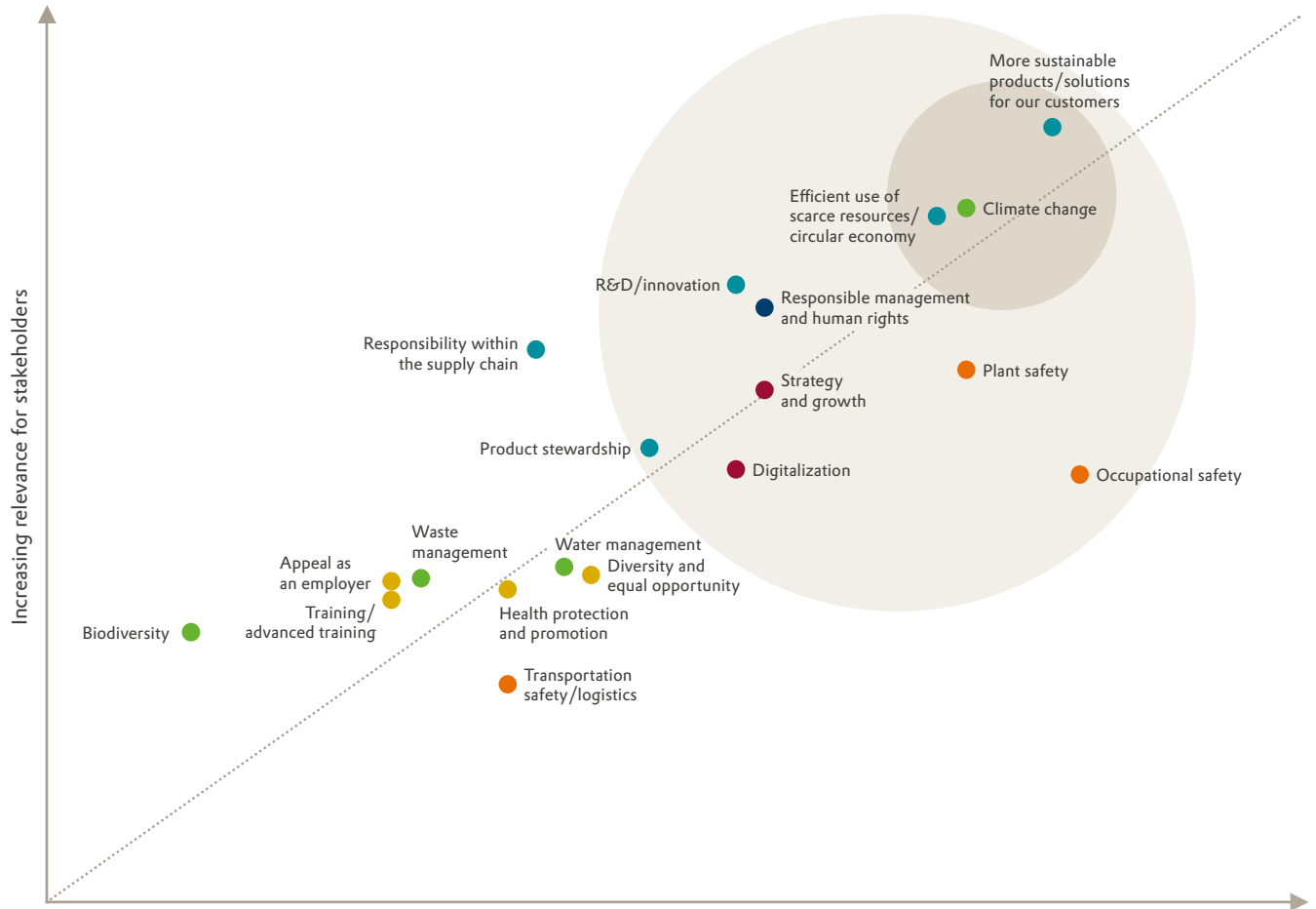
Chart C12 Materiality analysis 2019 shows the opinion of our stakeholders and internal experts on the most important sustainability topics for Evonik. The top 3 topics are

- sustainable products/solutions for our customers,
- climate change, and
- efficient use of scarce resources/circular economy.

These were the focus of our work in 2019. This is reflected in our new target for reducing CO<sub>2</sub> emissions, which forms a key element in our Sustainability Strategy 2020+, and internal and external events dedicated to the circular economy (see “Intensive dialogue in 2019” [p.19](#)). This report is also systematically aligned to the materiality criterion.

Materiality analysis 2019 [102-44, 102-46, 102-47, 102-48, 102-49, 103-2](#)

C12



**Areas of action**

- Strategy and growth
- Governance and compliance
- Value chain and products

- The environment
- Employees
- Safety

- Top 3 sustainability issues of relevance for Evonik
- Top 10 sustainability issues of relevance for Evonik

**Further information:**

- ★ Case study “Sustainable products: oxidation agents” [p. 9](#)
- ★ Case study “Circular economy” [p. 41](#)
- ★ Case study “Sustainable products: cosmetics” [p. 44](#)
- ★ Case study “Climate change” [p. 53](#)

If significant new topics arise, we review the relevant processes and adapt them as necessary. We intend to conduct an extensive update of our materiality analysis roughly every three years. In the meantime, we are driving forward the topics already identified.

For the topics defined in our materiality analysis, there is a complaints mechanism for both employees and external stakeholders. An important tool for this is our whistleblower system (see chapter "Governance and compliance" [p. 26 ff.](#)).




We have defined reporting boundaries for our six areas of action and the related topics. These specify whether we monitor and manage the area of action within our organization or externally. Chart **C13** Areas of action and impact of Evonik's business along the value chain (see [p. 23](#)) provides an insight into the possibilities and limits of our influence within the value chain—for example, through our procurement volume, our management systems, or current business processes.

[102-46, 102-47](#)


## Our targets




**Below is an overview of the targets set for our strategy and growth area of action. The targets defined for 2020 and beyond have been sharpened and streamlined to enhance their strategic relevance.**

### Target attainment in 2019

-  Anchor sustainability in strategy dialogues (see "Our Sustainability Strategy 2020+" [p. 11](#))
-  Synchronize the publication of date of financial and non-financial reports (see "About this report" [p. 82](#))
-  Review the SDGs of relevance for Evonik (from 2020)<sup>1</sup> (see "UN Sustainable Development Goals of relevance for Evonik" [p. 17](#))
-  Ongoing development of the impact valuation (see "Impact valuation" [p. 12](#))
  - Complete the global monetary valuation of the impact of our business along the value chain
  - Update the data to include 2017 and 2018
-  Conduct a sustainability analysis of our businesses using the extended methodology (see "Sustainability analysis of our business 2.0" [p. 14](#))

### Target for 2020 and beyond

-  Complete the sustainability analysis of our business 2.0

-  Target not achieved
-  Target partially achieved or target horizon extends beyond 2019
-  Target achieved

<sup>1</sup> This target will not be pursued in 2020 because in the coming year we will be concentrating on implementing our Sustainability Strategy 2020+ and extending the sustainability analysis of our business 2.0. The SDGs are integrated into the sustainability analysis.

Areas of action and impact of Evonik's business along the value chain  102-46, 102-47, 103-2

C13

Areas of action and key topics	SDGs of relevance for Evonik	Reporting boundary <sup>a</sup>	Influence along the value chain		
			Supply chain <sup>a</sup>	Evonik	Application <sup>b</sup>
<p> <b>Strategy and growth</b></p> <ul style="list-style-type: none"> <li>• Strategy and growth</li> <li>• Digitalization</li> </ul>		internal/ external	medium	high	medium
<p> <b>Governance and compliance</b></p> <ul style="list-style-type: none"> <li>• Responsible management and human rights</li> </ul>		internal/ external	medium	high	low
<p> <b>Value chain and products</b></p> <ul style="list-style-type: none"> <li>• Responsibility within the supply chain</li> <li>• R&amp;D/innovation</li> <li>• Efficient use of scarce resources/circular economy</li> <li>• Sustainable products/solutions for our customers</li> <li>• Product stewardship</li> </ul>		internal/ external	medium	high	medium
<p> <b>The environment</b></p> <ul style="list-style-type: none"> <li>• Climate change</li> <li>• Water management</li> <li>• Waste management</li> <li>• Biodiversity</li> </ul>		internal	none	high	none
<p> <b>Employees</b></p> <ul style="list-style-type: none"> <li>• Appeal as an employer</li> <li>• Diversity and equal opportunity</li> <li>• Training/advanced training</li> <li>• Protecting and promoting health</li> </ul>		internal	none	high	none
<p> <b>Safety</b></p> <ul style="list-style-type: none"> <li>• Occupational safety</li> <li>• Plant safety</li> <li>• Transportation safety/logistics</li> </ul>		internal/ external	medium	high	low

<sup>a</sup> We have defined reporting boundaries for these areas of action and the related topics. These specify whether we monitor and manage the area of action within our organization or externally.

<sup>b</sup> Only direct suppliers and direct customers.

# GOVERNANCE AND COMPLIANCE ✓



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



SDGs of particular relevance for Evonik

## KEY TOPIC ▶

- Responsible corporate governance and human rights

**25.0%**

Female executive board members

**26.1%**

Female managers at first management level<sup>1</sup>

**24.1%**

Female managers at second management level<sup>1</sup>

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



GOVERNANCE AND COMPLIANCE

25 Responsible corporate governance and human rights

- 25 Strategy and management 102-12, 102-13, 102-16
- 26 Human rights 406-1, 407-1, 408-1, 409-1, 103-2
- 27 Corporate governance 102-18, 102-19, 102-20, 102-21, 102-22, 102-23, 102-27, 102-28, 102-35, 102-36, 405-1
- 28 Opportunity and risk management 102-15, 102-29, 102-30, 201-2
- 28 Compliance 102-11, 102-33, 102-34, 102-17, 307-1, 103-2, 407-1, 205-1, 205-2, 205-3, 206-1, 419-1
- 31 Our activities in 2019
- 31 Cybersecurity
- 32 Management of data protection 418-1
- 32 Donations and sponsorship 415-1

32 Our targets

Responsible corporate governance and human rights

Responsible corporate governance does not simply involve complying with the law and respecting human rights. It also includes internal regulations and binding voluntary commitments. We are committed to fair competition, we comply with cartel and antitrust law, and we forbid any form of corruption.

Strategy and management

Evonik is committed to observing internationally recognized standards and its 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 environment, safety, health, and quality

Voluntary commitments

C14

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
Our Values for the Environment, Safety, Health, and Quality	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

(ESHQ) values. In addition, the executive board has adopted a policy statement on human rights. Human rights are included in the updated code of conduct that came into effect in spring 2017.

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<sup>1</sup> and is an integral part of the employment contract between each individual employee and Evonik. Violation of the code of conduct can have far-reaching consequences for employees. In addition, it can damage Evonik’s reputation and result in substantial financial loss. We do not tolerate violation of our code of conduct. Evonik has issued a special code of conduct for suppliers, setting out binding requirements (see chapter “Value chain and products” p.35).

In our global social policy, we set out the principles of social responsibility for our employees. As a member of the UN Global Compact, we have given an undertaking that, within our sphere of influence, we will 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 chapter “Strategy and growth” p.17).

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, and safety. Our ESHQ values define protecting people and the environment as core elements of our actions. Together with more detailed policies and procedures, they form Evonik’s ESHQ regulations. For information on our code of conduct for suppliers and our activities as a founding member of the chemical industry’s Together for Sustainability initiative (see chapter “Value chain and products” p.35).

<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).

Evonik is involved in many national and international competency networks in the area of sustainability. These include econsense, an association of leading German companies that operate in the global arena, and Chemie<sup>3</sup>, the sustainability initiative of the German chemical industry. Evonik is also a member of the World Business Council for Sustainable Development (WBCSD) and is committed to its Vision 2050. We regularly report our climate and water performance to the CDP.

Our sustainability reporting complies with the Global Reporting Initiative (GRI). We are a member of GRI Community and



support the mission of GRI to empower decision-makers everywhere, through GRI Sustainability Reporting Standards and its multi-stakeholder network, to take action towards a more sustainable economy and world. 📞 407-1, 103-2, 408-1, 409-1



**Human rights training with Alejandra**

Alejandra is twelve years old. Instead of getting ready for school when she gets up in the morning, she prepares to go to work in a mangrove swamp. That is the introduction to a case study used for human rights training at Evonik. A worksheet contains further information on the dangers involved in her job. The participants at this training session discuss whether or not Alejandra’s situation is a violation of human rights. Once they reach agreement, they move on to the next worksheet. At the end, everyone present discusses the decisions. Alejandra’s case is about dangerous child labor, the right to education, and the right to health.

Participants at these human rights training sessions learn a lot about human rights as they work through the exercises. At the end, they know that human rights are universal rights that apply to people, no matter where they live. They also know that Evonik has given a commitment to respect the ten principles of the Global Compact. In a further training



Does this violate human rights? Participants discussing a case at a training session.

module, they learn more about Evonik’s global social policy and how the company and they themselves can put the policy into practice.

Most of the participants at the training sessions have not been personally confronted with human rights violations, but after the course they know how important human rights are for daily life and what it means if they are not respected.

**GOVERNANCE AND COMPLIANCE**

Responsible corporate governance and human rights

**Human rights**

Evonik looks at human rights at all stages in the value chain, including suppliers, its own processes, and customer applications. The demands made on our suppliers are set out in a separate code of conduct. We regularly check compliance through our supplier validation and evaluation processes (see chapter “Value chain and products” p.35).

Information on breaches of our commitments can be reported via a whistleblower system operated by a third party, which guarantees the anonymity of the whistleblower. This enables employees and third parties (e.g., local residents, suppliers, customers) to report suspected breaches of human rights. The Corporate Responsibility division examines all allegations. No suspected breaches of human rights were reported in 2019.

In the reporting period, we streamlined and updated our human rights risk map, which helps us identify and assess potential human rights and labor law risks. In addition, we refined our human rights training programs, which were used in the training of managers and employees in various countries, including Singapore, Brazil, and the United States. The courses give participants a basic overview of human rights, present the relevant Evonik regulations, and show how they relate to the applicable human rights and labor rights. We will continue our human rights training in the coming year. In addition, we have developed a web-based training module, which will be introduced in 2020.

The German government’s national action plan on business and human rights (NAP) is an initiative to improve the human rights situation throughout the value chain. A government survey in 2019 and 2020 is compiling information on implementation of core elements of the duty to respect human rights in accordance with the NAP. We took part in this through Evonik Nutrition & Care GmbH. The government will use the results of this review to decide on possible legislation.



We have published our statement on the UK Modern Slavery Act on our website. This reiterates our rejection of forced labor, slavery, child labor, and human trafficking, both within Evonik and in our value chain.

### 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. Respecting and applying the principles of corporate governance are important management tasks.

These principles relate mainly to collaboration within the executive board and supervisory board and between these two boards. They also include the relationship between Evonik and its shareholders and other people and organizations that have a business relationship with 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 [www.evonik.com](http://www.evonik.com).

### 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. For details of the executive board's overall responsibility for sustainability, see "Strategy and growth" [p. 12](#). The executive board discusses sustainability at its meetings several times a year, especially aspects relating to the environment, safety, and society.

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. These include, for example, a suitable mixture of ages 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 to June 30, 2022, the supervisory board has raised the target for the proportion of women on the executive board from 20 percent to 25 percent. At present, one member of the executive board is female and three are male, so it meets this target.

For the period from January 1, 2017 to December 31, 2019, the executive board set a target of 20 percent female managers for each of the first two management levels below the executive board. At the end of 2019, the proportion of female managers was 26.1 percent at the first management level and 24.1 percent at the second management level, so these targets were met. For the period from January 1, 2020 to December 31, 2020, the executive board has set new targets. These are 27.3 percent for the first management level below the executive board and 25.0 percent for 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

## GOVERNANCE AND COMPLIANCE

Responsible corporate governance and human rights

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 are also discussed at meetings of the supervisory board. For example, the executive board's report to the supervisory board meeting in June 2019 included Evonik's new sustainability and climate strategy.

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 seven women and 13 men. Women therefore make up 35 percent 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.

You can find further information on corporate governance in the corporate governance report and the declaration on corporate governance, which are available on our website and also form part of Evonik's financial report. [p. 102-21, 103-2, 102-25, 102-22, 102-23, 102-24, 102-27, 405-1](#)

*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 significant sustainability topics, occupational safety (accident frequency and severity) influences the remuneration of the executive board. The remuneration report in the financial report 2019 contains further information on the remuneration of the executive board and supervisory board. [📄 102-36](#)

**Opportunity and risk management**

Evonik is exposed to a range of influences that may constitute either opportunities or risks. Timely identification and mitigation of risks is therefore the basis of our extensive opportunity and risk management. [📄 201-2](#)

Since 2017, non-financial risks have been integrated more closely into our conventional risk reporting. Our established risk management system now systematically captures and monitors non-quantifiable sustainability risks over a longer time horizon. All units are required to update their risk reports, including sustainability risks, every quarter and to immediately report any ad-hoc risks, even outside the regular reporting intervals. Further information can be found in the opportunity and risk report in the financial report 2019.

For the first time, this reports climate-related opportunities and risks in the categories defined by the Task Force on Climate-related Financial Disclosures (TCFD): governance, strategy, risk management, and metrics and targets (see chapter “Basis of reporting” [📄 p.80 f.](#)).<sup>1</sup>

**Compliance**

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

Functional responsibility for the environment, safety, health, and quality are bundled in a corporate division with the same name (see chapter “The environment” [📄 p.50](#)).

Minimum group-wide standards have been defined for the compliance management systems for the areas covered by the House of Compliance, and we ensure that they are implemented. Final responsibility rests with the executive board, which defines the key elements of the compliance management system and ensures that it is observed. The supervisory board’s audit committee monitors the effectiveness of the system. The process of forming a consensus, sharing experience, and coordinating compliance

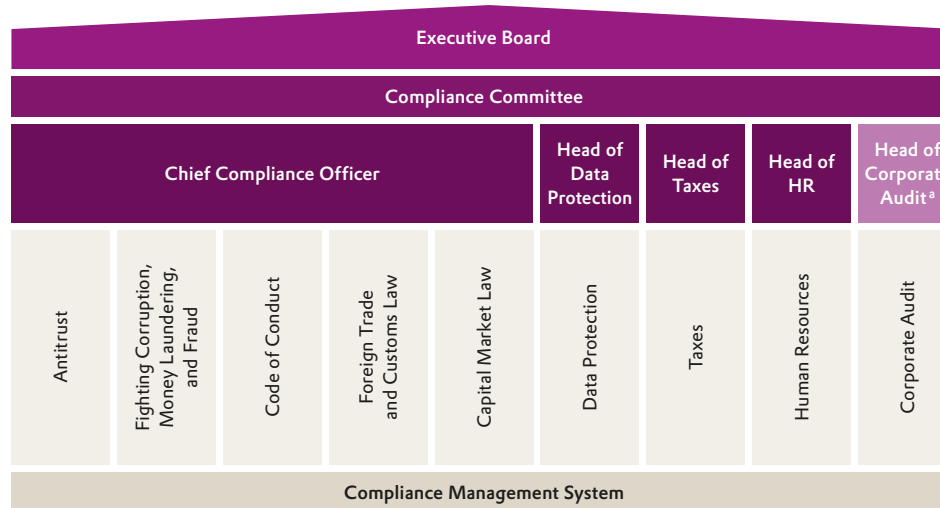
activities takes place in the compliance committee, which is composed of the heads of the respective units, who have independent responsibility for their areas, and the head of the Corporate Audit division. Corporate Audit supports the executive board and subsequent management levels in the performance of their supervisory duties and continuous improvement of business processes by performing independent audits. 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. The main aim of the compliance management system is to avoid, or at least minimize, violations and the associated risks. The objective is to identify violations and impose sanctions based on their severity. The heads of the compliance departments ensure that the compliance management system is appropriate and effective for the respective compliance issues.

**House of Compliance** [📄 102-16, 102-17](#)

C15



<sup>1</sup> Outside the scope of the limited assurance review by PwC.

<sup>a</sup> Advisory function.

**Compliance Management System (CMS)** ⓘ 102-17, 103-2, 407-1, 408-1, 409-1

C16



*Principle of detection*

Tools used to identify potential compliance risks include our whistleblower system and investigations.

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 whether they relate to them personally or to their colleagues. There is also an anonymous **whistleblower system** managed by an independent party for the reporting of possible compliance violations. Both employees and external parties such as business partners can report possible compliance violations to Evonik without any technical risks that their identity will be disclosed. Anonymous reports are possible on all key compliance issues and are automatically forwarded to the responsible unit within the company for action.

*Principle of prevention*

Tools used to avoid potential compliance risks include risk analysis and training.

To identify potential risks as early as possible, every unit is required to perform regular **risk analyses**. Based on the results of these risk analyses, 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.

Group-wide training concepts have been developed for all aspects bundled in the House of Compliance. They define the type, frequency, and content of **training** and the target groups. Each organizational unit is responsible for their realization. We pay special attention to training in the areas of antitrust law, fighting corruption, and the code of conduct. Participants are allocated to three groups on the basis of risk. See table T02.

**Uniform global training concept**

T02

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

<sup>a</sup> More frequent training can be held if necessary, e.g., if there are changes in the legal framework or statutory requirements.

Evonik investigates all alleged violations and treats all information with the greatest possible confidentiality. We do not tolerate any disadvantage to employees who report possible or actual violations or cooperate in the investigation of such violations.

Internal **investigations** into alleged compliance violations, along with possible improvements and sanctions, are based on uniform principles and standards. These are applicable for all units that perform internal investigations, not just those in the House of Compliance.

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

*Principle of response*

Suitable measures are taken to end the violation and minimize the risk. Depending on the severity of the case, disciplinary action ranges from warnings or reprimands to redeployment or dismissal. Where appropriate, further action is taken to raise awareness, for example, through training.

The principal risks, events, and measures taken are outlined in an annual compliance report submitted to the supervisory board's audit committee, the executive board, and the management boards of the segments. Furthermore, where necessary the executive board and segment management boards receive immediate information on material risks, violations of rules, and compliance-related developments.

**Compliance rules for business partners**

Evonik has issued a special code of conduct for suppliers, setting out binding requirements (see chapter "Value chain and products" [p.34](#)). Intermediaries, above all sales intermediaries, are subject to a compliance check before the establishment of the business relationship and every five years thereafter. They also have to sign a compliance declaration. 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. [102-17](#)

**Compliance training and training rate<sup>a</sup>****T03**

	Antitrust law		Fighting corruption		Code of conduct	
	Training candidates, total	Training rate in %	Training candidates, total	Training rate in %	Training candidates, total	Training rate in %
<b>Worldwide</b>	<b>4,069</b>	<b>82</b>	<b>10,681</b>	<b>91</b>	<b>28,500</b>	<b>89</b>
<b>Management functions</b>	<b>2,701</b>	<b>81</b>	<b>6,529</b>	<b>89</b>	<b>7,478</b>	<b>89</b>
Management circle 1 <sup>b</sup>	112	95	162	83	162	83
Management circle 2 <sup>c</sup>	310	88	482	90	484	90
Management circle 3 <sup>d</sup>	2,279	79	5,885	89	6,832	89
<b>Non-management functions</b>	<b>1,368</b>	<b>85</b>	<b>4,152</b>	<b>94</b>	<b>21,022</b>	<b>89</b>
<b>Functions</b>						
Production & Technology	115	74	3,035	93	11,781	87
Innovation Management	582	79	1,664	96	4,631	93
Marketing & Sales	2,396	85	2,214	83	2,581	83
Administrative functions	976	80	3,768	92	8,138	90
Other functions <sup>e</sup>	0	0	0	0	1,369	89
<b>Regions</b>						
Asia-Pacific North	622	88	1,166	93	2,036	88
Asia-Pacific South	316	74	626	93	1,420	91
Middle East & Africa	76	84	93	83	142	75
North America	680	58	1,690	88	4,338	80
Eastern Europe	115	87	163	79	272	78
Western Europe	2,089	91	6,679	92	19,630	91
of which Germany	1,888	93	6,339	94	18,523	92
Central & South America	169	66	262	75	659	69

<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 on December 31, 2019.

All training reported in the system is included.

<sup>b</sup> Management circle 1 = executive functions, i.e., top management functions in the Evonik Group.

<sup>c</sup> Management circle 2 = senior management functions, i.e., key functions in the segments, regions, service units, and corporate divisions.

<sup>d</sup> Management circle 3 = further management functions.

<sup>e</sup> Other functions = apprentices, apprentices outside Germany, non-permanent staff.

## Our activities in 2019 102-17, 103-2, 407-1, 408-1, 409-1, 418-1

The measures implemented in 2019 include:

- Prevention of money laundering: drawing up an anti-money laundering policy and programming a supporting application
- Group-wide project to harmonize the requirements for analyzing business partners
- Antitrust law: procurement of new e-learning modules.

Further compliance activities are outlined in the section headed "Training."

### Training

For the compliance areas antitrust law, fighting corruption, and code of conduct, we report a training rate for 2019. 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. To improve group-wide participation in face-to-face and e-learning training sessions, an extensive concept to deal with employees who fail to take part in training was implemented in the reporting period. The training concept was extended to cover the relative new topic of combating money laundering and financing of terrorism. The materials used for face-to-face training on fighting corruption were revised. The e-learning module on the code of conduct was aligned to the new corporate values and a new section on taxes was added.

### Internal investigations

Group-wide, 113 internal investigations into suspected violations of compliance rules were conducted in 2019. 60 disciplinary measures were taken as a result of these internal investigations: Seven employees were dismissed, three employees received a warning or reprimand, and one employee was transferred to a different position. In two cases, training or other action to enhance awareness was undertaken. Security consulting was provided in ten cases. Criminal proceedings were initiated in three cases and civil proceedings were initiated in two cases.

Various individual measures were taken in 32 other cases. Since 2018, the scope of reporting has covered all internal investigations in the Evonik Group. Before that, only the areas covered by the House of Compliance were included.

### Fines and other sanctions

In 2019, the annual compliance reporting for the areas in the House of Compliance, Group Security, ESHQ, and IT Security, included a structured survey to identify significant fines (>€100,000) and non-monetary sanctions resulting from failure to comply with laws or regulations. No fines or sanctions of this type were imposed on the above areas in 2019 in connection with compliance issues.

### Internal investigations in 2019

T04

	2017	2018	2019
<b>Reported potential compliance violations</b>	<b>27</b>	<b>90</b>	<b>113</b>
<b>Disciplinary measures taken</b>	<b>12</b>	<b>106<sup>a</sup></b>	<b>60</b>
Termination of employment contract	6	7	7
Warning or reprimand	1	19	3
Redeployment	1	1	1
Awareness-raising/training	4	12	2
Security consulting	–	14	10
Criminal proceedings	–	7 <sup>c</sup>	3
Civil proceedings	–	–	2
Other <sup>b</sup>	–	37	32

- <sup>a</sup> In some cases, more than one measure was taken in connection with an investigation.  
<sup>b</sup> Various individual measures, e.g., termination of collaboration with a service provider or termination of a contract.  
<sup>c</sup> In 2018, criminal or civil proceedings were initiated in a total of seven cases; separate data are not available.

## GOVERNANCE AND COMPLIANCE

Responsible corporate governance and human rights

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

In 2012, the Brazilian antitrust authorities filed proceedings against Evonik in connection with the delivery of methionine in the period prior to 2000. A final decision has not yet been taken. Following a fine imposed by the EU Commission in 2002 on various methionine producers (including Evonik), the Brazilian antitrust authorities have filed proceedings against Evonik in connection with the delivery of methionine to Brazil. Evonik is of the opinion that a fine cannot be imposed due to the statute of limitations. In Germany, a claim for damages resulting from a cartel has been filed against the parties involved in the European hydrogen peroxide cartel, which was ended in 2001. Since Evonik concluded a settlement with the plaintiff years ago, it is not a defendant and is merely a party cited in the case.

### Confirmed incidents of corruption and action taken

In the reporting period, there was one attempt at corruption in Germany and a confirmed case of corruption in Taiwan. In Germany, we suspended our relationship with a business partner until the situation had been clarified. Evonik is of the opinion that appropriate action was taken by the business partner, so the business relationship was resumed. In Taiwan, we ended our relationship with the business partner, and the employee involved was dismissed.

### Cybersecurity

Evonik bases the protection of its data and information systems on the international information security management system ISO 27001. Certification is planned for 2020.

There are binding policies and rules on IT security for the entire Evonik Group. We drive forward and monitor implementation of our security measures for the operation and use of office IT with the aid of an internal control system. This ensures we keep a constant eye on the present threats and align our security measures to them. The cybersecurity performance of Evonik and of our critical suppliers is measured and evaluated by BitSight, an external rating agency that uses standardized parameters for this.


To identify and counter cyberattacks, we invest continuously in technical and organizational measures as part of a special cybersecurity enforcement program. In 2019, we installed our own cybersecurity operation center. This brings together all important operational IT security functions and operates worldwide. Our computer emergency response team (CERT) is part of the cybersecurity operation center. It is based in Germany and is responsible for identifying and dealing with IT security issues.

We carry out penetration tests in order to check and steadily improve the security of our IT systems. We regularly train employees and raise their awareness of cyber threats. Timely information on current security threats is communicated via our intranet. In addition, we are a member of various professional cybersecurity associations and working groups.

Supplementary IT security rules have been introduced for production systems (operational technology) and we have started to implement the requirements in our production facilities. Further details will be provided in the future.


### Management of data protection

Increasing global data sharing at Evonik requires additional technical and organizational security measures. These are monitored continuously. Target group-specific data protection training of employees is mandatory. Information on the relevant requirements and responsibilities is available to all employees on the Evonik 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 compliance policy and the group-wide data protection policy. The aim of data protection

management at Evonik is to ensure compliance with the regulations, support the organizational units in implementing them, and monitor the correct use of software used to process personal data. In 2019, Evonik did not receive any complaints relating to the loss or incorrect protection of customer data.  418-1

### Donations and sponsorship

The executive board defines the aims and conditions for the Group's donations and sponsorship. It has delegated coordination and monitoring to the Board Office/Communications division on the basis of specific policies and guidelines. For example, individual donations of supra-regional significance and sponsorship from a threshold of €100,000 require the approval of the executive board. The segments 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 (see chapter "Society"  p.78). These included donations totaling €210,000 to political parties in Germany. Of this amount, €90,000 was donated to the CDU, €80,000 to the SPD, and €20,000 each to the FDP and Bündnis 90/Die Grünen.






In 2019, Evonik renewed and refined its entry in the Transparency Register, the list of lobbyists maintained jointly by the European Commission and European Parliament.

 102-25, 103-2, 102-27

## Our targets




**Below is an overview of the targets set for our governance and compliance area of action. The targets defined for 2020 and beyond have been sharpened and streamlined to enhance their strategic relevance.**

### Target attainment in 2019

-  Proportion of female executive board members: 25 percent up to June 30, 2022<sup>1</sup>
-  Women at the first and second management levels below the executive board: 20 percent at each level by year-end 2019
-  Structure and implement the revised internal regulations on gifts and hospitality, focusing on the implementation of anti-money laundering regulations<sup>1</sup>
-  Introduce uniform Group-wide standards on monitoring business partners<sup>1</sup>
-  Update the rules on internal investigations<sup>1</sup>

### Target for 2020 and beyond

- 27.3 percent women at the first management level below the executive board and 25 percent at the second management level by year-end 2020

-  Target not achieved
-  Target partially achieved or target horizon extends beyond 2019
-  Target achieved

<sup>1</sup> Since we streamlined and sharpened our targets with a view to strategic relevance in 2019, we have not set targets for 2020 and beyond. We will continue to work on these objectives and to report on them.



## VALUE CHAIN AND PRODUCTS ✓



We drive forward our sustainability activities along the value chain in dialogue with our stakeholders. 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.



SDGs of particular relevance for Evonik

### KEY TOPICS

- Responsibility within the supply chain
- R&D/innovation
- Efficient use of scarce resources/circular economy
- Sustainable products/solutions for our customers
- Product stewardship

# 66%

Percentage of raw material suppliers<sup>1</sup> covered by TFS assessments

# 13%

Percentage of sales generated with products/applications developed in the past five years

# > 85%

Percentage of risk estimates for substances placed on the market in quantities of >1 metric ton p.a.

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



VALUE CHAIN AND PRODUCTS

- 34 **Responsibility within the supply chain** ⓘ 102-9, 102-10, 103-2, 204-1, 308-1, 308-2, 414-1, 414-2, 407-1, 408-1
- 34 Strategy and management
- 35 Validation and evaluation of suppliers
- 36 Our activities in 2019
- 37 **Research & development/ innovation** ⓘ 201-4
- 37 Strategy and management
- 39 Our activities in 2019
- 39 **Efficient use of scarce resources/circular economy** ⓘ 301-1, 102-44
- 39 Strategy and management
- 40 Conflict minerals, renewable raw materials, palm oil
- 41 **★ CASE STUDY: VESTENAMER® turns used tires into a valuable resource**
- 42 Circular economy
- 43 **Sustainable products solutions for our customers** ⓘ 102-2, 102-6, 102-44
- 43 Strategy and management
- 44 **★ CASE STUDY: Ingredients for the cosmetic industry**
- 45 **Product stewardship** ⓘ 102-2, 413-2, 416-1, 416-2, 417-1
- 45 Strategy and management
- 46 Our activities in 2019
- 46 Microplastics  
Animal protection  
Endocrine disruptors  
PBT/PMT  
Nanotechnology  
Biotechnology
- 48 **Our targets** ⓘ 102-14, 102-15

## Responsibility within the supply chain

**Evonik has a significant influence on society and the environment through its procurement volume. We are aware of this responsibility. We continuously drive forward transparency and sustainability along the supply chain.**

### Strategy and management

By selecting suppliers carefully, we do not simply secure and increase their sustainability standards, we also enhance the quality of the entire value chain. On the one hand, we focus on validating and evaluating suppliers, while on the other, we specifically monitor suppliers of certain critical raw materials. We define critical raw materials as all raw materials that could potentially involve a supply risk or reputational risk, for example, conflict minerals and renewable raw materials, including palm oil. We have established special procurement strategies and risk management systems for these critical raw materials. These processes are integrated into a management system, where they are mapped. We have extended our previous target of performing a sustainability evaluation of 90 percent of suppliers of critical raw materials by the end of 2020. We now aim to have reviewed the sustainability of all major<sup>1</sup> suppliers of raw materials by the end of 2025.

Continuous dialogue with our suppliers is very important to help us live up to our responsibility. 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. We did not receive any such reports from our suppliers in 2019.

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

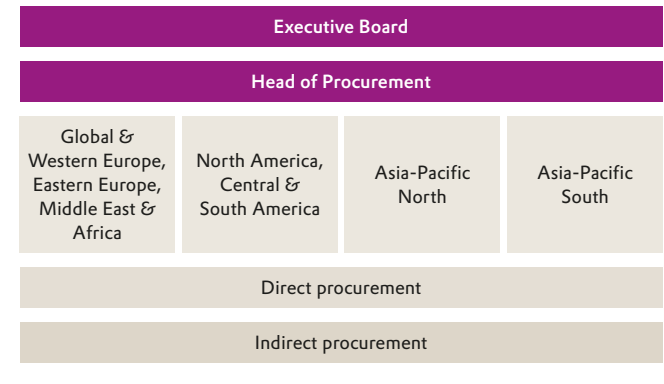
VALUE CHAIN AND PRODUCTS

Responsibility within the supply chain

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 Labour Standards issued by the International Labour Organization (ILO), and the topics addressed by the Responsible Care® initiative.

Evonik’s procurement organization

C17



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 in North and South America.

Validation and evaluation of our suppliers is 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. 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 Together for Sustainability.

### Together for Sustainability

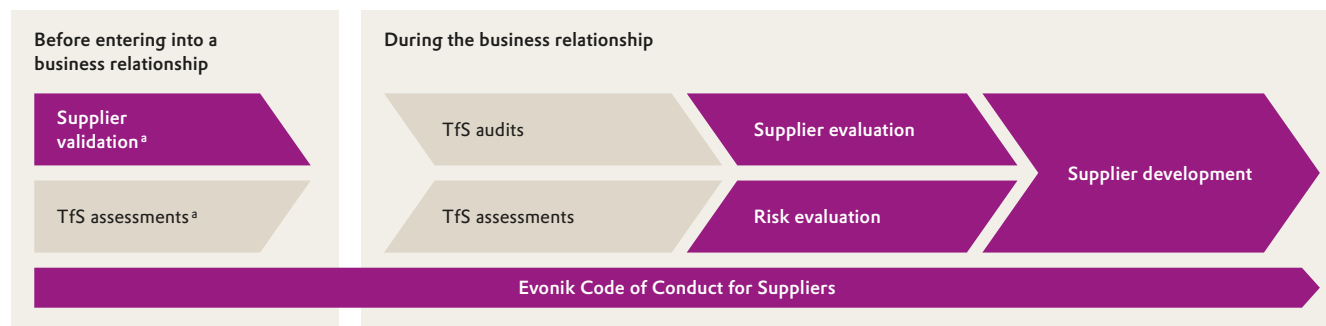
Harmonizing global standards in the supply chain creates transparency and makes it easier for both suppliers and customers to reliably assess and evaluate sustainability performance. The chemical industry set up the Together for Sustainability (TfS) initiative for this purpose in 2011. Evonik is one of the six founding members of this initiative. The aim of TfS is the joint development and implementation of a global assessment and audit program for responsible procurement of goods and services. As well as helping to make environmental and social standards measurable, TfS contributes to improving them.

### Validation and evaluation of suppliers

We expect our suppliers to share our principles and to 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 online and evaluated using a validation matrix.

### Supplier validation and evaluation

C18



■ TfS process. ■ Evonik process.

<sup>a</sup> Alternatives

All suppliers are informed about corruption prevention and the related measures in our code of conduct for suppliers and our general terms and conditions of purchase. In 2019, we evaluated 2,000 new suppliers (nearly 90 percent).

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. The aim is to safeguard the supply of raw materials and technical goods to Evonik and gain access to new procurement markets and suppliers. In the reporting period, TfS assessments were performed on 68 new suppliers of raw materials, technical goods, and services.

We apply the same care to the evaluation of existing relationships with suppliers. Strategic suppliers are examined regularly as a basis for initiating improvements where necessary. To minimize the risk to Evonik, as part of our management of contractors, evidence, and self-assessments on compliance with the relevant German legislation (MiLoG, AEntG, SGB, and HwO)<sup>1</sup> were obtained and evaluated.

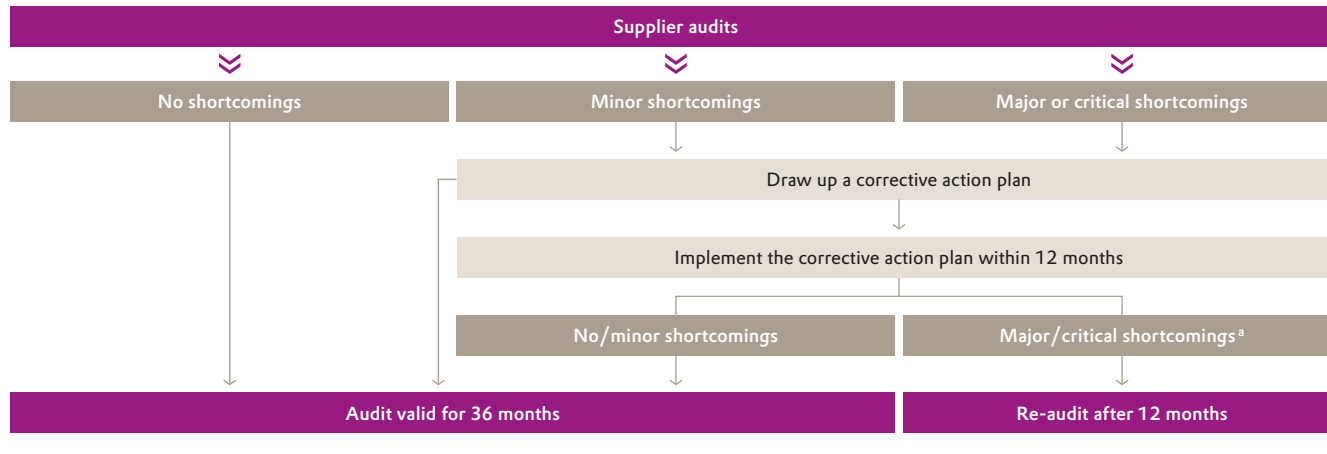
Optimization of construction and technical services continued in 2019 in order to address the challenges resulting from the skills shortage and the construction boom in Germany. Here, we made significant progress in validating new suppliers and extending long-term supply relationships.

[102-16](#), [103-2](#), [407-1](#), [408-1](#), [409-1](#), [414-1](#), [414-2](#)

<sup>1</sup> MiLoG = German Minimum Wage Act; AEntG = German Employee Secondment Act; SGB = German Social Code; HwO = German Ordinance on Craftsmen.

**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.

There is a clear and structured process for supplier audits, including various escalation steps (see chart C19 Audit escalation process). 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.

**Our activities in 2019**

In 2019, we sourced raw materials and supplies, technical goods, services, energy, and other operating supplies with a total value of around €9.4 billion (2018: €9.9 billion) from around 30,000 suppliers. Local sourcing<sup>1</sup> accounted for around 77 percent of this amount (2018: 76 percent). Raw materials and supplies accounted for 55 percent of procurement volume (2018: 60 percent). Spending on petrochemical feedstocks was around €3.4 billion and accounted for 60 percent of our raw material base.

Worldwide, the Tfs member companies initiated 309 audits and around 1,043 assessments in 2019. Evonik initiated 26 of these audits and 117 of the assessments. About 80 percent of our direct and over 50 percent of our indirect procurement volume was covered by Tfs assessments.<sup>2</sup>

In 2019, we evaluated around 92 percent (2018: 83 percent) of suppliers of critical raw materials on the basis of sustainability criteria. These criteria include country risks, the supply situation, and market availability. Tfs assessments and audits were also used to review further significant suppliers. In addition, 66 percent of all significant suppliers of raw materials have already been reviewed using sustainability criteria.

A particular focus in 2019 was the process of following up on audits and assessments. Corrective action was initiated with 19 suppliers, where major or critical issues were identified during

audits. In seven cases, supplier assessments showed that insufficient attention had been paid to sustainability aspects. In these cases as well, corrective action was initiated. Shortcomings in the implementation of environmental measures and potential for improvement in occupational safety were also identified in 2019 at suppliers audited by Tfs. None of the suppliers evaluated had significant negative impacts on the environment, nor was the scope to improve social aspects of their business activities classified as significant. No cases of child labor or forced labor were identified in on-site inspections, and there were no cases of discrimination or restriction on the freedom of association.

📍 407-1, 103-2, 408-1, 409-1, 204-1

<sup>1</sup> For us, local sourcing means deliberate procurement from sources that are geographically close to our production sites.

<sup>2</sup> For further information see [www.tfs-initiative.com](http://www.tfs-initiative.com)

Supplier validation, assessments, and audits, including corrective action  414-1, 414-2

T05

	2018	2019
No. of new suppliers evaluated	1,357	2,049
Based on environmental criteria	1,357	2,049
Based on social criteria	1,357	2,049
No. of new and established suppliers evaluated	1,508	2,192
Based on environmental criteria	1,508	2,192
Based on social criteria	1,508	2,192
No. of suppliers audited where a need for corrective action was identified	26	26
thereof % of suppliers where significant actual or potentially negative impacts were identified <sup>a</sup>	0	0
% of suppliers with whom corrective action plans (CAP) were agreed	85	100
% of suppliers where the supply relationship was terminated as a result of the evaluation	0	0

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

The total of 2,192 suppliers evaluated comprises audits, assessments, and supplier validations performed by TfS and directly by Evonik.

Active involvement in TfS is important to us. Evonik employees are represented on TfS workstreams in Germany, North and South America, and Asia. In 2019, Evonik organized a TfS conference on sustainability within the supply chain in Shanghai (China). As a member of the initiative, Evonik is also subject to TfS assessments. Our gold rating positioned us among the top-rated companies in 2019. Evonik also supported the sustainability in the supply chain pilot project run by Chemie<sup>3</sup>, the sustainability initiative of the German Chemical Industry Association (VCI).

### Reducing carbon emissions along the upstream value chain

Scope 3 emissions along the upstream value chain are of special interest with a view to our climate targets. Evonik therefore set up a team of experts in the reporting period. As the first step, it contacted suppliers of our key raw materials asking them to list the “carbon backpack” of the raw materials supplied. Together with the operating units, the project team is also gathering ideas on the use of alternative raw materials and production technologies.

## Research & development/innovation

**A combination of innovative capability and proximity to customers is a key success factor for Evonik and drives profitable growth. Within the growth engines of relevance for Evonik—Specialty Additives, Animal Nutrition, Health & Care, and Smart Materials—we identify future-oriented innovation growth fields, which we use to achieve our ambitious targets.**

### Strategy and management

Evonik’s vision is to be an innovation leader. We have therefore defined clear and ambitious targets. Our guiding principles on innovation help us meet these targets. We see Evonik as an open and learning organization with a constructive approach to errors. Sustainability is an important aspect of our innovation activities. We work with customers and external partners across internal departmental boundaries and provide incentives for new discoveries so that good ideas can be turned into marketable innovations. Research and development (R&D) in our strategic innovation unit Creavis and in the Nutrition & Care and Resource Efficiency segments is aligned to six innovation growth fields:

- **Sustainable Nutrition:** establishing additional 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
- **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

We aim to generate additional sales of over €1 billion with these innovation growth fields by 2025. We are making good progress. Our goal is to increase sales generated with products and applications developed in the past five years to 16 percent in the mid term. In 2019, such products and applications accounted for 13 percent of sales.

Evonik's global R&D network comprises 38 locations with approximately 2,560 R&D employees. R&D expenses declined by 2 percent to €428 million in 2019 as a result of our continuous, target-oriented management. The ratio of R&D expenses to sales was 3.3 percent (2018: 3.3 percent). Our R&D projects are managed using the multi-step Idea-to-Profit process developed by Evonik to support the systematic development of projects right up to profitable commercialization. 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 €4.2 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. Around 225 new patent applications were submitted in 2019, and we had around 24,000 patents and pending patents. Patent-driven sales accounted for 47 percent of total sales.

#### Innovation and sustainability

Our innovation pipeline includes both completely new business options and securing and enhancing the prospects of existing

businesses. Equal attention is paid to product and process innovations, business model and systems innovations, and environmental and climate protection.

Our project portfolio is aligned to the differing strategies of the various business lines and we focus on growth engines with high sustainability benefits. During the reporting period, we started to evaluate selected innovation projects using the World Business Council for Sustainable Development's PSA<sup>1</sup> model. We have performed sustainability analyses of our products since 2016. Since 2019, PARCs<sup>2</sup> have been used for this (see chapter "Strategy and growth," sustainability analysis of our business 2.0 [p. 14](#)).

#### Organization and management

Our operating segments account for around 85 percent of our R&D expenses. That includes, first and foremost, research geared specifically to their core technologies and markets, and the development of new business. An above-average proportion of our R&D funding is allocated to the growth segments, Nutrition & Care and Resource Efficiency. The Performance Materials segment focuses on process optimization and product improvements.

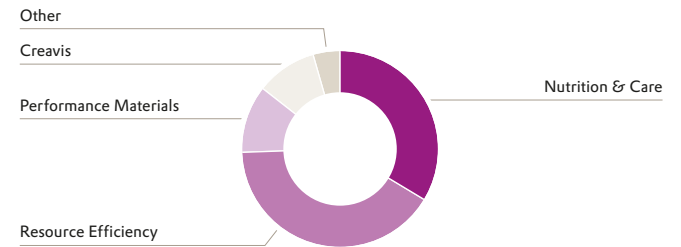
Our strategic innovation unit, Creavis, focuses on mid- to long-term innovation projects that support Evonik's growth and sustainability strategy and open up new business options. It works on transformative innovations, taking economic, ecological, and social aspects into account in the management of the portfolio (I2P<sup>3</sup> process). Creavis also identifies future topics and serves as an internal incubator. Using scenario methods, our scientists have developed future visions for specialty chemicals. This is the biggest study of its type in the world and Evonik intends to use the results to initiate timely and purposeful innovations. In addition, long-term strategies can be measured against the scenarios and refined. Innovation projects that are cross-organizational or build up competencies for Evonik are explored in

## VALUE CHAIN AND PRODUCTS

Research & development/innovation

### Breakdown of R&D expenses

C20



project houses at Creavis. Experts from the organizational units involved in the project house normally spend three years working together on the development issues on which the project house focuses. The products and technologies developed are subsequently marketed by one of the operating segments. Other possible options are setting up a competence center or an internal start-up. In all, Evonik has set up twelve project houses since 2000. At present, the Singapore-based Tissue Engineering project house in the Healthcare Solutions innovation growth field is working on new solutions for the regeneration of human tissue after an accident or illness. The aim is to produce materials for biological implants for medical applications. Research into optimized approaches to skin models with better predictive power and scalability and excellent reproducibility is currently being carried out for the Cosmetic Solutions innovation growth field. These approaches will be used in laboratory research and testing, for example, to test active ingredients for cosmetics, cleaning agents, and chemicals. Evonik also obtains access to innovative technologies and new business options through its corporate venture capital activities. We invest specifically in specialized technology funds and start-ups of strategic relevance to Evonik. That gives us an insight into innovative developments

<sup>1</sup> PSA = Portfolio Sustainability Assessment.

<sup>2</sup> PARC = Product-application-region combination.




at an early stage. Projects with our partners enable us to work on new products and technologies, which increases the pace of innovation. Around 30 investments have been made since 2012.

<https://venturing.evonik.com/sites/venturing/en/direct-investments/>

### Our activities in 2019

The Veramis joint venture in Delft (Netherlands) created from the research collaboration between Evonik and Royal DSM has developed a process to produce the omega-3 fatty acids EPA<sup>1</sup> and DHA<sup>1</sup> for the nutrition of salmon in aquaculture. This means that fish oil obtained from wild fish is no longer necessary, thereby protecting this natural resource. A new production facility came on stream as planned in Blair (Nebraska, USA) in mid-2019.

Evonik has entered into extensive cooperation arrangements to develop new products with sustainability features. A research agreement has been signed with specialty chemicals company Perstorp (Malmö, Sweden) to develop new animal nutrition products that reduce dependence on antibiotic growth promoters.

We also have an exclusive technology partnership with Dow Chemicals. Together, we plan to develop a process for direct synthesis of propylene glycol (PG) from propylene and hydrogen peroxide to market maturity. The key element is a new catalytic system that enables direct synthesis of PG from propylene and hydrogen peroxide in a process that generates high yields with comparatively low energy consumption.  103-2

Our corporate venture capital unit has invested in a start-up for sustainable production of biofabricated material inspired by leather, eliminating the need for animal skins. The technology developed by Modern Meadow, Nutley (New Jersey, USA) produces animal-free collagen via a fermentation process using yeast

cells. The biofabricated material produced by this animal-free method more closely resembles natural leather than synthetic equivalents.

Evonik and Siemens have embarked on Rheticus II<sup>2</sup>, a joint research project that aims to develop an efficient and powerful test facility to produce specialty chemicals with the aid of bacteria—using carbon dioxide, water, and electricity from renewable sources. In the Rheticus I<sup>3</sup> project, the two companies previously worked for two years to develop the technically feasible basis for this artificial photosynthesis process using a bioreactor and electrolyzer. Evonik and Siemens are now combining these two previously separate plants in a test facility at Evonik's site in Marl (Germany).

As part of the European Union's Horizon 2020 research program, Evonik and nine project partners from five countries have succeeded in developing a novel new reactor to catalyze OXO reactions (Reactor Optimization by Membrane Enhanced Operation project "ROMEO"<sup>4</sup>). The new reactor reduces CO<sub>2</sub> emissions by around 70 percent compared with the conventional process—a clear step towards more sustainable production.

## Efficient use of scarce resources/ circular economy

**The biggest direct influence on sustainability requirements in the value chain comes from our production and business processes and the products we market. In many cases, we develop and use our own production processes that enable us to combine efficient processes, careful use of resources, and innovative capability.**

### Strategy and management

At many of our sites, we have backwardly integrated production complexes where key precursors are produced in adjacent production facilities. That ensures high reliability of supply for our customers. Our world-scale facilities are also a high entry barrier for potential competitors.

We generate 83 percent of our sales outside Germany. That shows the global focus of our business. We have production facilities in 26 countries on six continents 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 units. This results in valuable economies of scale and very good use of material flows. In this way, we make a contribution to the circular economy. Continuous process optimization and the efficient use of resources have always been very important for our production activities.

<sup>1</sup> EPA = eicosapentaenoic acid, DHA = docosahexaenoic acid.

<sup>2</sup> Rheticus II: funded by the Federal Ministry of Education and Research; funding reference O3SF0574A.

<sup>3</sup> Rheticus I: funded by the Federal Ministry of Education and Research; funding reference O3SF0548A.

<sup>4</sup> Funding reference 680395.

### Production inputs and output<sup>1</sup>

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 9.86 million metric tons to 9.24 million metric tons in 2019. Excluding the methacrylates business, which has been divested, production output was 9.16 million metric tons. Evonik already has a strong focus on re-usable packaging materials for its products. For instance, we collect steel and plastic drums at our sites. They are reconditioned for re-use as packaging. We constantly strive to increase the proportion of recyclable packaging. 🌱 301-1

### Conflict minerals

The Dodd-Frank Act requires companies listed on the US stock market to disclose whether 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. In addition, we require new suppliers to provide evidence of origin in the validation process. In 2019, we screened around 2,000 new suppliers and did not identify any use of conflict minerals.

### Renewable raw materials<sup>1</sup>

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 reliability of supply. Consequently, they are subject to a special examination.

We endeavor to raise the proportion of renewable raw materials wherever this makes sense from a technical, economic, ecological, and social perspective. In view of the rising significance of renewable raw materials for our customers and in public debate, this topic is discussed by our specialists in our internal expert circle on renewable raw materials.

In 2019, renewable raw materials accounted for 7.9 percent of production inputs (2018: 9.7 percent). This is attributable to a reduction in the use of sugar by Animal Nutrition at the site in Blair (Nebraska, USA).

### Palm oil

Palm oil plantations can have negative effects on the environment and local inhabitants. In view of this, Evonik supports the use of sustainable palm oil in the supply chain. We therefore use internationally recognized certification standards. We have been a member of the Roundtable on Sustainable Palm Oil (RSPO) since 2010. In cooperation with customers, our Care Solutions business line has defined additional supply chain criteria such as traceability to palm oil plantations or refineries. Strategy, objectives, and activities such as Evonik's palm oil roadmap are discussed internally by our expert circle. We publish our activities and our targets to promote sustainable palm oil production in the RSPO's annual progress report.

Evonik uses small amounts of palm oil, palm kernel oil, and their derivatives in production processes, for example, to produce ingredients for the cosmetic and consumer goods industries. 20 production sites that use palm oil derivatives have already been 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. We are extending our portfolio of RSPO-certified products in collaboration with our customers and suppliers. The Care Solutions business line already markets over 100 products that conform to RSPO standards. In Europe, Care Solutions has switched two products based on pure palm oil or palm kernel oil to the SG standard. Through the supply and labeling of certified products, this provides strong support for the RSPO's goals of transition to sustainable supply chains. In addition, this has greatly increased demand from major cosmetic producers and retail chains for RSPO-certified products. However, there are massive regional variations in the supply of certified derivatives—often coupled with higher prices, higher take-off guarantees, or restricted availability of suppliers. That entails uncertainty in meeting demand. Care Solutions therefore continuously screens supply on the market and is stepping up pressure on direct pre-suppliers so that it can switch products globally to the MB standard.

To enhance transparency, since the end of 2019, we have indicated all RSPO-certified products in the tradename. Our expert circle is drawing up recommendations for the Evonik Group and working on external monitoring of suppliers. To implement the no-deforestation policy (NDP) among direct suppliers to the Care Solutions business line, an external study was commissioned. As a result, many of our suppliers have already introduced corresponding targets and measures. Complexity and ongoing changes mean that continuous monitoring of the supply chain back to the refinery or plantation is virtually impossible. A future goal for us is to participate in industry platforms on the transparency and integration of NDP palm oil derivatives.

<sup>1</sup> See "About this report" 📄 p. 83, T29.



## CASE STUDY

## Circular economy: VESTENAMER® turns used tires into a valuable resource

Environment-friendly disposal of tires is an ecological challenge. Around 26 million metric tons<sup>1</sup> of tires have to be disposed of every year, including around 4 million metric tons<sup>1</sup> in Europe. And the amount is rising.<sup>2</sup>

In the past, tires that had reached the end of their useful life were either incinerated to generate energy or disposed of in landfills. Today, reprocessing is becoming more important. Rubber granulate or ground rubber obtained from tires using sophisticated technology can reduce the use of key primary resources such as natural rubber and crude oil. Knock-on effects include less destruction of the environment, reduced land use, and a reduction in carbon emissions compared with products that do not use reprocessed rubber.

VESTENAMER®, a process additive developed and marketed by Evonik, improves the processing properties of rubber blends so rubber granulate and ground rubber from scrap tires can be used efficiently to manufacture high-quality products. VESTENAMER® improves the cost-effectiveness and quality of the rubber components and therefore helps create a sustainable circular economy.



VESTENAMER® (white granulate) from Evonik facilitates efficient reprocessing of rubber (black granulate).

For many years, VESTENAMER® has been used to reprocess rubber for use in railroad crossings, flooring, and mats. This patented process also offers advantages in high-quality road construction. In rubber-modified asphalt, in particular, blends containing VESTENAMER® reduce the formation of cracks and ruts and therefore enhance the quality and durability of roads. At the same time, VESTENAMER® is an answer to well-known processing challenges because it makes the asphalt blend less sticky and improves sealing properties.

In addition to conventional applications in technical rubber products such as hoses, profiles, molded articles, and the production of new tires, applications that use processed tire rubber are therefore of special interest for VESTENAMER®. A change of attitude by tire producers is also being observed.

In the past, products with a proportion of rubber granulate or ground rubber were considered to be lower-quality products. Now, more and more tire producers are using ground rubber.

The use of tire rubber in mats for livestock is a new application. In particular, such mats offer greater comfort for resting cattle, reduce injuries to joints, and provide heat insulation. The enhanced well-being of the animals increases productivity, so farmers benefit from higher milk yields.



The disposal of vast quantities of tires is an ecological problem.



### CIRCULAR ECONOMY

Our stakeholders rank efficient use of scarce resources/circular economy as one of the three most important sustainability issues for Evonik.<sup>3</sup>

<sup>1</sup> WBCSD ELT Management State of Knowledge Report; January 2018.

<sup>2</sup> Global Market for the Tire and Rubber Remediation and Recycling Industry; July 2018.

<sup>3</sup> See our materiality analysis in the chapter "Strategy and growth" p.21 f.

### Circular economy

Circular economy has been part of our materiality analysis since 2017. A circular economy is an alternative to the conventional linear business model. Ideally, in a circular economy, materials are maintained at the highest possible level of the value chain and undergo various cycles of production, use, recycling, and re-use.

As a specialty chemicals company, we research and develop solutions for mechanical and chemical recycling. These include both the recycling of plastics and rubber, and the use of CO<sub>2</sub> as a production input. In addition, Evonik is currently exploring the feasibility of recycling PET plastics.

Our experts have also looked into quantitative evaluation of the circularity of selected Evonik products. Following intensive research, they decided to use the material circularity indicator developed by the Ellen MacArthur Foundation and Granta Design. This indicator is now calculated to evaluate the circularity of selected Evonik products. In addition to this, life cycle assessments are available as a basis for calculating the environmental impact of these Evonik products. The results will be used in the selection of production inputs and in the sustainability analysis of our business (see chapter “Strategy and growth” [p.14](#)).

To enhance visibility and draw management’s attention to the opportunities and challenges of circularity at Evonik, a kick-off meeting was held for a strategy-oriented circular economy initiative. Subsequently, our existing task force was recast as an expert circle on the circular economy. This was confirmed by the Global ESHQ Committee and has now been fully integrated into our ESHQ management approach. In view of the increasing significance of the circular economy in society and for Evonik, several workshops and other events on this topic were held in 2019. This included the brainstorming workshop “No time to waste” in Brussels (Belgium) and a workshop on polymer recycling in Marl (Germany). The motto of the Evonik Perspectives stakeholder

forum in Berlin (Germany) was “Making the future go round—The circular economy as an opportunity for Germany as a business center” (see “Intensive dialogue in 2019” [p.19](#)). The expert circle will be using the feedback and comments received from the more than 150 attendees on its work.




Evonik’s wide range of projects on plastics recycling was presented and keenly discussed at an expert workshop.

In 2020, we will continue to closely monitor and actively shape the development of a circular economy and report regularly on our progress. These tasks will mainly be undertaken by the new expert circle. In addition, we intend to drive forward the quantitative evaluation of the circularity of selected Evonik products.

## Sustainable products and solutions for our customers

**Demand from customers for products for energy- and resource-efficient applications is rising. In many businesses, sustainability is becoming a growth driver.**

### Strategy and management

We play a part in meeting the rising sustainability requirements of our markets. Our special strength is working in close partnership with our customers. That gives us a good basis, so we can ensure timely identification of promising developments in our markets and gain access to new growth areas. Evonik's product portfolio ranges from high-quality intermediates to complex formulations and system solutions. Our markets cover a balanced spectrum, including pharmaceuticals, consumer and care products, food and animal feed, paints and coatings, the automotive industry, mechanical engineering, and construction.  102-44

None of the end-markets that we supply accounts for more than 20 percent of our sales. Evonik's customers are mainly industrial companies that use our intermediates in their own products and solutions. Our operating segments make a key contribution to enhancing the product benefits that differentiate our customers in the market and make them successful in global competition.

Our in-depth knowledge of requirements, markets, and trends helps us tailor products individually to the specific needs of our customers. Regional specifics are taken into account through our numerous technology and competence centers. Alongside products and solutions, many of our businesses sell services along the entire value chain. A good example is our Animal Nutrition business line, with its broad range of specialist services. At Evonik, the operating businesses are responsible for customer relationship management, which is aligned to market and customer needs on a decentralized basis by our segments and business lines.

Close collaboration with our customers  102-44


Leading market positions account for around of 80 percent of Evonik's sales<sup>1</sup>. Our aim is to be integrated into our customers' supply chains where possible. That allows optimal alignment of our research & development, production, marketing, and distribution workflows to our customers' requirements. Close contact to our stakeholders helps to improve our understanding of market developments and customer requirements. At group level, we have a marketing and sales excellence (MSE) team that offers special staff training and management tools to support our segments in the steady development of customer focus. Examples include a digital approach for ongoing customer surveys and customer interaction.

Our cross-business industry teams also make an important contribution to marketing. These teams pool solutions expertise for specific sectors or markets and provide a group-wide communication platform for dialogue with customers. In this way, we build expertise and at the same time increase our visibility in our key markets. Examples of our industry teams are Automotive, Food, Medical Technology, and Oil & Gas.

### Trend in greenhouse gas avoidance over the life cycle of applications of the Evonik products sold in the specified year<sup>a</sup>

T06

	2015	2016	2017	2018
CO <sub>2</sub> eq avoided in million metric tons	92.2	95.2	101.8	108.0

<sup>a</sup> Figure for 2019 scheduled for publication in mid-2020 (see the brochure "Evonik Carbon Footprint" on our website  [www.evonik.com/responsibility](http://www.evonik.com/responsibility)).

## VALUE CHAIN AND PRODUCTS

Sustainable products and solutions for our customers

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. The avoidance of greenhouse gases shown here results from applications for the following four products/system solutions compared with established alternatives: "green" tire technology, amino acids for animal nutrition, foam stabilizers for insulating materials, and oil additives for hydraulic fluids. The amounts stated are avoided over the application life cycle of the products, based on volume sales of the products manufactured by Evonik in the year given. The method used to compile the data is the WBCSD Avoided Emissions Guidance published in October 2013. The guidance was updated in 2017 and a second version was published. The increase in avoided greenhouse gas emissions in 2017 was due to higher sales volumes. In 2018, emissions avoided by using Evonik products increased further. This was due to higher volume sales of three of the four products evaluated.

<sup>1</sup> We define these as ranking 1st, 2nd, or 3rd in the relevant markets.





## CASE STUDY

## Ingredients for the cosmetic industry

Sustainability and naturalness are key success factors in the cosmetic industry. More and more consumers actively include climate protection and careful use of resources in their purchasing decisions. Producers and retail chains are responding to these new demands and aligning their portfolios accordingly.

For suppliers of high-quality ingredients to the cosmetic industry, providing attractively priced first-rate products is no longer enough. These days, they need to make their contribution to sustainability transparent and improve it constantly in collaboration with their customers. Evonik's Care Solutions business line took steps to prepare for this at an early stage. Nearly 90 percent of the products currently marketed by Evonik for the personal care sector are based on a proportion of renewable raw materials. Life cycle analyses ensure the necessary transparency from the origin of the raw materials through the traded end-product to what happens to potential decomposition products after use.



### SUSTAINABLE PRODUCTS

According to our stakeholders, sustainable products/solutions for our customers is one of the three most important sustainability issues for Evonik.<sup>1</sup>

When developing innovative new products, Evonik brings together its technological knowledge of the areas of organics, silicones, biotechnology, and active ingredients to create integrated platform solutions. Applications range from hair and skin care, sunscreen, and bath and shower products to decorative cosmetics, anti-aging

ingredients, and deodorants. Care Solutions generates the highest growth rates in its core European market with natural cosmetics and alternative preservatives and has aligned its portfolio to this in recent years.

### High transparency for customers

The convergence of sustainability requirements and digital technologies is a dominant issue in the market. The use of digital labels such as QR codes introduces opportunities for informed purchasing decisions using smartphones, which have hardly been used so far. Care Solutions has developed the CAREtain<sup>®</sup> Toolbox<sup>2</sup>, an information system that provides a wide range of facts and data.

In addition, Evonik's web-based platform IntoBeauty provides greater transparency and innovative ideas. The main aim of this platform is to give business-to-business (B2B) customers a tool that simplifies the development of new products with an optimized ecological profile. Access to information on the origin of raw materials and ingredients, RSPO certification<sup>3</sup>, biodegradability, and the

Evonik has developed RHEANCE<sup>®</sup> One, a completely natural raw material for cosmetics that meets many of the demands made by producers and consumers.



Evonik markets innovative solutions for resource-saving active ingredients.

conformity of natural cosmetics enables cosmetic producers to take account of the needs of their end-customers from the initial stages of product development and design.

Evonik has many years of experience and proven expertise in resource-saving processes for a broad spectrum of ingredients. That gives it a good basis for collaboration on new generations of innovative products and future-oriented solutions.

<sup>1</sup> See our materiality analysis in the chapter "Strategy and growth" p.21.

<sup>2</sup> This tool is accessible by logging onto [intobeauty.evonik.com](https://intobeauty.evonik.com).

<sup>3</sup> Roundtable on Sustainable Palm Oil.




## Product stewardship

**Product stewardship is a vital precondition for our business. It is our “license to operate.” It includes timely identification and evaluation of the potential health and environmental risks in our portfolio.**

### Strategy and management

We therefore examine the entire value chain of each of our products—from procurement of the raw materials to delivery to our industrial customers, who receive all relevant information on the handling and disposal of our products. That includes, for example, safety data sheets and technical information sheets.

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.

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). The key elements of our product stewardship have been defined in a product policy. To supplement this, an operating procedure defines how these commitments are to be implemented within Evonik, together with control mechanisms to monitor their observance.  417-1, 103-2

### Responsible handling of chemicals

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 ensure this through 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. There are also 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 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 in how to handle our products.

### 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.

## VALUE CHAIN AND PRODUCTS

### Product stewardship

Evonik evaluates its substances using its own Chemicals Management System (CMS). This system, which was developed in-house, supports us in global product evaluation, analogously to a life cycle assessment. The content of the CMS has been harmonized with the GPS and REACH requirements. By the end of 2019, we had performed more than 85 percent of the required evaluations. Substances relating to acquisitions made since 2017 will be evaluated later.

The Global Product Strategy (GPS) was introduced in 2006 by the International Council of Chemical Associations (ICCA) to establish uniform global risk assessments for all substances produced or placed on the market in quantities exceeding 1 metric ton per year. Originally, these were to be supplemented by GPS Safety Summaries as a readily accessible and easy-to-read source of information on chemicals.

The amount of data and information available on substances has now improved considerably, as shown by the final report on a joint study by UN Environment and the ICCA. In 2019, the ICCA Board therefore decided to discontinue the GPS Safety Summaries and the ICCA portal. Evonik has implemented this decision. However, the safety summaries for about 170 substances exceeding 100 metric tons p.a. remain available on our website.

As an extension of the CMS, our Chemicals Management System<sup>PLUS</sup> is used for products containing substances of very high concern. These are subject to a more detailed examination to bring about a reduction in the negative impact on people and the environment. Around 1 percent of our products currently meet the criteria for evaluation on the basis of CMS<sup>PLUS</sup>.

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

Evonik is also involved in various national and international associations and initiatives engaged in the ongoing development of risk evaluation using criteria.

### Our activities in 2019

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.

Following successful completion of registration, the focus for all Evonik substances is shifting to the evaluation of dossiers and substances, and to restriction and authorization. We constantly compare the substance lists published by the authorities with our own portfolio to ensure timely identification of any of our substances that are affected. If such substances are identified, we examine suitable measures. We also collaborate closely with our customers to work out the next steps. In addition, we examine the raw materials we procure. If any substances are categorized as being of very high concern or are on the 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.

In 2019, our REACH activities concentrated on the evaluation of dossiers and substances, and on reviewing and updating dossiers that have already been registered. This is based closely on the Cefic action plan, which Evonik has signed. The review of all of Evonik's approximately 1,300 dossiers with a view to enhancing quality will take place stepwise up to year-end 2026. Progress will be outlined annually in this report and in a report to Cefic. Evonik is not presently affected by authorizations.

Some countries and regions are currently introducing chemical regulations with requirements similar to the REACH requirements in the EU. 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 and ensures that it implements them in the relevant regions. In 2019, all relevant substances were successfully pre-registered in South Korea and pre-registration started in Turkey. Reports to the substance inventory in the Eurasian Economic Union are being made in parallel with this.

### The Globally Harmonized System (GHS)

The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) initiated 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<sup>1</sup> requirements in all countries where they apply.

### Microplastics

Pollution of the environment and especially aquatic systems by plastics is a focus of public debate. Every year, 4.8–12.7 million metric tons<sup>2</sup> of plastic waste, including microplastics, get into the world's oceans. Microplastics can be added to products intentionally but can also be generated by the abrasion of plastics, for example, abrasion of tires and fragmentation of larger plastic items.

In January 2019, the European Chemicals Agency (ECHA) published a draft restriction on behalf of the European Commission on intentionally added microplastics. There was a public consultation on this draft between March and September 2019. Evonik took part in this both directly and via associations such as Cefic and VCI. Since the requirements and definitions are still unclear, it

is difficult to reach a clear assessment of how it will affect Evonik. Based on the present draft, the main impact on Evonik would relate to powders and nylon particles in leave-on cosmetics and to surface-treated silica.

Evonik is actively supporting the approach taken by Cefic, which is geared to producing a realistic draft restriction as a basis for discussion with the EU Commission and the member states. The aim must be a restriction that makes sense, contains clear definitions and areas of applicability, and is based on the fundamental principles of REACH.

Evonik has been involved in the Zero Pellet Loss campaign since 2013 and became a signatory to Operation Clean Sweep in 2015. The aim of these two global initiatives 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.

<sup>1</sup> CLP = Regulation EC No. 1272 /2008 on the classification, labelling and packaging of substances and mixtures.

<sup>2</sup> Jenna R. Jambeck et al. 2015. Plastic waste inputs from land into the ocean. *Science*, vol. 347, no. 6223, pp. 768 – 771; DOI: <https://doi.org/10.1126/science.1260352>.

### Animal protection

We need toxicological and ecotoxicological data to assess the safety of our products. As the first step, we examine all alternatives to animal testing in detail (quantitative structure-activity relationship analyses, analogies, literature, non-animal testing). We have therefore set up a task force in the Evonik Group, for example, to pool expertise on in-silico methods, to evaluate in-vitro methods for the skin sensitization endpoint, and to examine the viability of test strategies. A first in-vitro feasibility study for the respiratory tract sensitization endpoint has been performed with an external partner. This project is being continued with financial support from Evonik. The initial findings indicate that the respiratory tract irritation endpoint should be pursued so that, in the future, substances can be tested in vitro to evaluate irritation thresholds. Evonik is also a member of the European Partnership for Alternative Approaches to Animal Testing (EPPA) to drive forward cross-sector alternatives.

From a legal and scientific perspective, in many cases, tests on animals are often the only way to meet the necessary data requirements. Evonik arranges for animal tests to be performed only by test institutes that are validated in accordance with the applicable national and international legal provisions and ensures that these tests meet animal protection standards. As a responsible company, we have also drawn up our own animal protection guidelines.

### Endocrine disruptors

Endocrine disruptors are natural or chemical substances that disrupt or alter regulation of the hormone system and can cause lasting damage. The European Commission wants the present regulations on biocides and pesticides containing relevant evaluation criteria to be extended to other sectors such as cosmetics, toys, and chemicals. Evonik is working in national and European organizations towards appropriate implementation of this issue.

### PBT/PMT

PBTs are substances with persistent bioaccumulative or toxic properties. PMTs are substances with persistent, mobile, and toxic properties. Evonik is working actively in national and European associations to define and obtain scientifically based data. The background is the potential classification of substances that meet these criteria as substances of very high concern (SVHC).

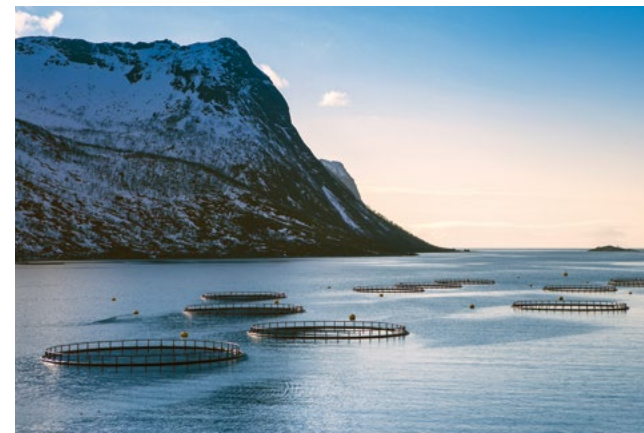
### Nanotechnology

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. We handle the associated technologies responsibly and utilize the possibilities they offer. For example, we see considerable opportunities in new materials for high-end batteries and energy-saving applications in the construction sector.

Based on our long-standing experience, we 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 share the results of our research openly and transparently with our stakeholders. Representatives of Evonik take part in the German government's NanoDialog, where experts from industry, science, authorities, and industry associations discuss the opportunities and risks of nanotechnology.

### Biotechnology



Evonik has many years' expertise in fermentation processes such as the production of omega-3 fatty acids from natural algae for use in aquaculture.

[www.veramaris.com](http://www.veramaris.com)




Evonik utilizes the opportunities offered by biotechnology for efficient and environmentally compatible production processes and innovative products. We use micro-organisms for biocatalysis processes and fermentative production processes. Biotechnology is used to produce essential amino acids, probiotics, nutritional supplements, and pharmaceutical and cosmetic ingredients that are difficult or impossible to access through conventional chemical synthesis. Evonik has issued guidelines on safe and responsible use of biotechnology. These meet our customers' desire for transparency, openness, and strict risk limitation. The products have to be registered before they can be produced and placed on the market. That requires detailed explanations of the production processes and the micro-organisms used, as well as of safety aspects.

## Our targets





Below is an overview of the targets set for our value chain and products area of action. The targets defined for 2020 and beyond have been sharpened and streamlined to enhance their strategic relevance.

### Target attainment in 2019



#### Responsibility within the supply chain

-  Conduct at least 20 supplier sustainability audits p.a. under the shared audit principle of the Together for Sustainability initiative; we conducted 26 audits in 2019
-  Continue the analysis of suppliers by reviewing at least 80 TfS assessments; in 2019, we conducted more than 100 TfS assessments
-  Evaluate the sustainability performance of 90 percent of suppliers of critical raw materials by 2020; status in 2019: 92 percent<sup>1</sup>



#### Research & development/innovation

-  Generate more than €1 billion in additional sales by 2025 in our six innovation growth fields (see section headed "Research & development/innovation"  p.37)
-  Increase sales of products and applications developed in the past five years to 16 percent in the mid term; status in 2019: 13 percent (see section headed "Research & development/innovation"  p.37)

#### Efficient use of scarce resources/circular economy

-  Develop recommendations for action on palm oil, palm kernel oil, and their derivatives at Evonik<sup>2</sup>
-  External monitoring of suppliers of renewable raw materials and in-house supplier criteria

#### Product stewardship

-  Establish a risk estimate for >99 percent of substances placed on the market in quantities of >1 metric ton p.a. by the end of 2020; status in 2019: >85 percent
-  Conduct a more far-reaching assessment of all products containing >0.1 percent hazardous chemicals of high concern (hChC)<sup>3</sup>; e.g., CMR<sup>4</sup> 1A/1B, PBT<sup>5</sup> (CMS<sup>PLUS</sup>)




### Targets for 2020 and beyond

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

Increase sales of products and applications developed in the past five years to 16 percent in the mid term

More than €1 billion additional sales in the six innovation growth fields by 2025 (see section "Research and development" p.37)

Establish a risk estimate for >99 percent of substances placed on the market in quantities of >1 metric ton p.a. by year-end 2020

-  Target not achieved
-  Target partially achieved or target horizon extends beyond 2019
-  Target achieved

<sup>1</sup> We have defined a new target for evaluating the sustainability performance of suppliers of critical raw materials by the end of 2025. See targets for 2020 and beyond.

<sup>2</sup> Since we streamlined and sharpened our targets with a view to strategic relevance in 2019, we have not set targets for 2020 and beyond. We will continue to work on these objectives and to report on them.

<sup>3</sup> hChC = hazardous chemicals of high concern.

<sup>4</sup> CMR = carcinogenic, mutagenic, reprotoxic.

<sup>5</sup> PBT = persistent, bioaccumulative, toxic.



# THE ENVIRONMENT ✓



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



SDGs of particular relevance for Evonik

## KEY TOPICS ▶

- Climate change
- Water management
- Waste management
- Biodiversity

**-42%**

Reduction in scope 1 and 2 greenhouse gas emissions (reference base: 2008)

**€50**

per metric ton Carbon pricing to manage our investments

<sup>1</sup> We assume that market pricing or regulatory price systems of at least €50 per metric ton CO<sub>2</sub> will be established in all Evonik regions in ten years at the latest. We have drafted scenarios for the development of prices on the basis of the different regional starting points.




## THE ENVIRONMENT

### 50 The environment

- 50 Strategy and management
- 51 Our previous environmental targets
- 52 Validation and environmental protection costs

### 52 Climate change


 201-2, 302-1, 305-1, 305-2, 305-3, 305-4, 305-5, 305-6, 305-7

- 52 Strategy and management

### 53 CASE STUDY: Increasing energy efficiency cuts emissions

- 55 Carbon pricing
- 55 Evonik Carbon Footprint

### 56 Water management

 103-2, 303-1, 303-2, 303-3, 303-4, 303-5, 301-3

- 56 Strategy and management
- 56 Water data
- 57 Emissions into water

### 58 Waste management

 306-2

- 58 Strategy and management
- 58 Our activities in 2019

### 59 Biodiversity

 304-1

- 59 Strategy and management
- 59 Our activities in 2019

### 60 Our targets

 102-14, 102-15

## The environment

**As a specialty chemicals company, we are aware that our production may possibly impact the environment. We take many steps to minimize this. According to our materiality analysis, climate change is one of the three most important sustainability issues. Other significant environmental issues are water management, waste management, and biodiversity. The importance of our environment area of action is also reflected in three of the SDGs of relevance for Evonik: responsible consumption and production (SDG 12), climate action (SDG 13), and clean water and sanitation (SDG 6).**

### Strategy and management

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 is based on legal requirements and on internal policies and standard operating procedures. In addition to meeting compliance requirements, we therefore support the continuous improvement of our environmental performance. In addition, we require our manufacturing sites to be validated as conforming to ISO 14001, the internationally recognized environmental management standard.



The Corporate ESHQ (Environment, Safety, Health & Quality) division uses a central audit system to regularly monitor 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.

## THE ENVIRONMENT

### The environment

In 2019, we introduced our new global server-based platform ESTER (Evonik Standard Tool ESHQ and Reporting). We expect this to bring considerable benefits by simplifying and enhancing the transparency of core ESHQ processes and data collection. The software platform was configured in the first half of 2019, followed by the global rollout. The modules introduced in the first phase were incident management, management of change, hazard assessment, and legal compliance. The rollout started in North America, followed by Europe and Asia. We aim to complete the rollout to all Evonik locations by mid-2020.

Our global ESHQ strategy is defined by the HR Executive Committee, which comprises the chief human resources officer, the industrial relations directors of the segments, and the heads of Corporate ESHQ, Corporate Responsibility, and Corporate Human Resources. Decisions on the implementation of this strategy are taken by the ESHQ Panel. Alongside representatives of the segments, regions, and the technical committee, the ESHQ Panel includes employee representatives. It is chaired by the head of the Corporate ESHQ division, who reports directly to the responsible executive board member (the chief human resources officer). The Corporate ESHQ division bundles all group-wide strategic management and coordination tasks in the environment area of action. The role of the Global ESHQ Committee is to regularly discuss ESHQ issues and prepare decisions to be taken by the ESHQ Panel. It comprises the heads of ESHQ in the regions and is chaired by the head of the Corporate ESHQ division. Subject experts are consulted on specific issues.

Specialist knowledge of selected issues is bundled in the ESHQ expert circles, which are convened as required. They are responsible for proposing solutions to specific environmental issues. These are then implemented by the operational and service units. A new expert circle on the circular economy was set up in 2019 (see chapter "Value chain and products"  p.39). Other expert circles deal with topics such as water stress, management & audits, and carbon pricing of investments (see also chart c05 "Sustainability governance structure at Evonik"  p.12).



### Task Force on Climate-related Financial Disclosures

We are following the objectives of the Task Force on Climate-related Financial Disclosures (TCFD) and the ongoing development of established reporting standards with great interest. In keeping with its participation in CDP Climate Change and CDP Water Security, in 2019 Evonik again published detailed strategies, data, and development paths on climate change. The executive board is regularly informed of the opportunities and risks for the Evonik Group, including climate-related risks. Furthermore, in 2019, we specifically reminded our risk coordinators about the need to identify long-term risks and climate risks. In the chapter “Basis of reporting” [p. 82](#), climate-related information is summarized for the first time in the categories governance, strategy, risk management, and metrics and targets, in line with the TCFD structure.<sup>1</sup>

### Our previous environmental targets

For the period 2013–2020, we set ambitious environmental objectives for Evonik based, in each case, on one metric ton of output (reference base: 2012):

- Reduce specific greenhouse gas emissions by 12 percent
- Reduce specific water intake by 10 percent

A further reduction in production waste was set as an additional target.

### Status of our environmental targets

T07

in % compared with 2012	2018	2019	Target 2020
Reduction in specific greenhouse gas emissions <sup>a</sup>	-17	-17	-12
Reduction in specific water intake	-6	-5	-10

<sup>a</sup> Includes both scope 1 and scope 2 emissions. Scope 2 emissions are calculated using the market-based method in accordance with the Greenhouse Gas (GHG) Protocol.

To sharpen our focus on specialty chemicals, on August 1, 2019 we divested the methacrylates business (see “About this report” [p. 83](#)). The methacrylates business, comprising large-volume monomers such as methylmethacrylate (MMA), various specialty monomers, and the PLEXIGLAS® brand of PMMA molding compounds and semi-finished products, constituted a major line of business. From an environmental perspective too, the impact of the divestment is significant and had a major influence on the development of our environmental indicators in 2019. Overall, it affected 15 production sites. Since separate management of the methacrylates business was no longer undertaken in 2019, the presentation of the environmental data and the status of environmental targets in the reporting period only covers the continuing operations (excluding the methacrylates business). As a result, the specific data for 2019 are no longer comparable with the data for 2018. Specific net greenhouse gas emissions (market-based) were 0.6 metric tons CO<sub>2</sub> equivalents per metric ton production output, a reduction of 17 percent compared with 2012. The methacrylates business mainly used cooling circuits rather than once-through cooling systems. Consequently, the divestment of this business had relatively little impact on water intake in 2019. By contrast, it resulted in a sharp reduction in production output of 17 percent. That was the main reason for the 1 percentage point increase in specific water intake in 2019.

## THE ENVIRONMENT

### The environment

Production waste decreased by 18 percent to 321,000 metric tons in 2019. Apart from the divestment of the methacrylates business, the main reason for this was a reduction in output of fermentation products.

### New environmental targets for the period to 2025

Since we achieved our target for the reduction in specific greenhouse gas emissions ahead of schedule, the executive board introduced new environmental targets in February 2019. Our target now is a 50 percent reduction in absolute scope 1 and 2 emissions by 2025, compared with the level in 2008—the first full year after the establishment of Evonik. This affirms our commitment to the Paris Agreement on Climate Change. At present, we assume an average reduction in climate-relevant emissions of 3 percent a year. The relatively short period up to 2025 reflects our view that it is not currently possible to predict technological and regulatory developments beyond this date with sufficient certainty. In addition to this, by 2025 we intend to reduce the scope 3 emissions related to our raw material “back-pack” by 15 percent (reference base: 2020).

In place of our previous group-wide target for a reduction in specific water intake, we are developing site-specific action plans. To take account of projections for climate change and socio-economic developments, we are identifying the sites which will be most affected by water stress in the next 20 years. At these sites, we want to take specific precautions: for example, we are examining alternative cooling systems and transportation options, and the possibility of reducing the volume of process water.

<sup>1</sup> Outside the scope of the limited assurance review by PwC.

Our stakeholder surveys indicate that interest in quantitative targets for waste has declined significantly. We attribute this to our success in recent years. Therefore, we have not set a new target for waste. However, we will continue to work on our waste profile.

### Validation and environmental protection costs

Audits of our segments, regions, and sites are conducted to monitor compliance with ISO 14001 validation at our production locations. In 2019, 42 internal and external ESHQ audits were conducted worldwide. The proportion of output covered by validation varies because of the addition of new units. However, it is always between 95 and 100 percent.

### Environmental protection investment and operating costs T08

in € million	2017	2018	2019
Operating costs for environmental protection	310	309	289
Investment in environmental protection	42	46 <sup>a</sup>	36

<sup>a</sup> Data corrected due to the "fast close" process, see "About this report" [p. 84](#).

In 2019, we invested €36 million (2018: €46 million) in measures to achieve a further improvement in environmental protection. Investment in environmental protection can fluctuate considerably because it depends on specific projects. For example, in 2019 a new noise insulation wall was erected in Wesseling (Germany). In Schörfing (Austria), action was taken to avoid waste so that used solvents could be returned to the production process.

Operating costs for environmental protection facilities decreased to €289 million in 2019 (2018: €309 million). The substantial drop in environmental protection and operating costs was mainly attributable to the divestment of the methacrylates business.

## Climate change

**Climate change is one of the top three topics in our materiality analysis. As well as producing products that are sustainable and enhance efficiency for our customers, we are reducing our CO<sub>2</sub> emissions by modernizing and renewing our energy infrastructure. In the reporting period, we introduced carbon pricing as an additional investment criterion.**

### Strategy and management

Our target is to cut scope 1 and 2 emissions by 50 percent in absolute terms by 2025 (compared with 2008). Use of alternative technologies and efficient production processes will help us achieve this.

We use a broad spectrum of technical and organizational measures to raise energy efficiency. Examples are co-generation plants and the expansion of integrated structures linking chemical production and energy generation. Third-party production facilities are included in these measures. We also consider using renewable energies. Many of our energy management systems meet the high standards of ISO 50001.

Evonik is planning to erect a further gas and steam turbine power plant in Marl (Germany) to replace the last coal-fired power plant at this site by the end of 2022. This will reduce our CO<sub>2</sub> emissions by up to 1 million metric tons p.a. (see case study on climate change [p. 53](#)). At the same time, the new modern power and steam generation plant will be far better able to meet the constantly fluctuating demand at the chemical park. In addition to the chemical park in Marl, our other German sites will benefit from the new plant because they will ensure economical in-house generation throughout Germany.

## THE ENVIRONMENT

### Climate change

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 from production, waste, and sewage sludge. These declined from 11 percent to 9 percent of total net energy inputs in 2019. At the same time, consumption of natural gas decreased considerably, dropping 8 percent to 37.03 petajoules. The drop in demand for these two fuels was mainly attributable to the divestment of the methacrylates business. The reduction in coal inputs was due to unscheduled shutdowns at a coal-fired power plant at the chemical park in Marl (Germany). To offset this, a gas-fired power plant was used.

[302-1, 103-2, 302-4, 305-1, 305-2, 305-3, 305-4, 305-6, 305-7](#)

### Energy inputs T09

in petajoules	2017	2018	2019
Gaseous fossil fuels	38.12	40.37	37.03
Solid fossil fuels	18.13	17.38	16.18
Liquid fossil fuels	0.25	0.34	0.24
Substitute fuels	7.93	8.09	5.63
Power, external input <sup>a</sup>	20.15	19.07	17.93
Power, external output	12.87	11.61	12.00
Steam, external input	7.52	7.52	7.21
Steam, external output	8.36	8.24	8.73
<b>Energy input, gross<sup>b</sup></b>	<b>92.10</b>	<b>92.75</b>	<b>84.22</b>
<b>Energy input, net (after subtraction of output)<sup>b</sup></b>	<b>70.87</b>	<b>72.91</b>	<b>63.49</b>
Production in million metric tons	10.98	11.03	9.16
Specific energy input, net	6.45	6.61	6.93

<sup>a</sup> Including captive hydroelectric and solar power.

<sup>b</sup> Differences between the data and totals are due to rounding differences.



## CASE STUDY

## Increasing energy efficiency cuts emissions

Evonik is building a new, highly efficient gas and steam turbine power plant at the Marl Chemical Park to end coal-fired power generation there. Modernizing our power plants is an important step in the implementation of our climate strategy. Compared with 2008, we aim to halve our absolute greenhouse gas emissions by 2025.



View of the chemical park in Marl (Germany).

The contracts with our partner Siemens for the two-block power plant were signed at the end of August 2019. The highly efficient co-generation plant for electricity and steam is scheduled to come into service in 2022. Efficiency will be over 90 percent. That will put an end to coal-fired generation of power and steam at Evonik's Marl site in Germany after more than 80 years and cut carbon emissions by up to 1 million metric tons a year. Direct annual greenhouse emissions by Evonik's plants worldwide will be reduced by nearly a fifth.

The new plant will provide a reliable long-term basis for economical, future-oriented energy supply at Evonik's largest production site. Both electricity and steam generation are important for production at the Marl Chemical Park. The rated capacity of the new power plant will be 180 megawatts of electricity—the equivalent of the power used by 500,000 homes. At the same time, it will be able to generate up to 440 metric tons of steam an hour. The power plant will be highly flexible, so it can play a part in compensating for fluctuations in the amount of energy from renewable resources fed into the power network, which is a key building block in Germany's new energy policy. In future, the steam network at the site will also supply district heating to around 2,000 homes.



### CLIMATE CHANGE

Evonik's stakeholders rank climate change/emissions into the air among the three most important sustainability issues for Evonik.<sup>1</sup>



Investment in the new gas and steam turbine power plant will be in the triple-digit millions of euros. As the general contractor, Siemens Gas and Power is responsible for planning and erecting the entire power plant, including the new central control building. Evonik will operate the plant in conjunction with its existing gas-fired power plants.

Model illustrating the new, highly efficient gas and turbine power plant to be built by Evonik at the chemical park in Marl (Germany).

<sup>1</sup> See our materiality analysis in the chapter "Strategy and growth" p.21.

Demand for electricity dropped in 2019, mainly because of the divestment of the methacrylates business. This was also the reason for the increase in the external output of electricity and steam, since the divested plants were still integrated into Evonik's energy system. In addition, some demand-driven declines in production in the continuing operations resulted in a drop in the demand for steam in 2019. Net total energy inputs declined substantially, dropping 13 percent to 63.49 petajoules.

The standard used to report our greenhouse gas 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. External power inputs are reported using the location-based and market-based methods. In accordance with the Greenhouse Gas Protocol, in the location-based method, carbon dioxide emissions from purchased power are calculated using country-specific average emission factors, while in the market-based method the individual emission factors of the power supplier are used.

In 2019, the majority (99 percent) of greenhouse gases released were carbon dioxide. The other greenhouse gases were dominated by dinitrogen oxide, which is generated in some production processes. Carbon dioxide mainly results from the combustion of the fossil fuels natural gas and coal. In 2019, they accounted for 45 percent and 31 percent of scope 1 emissions respectively. Further carbon dioxide emissions amounting to 14 percent of the total in 2019 came from the combustion of substitute fuels and 8 percent came from production processes such as the production of hydrogen peroxide. Oil is insignificant as a fuel and is generally only used in auxiliary firing systems.


### Greenhouse gas emissions 305-1, 305-2, 305-4

T10

in thousand metric tons CO <sub>2</sub> equivalents <sup>a</sup>	2008	2012	2018	2019
<b>Scope 1</b>				
Carbon dioxide (CO <sub>2</sub> )	8,938	5,879	5,636	4,859
Methane (CH <sub>4</sub> )	17	14	17	13
Dinitrogen oxide (N <sub>2</sub> O)	74	63	34	38
Fluorinated hydrocarbons (HFC)	–	7	1.1	13.2
Total	9,029	5,964	5,689	4,923
<b>Scope 2<sup>b</sup></b>				
Power, external input, location-based	–	2,668	2,398 <sup>c</sup>	2,261
Power, external input, market-based	2,800	3,754	3,369	2,855
Power, external output	1,616	2,301	2,280	2,146
Steam, external input	515	466	584	528
Steam, external output	1,210	894	790	674
Total net scope 2 (market-based) <sup>b</sup>	489	1,025	882	563
<b>Greenhouse gas emissions, net (market-based)</b>	<b>9,519</b>	<b>6,989</b>	<b>6,571</b>	<b>5,486</b>
<b>Total reduction in scope 1/scope 2 emissions compared with the reference year (2008) in %</b>	<b>0</b>	<b>–27</b>	<b>–31</b>	<b>–42</b>

<sup>a</sup> Global warming potential factors for a 100-year period for 2008–2017 based on the Intergovernmental Panel on Climate Change (IPCC) 1995 and 2018 ff. based on IPCC 2007.

<sup>b</sup> Net scope 2 emissions = power and steam sourced externally less power and steam supplied to third parties. The net figure shows the position after subtracting electricity and steam supplied to third parties from total inputs. That enables us to eliminate the proportion of CO<sub>2</sub> emissions attributable to third parties at our large multi-user sites and to generate company-specific indicators.

<sup>c</sup> Data corrected due to the “fast close” process, see “About this report”  p. 84.

The sum of scope 1 and net scope 2 (market-based) greenhouse gas emissions decreased by 17 percent to 5.486 million metric tons of CO<sub>2</sub> equivalents in 2019. The sharp decline was mainly due to the divestment of the methacrylates business. Scope 2 emissions are reported on a net basis by deducting electricity and steam sold to third parties from the electricity and steam produced for captive use.

Greenhouse gas emissions have been reduced by 42 percent compared with the reference base (2008). The sharp decline between 2008 and 2012 was principally due to the divestment of the carbon black activities in 2011. Considerable amounts of carbon dioxide were released during carbon black production.

Evonik operates 24 facilities that fall within the scope of the EU Emissions Trading System (EU ETS). The divestment of the methacrylates business reduced the number of plants covered by this trading system by six in 2019. The remaining plants that fall within the scope of the EU ETS emitted 3.3 million metric tons of CO<sub>2</sub> in 2019 (2018, including the methacrylates business: 3.9 million metric tons).



## Carbon pricing

We have decided to introduce carbon pricing for all investments as a basis for effective management of our new CO<sub>2</sub> reduction target. This adds another relevant indicator to the existing planning parameters for investments. 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. Including carbon pricing in investment calculations is based on the assumption that the present market price, where available, is an inadequate price indicator for the mid to long term. We assume that, in ten years at the latest, relevant market prices or regulatory pricing systems of at least €50 per metric ton CO<sub>2</sub> will be established in all regions of relevance to Evonik. 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. These take account of 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). To calculate the CO<sub>2</sub> sensitivity of an investment, at least one scenario with a statistical CO<sub>2</sub> price of €50 metric tons CO<sub>2</sub> is considered.

## 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 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 selected indirect emissions (scope 3). These include emissions from the production of purchased raw materials, packaging materials, capital goods, energy-related emissions outside scope 1 and scope 2, emissions from inbound shipments of raw materials, from the disposal of production waste, business trips, commuting by employees, Evonik's fleet of vehicles, energy

requirements for offices, and emissions from the disposal and recycling of products sold. The data exclude the usage phase of Evonik's products.

Greenhouse gas emissions increased to 27.6 million metric tons CO<sub>2</sub>eq in 2018 (2017: 26.9 million metric tons CO<sub>2</sub>eq). The increase in product-specific volume sales in 2018 compared with 2017 resulted in higher emissions, especially in categories 1 "purchase of chemical raw materials, packaging materials, and indirect goods," and 12 "disposal and recycling of products."

## THE ENVIRONMENT

### Climate change

## Change in greenhouse gas emissions along Evonik's value chain<sup>a</sup>

T11

in million metric tons	2016	2017	2018
CO <sub>2</sub> eq emissions	25.9	26.9	27.6


<sup>a</sup> Excluding the usage phase.

The method used is closely based on the GHG Protocol Standard of the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). The next table shows a breakdown of greenhouse gas emissions along Evonik's value chain, based on the categories in the GHG Protocol Standard.

## Evonik Carbon Footprint<sup>a</sup> 305-3

T12

Greenhouse gas emissions in million metric tons CO <sub>2</sub> eq (excluding the usage phase)		2018
Scope 1	Evonik's energy and process-related emissions	5.7
Scope 2	Purchased energy (net, total purchased power and steam—sale of power and steam to third parties; market-based approach)	0.9
Scope 3 <sup>b</sup>	Category 1: Purchase of chemical raw materials, packaging materials, and indirect goods	11.5
	Category 2: Capital goods	0.6
	Category 3: Energy-related activities (outside scope 1 and 2)	0.7
	Category 4: Inbound shipments of chemical raw materials	0.4
	Category 5: Disposal and recycling of production waste	0.6
	Category 6: Business trips by employees	0.04
	Category 7: Commuting by employees	0.09
	Category 8: Leasing of goods, upstream (company cars, power and heating requirements for offices)	0.03
	Category 9: Outbound shipments of products	0.5
	Category 12: Disposal and recycling of products	6.6
<b>Total</b>		<b>27.6</b>

 [https://corporate.evonik.de/downloads/corporate%20responsibility/evonik\\_carbon\\_footprint\\_en.pdf](https://corporate.evonik.de/downloads/corporate%20responsibility/evonik_carbon_footprint_en.pdf) (outside the scope of the limited assurance review by PwC).

<sup>a</sup> Differences between the data and totals are due to rounding differences.

<sup>b</sup> Some calculations are based on assumptions and estimates.

### 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. Our goal is to further reduce such emissions. 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. Our environmental management systems set the framework for us to achieve the statutory thresholds.

### Other emissions into the air

T13

in metric tons	2017	2018	2019
Carbon monoxide (CO)	1,132	1,093	1,135
Sulfur oxides (SO <sub>x</sub> /SO <sub>2</sub> )	2,626	2,408	1,200
Nitrogen oxides (NO <sub>x</sub> /NO <sub>2</sub> )	4,362	4,412	3,807
Non-methane volatile organic compounds (NMVOC)	672	714	702
Particulates	386	580	498
Heavy metals (As, Cd, Cr, Cu, Hg, Ni, Pb, Zn)	0.13	0.35 <sup>a</sup>	0.39
Ozone-depleting substances <sup>b</sup> in metric tons CFC-11 equivalents	0.14	0.16	0.06

<sup>a</sup> Data corrected due to the "fast close" process, see "About this report" p. 83 f.

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

The reduction in SO<sub>x</sub>, NO<sub>x</sub>, and particulate emissions is mainly attributable to the divestment of the methacrylates business. Emissions of CO, NO<sub>x</sub>, and heavy metals were unchanged from the previous year. As well as the disposal of the methacrylates business, particulate emissions reflect lower production of some products. [305-6, 305-7](#)

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. Consequently, emissions of ozone-depleting substances were again very low in 2019. 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 therefore 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 T10 "Greenhouse gas emissions"

[p. 54.](#)

## Water management

**We save water wherever possible and endeavor to achieve a further reduction in our emissions into water. A good water supply is crucial for smooth production.**

### Strategy and management

The Evonik Group strives to use water as efficiently as possible. Following the introduction of our new water target, our main focus initially is on sites in regions that are sensitive to water stress. Taking into account projections for the climate and socio-economic developments, we have identified sites that are particularly likely to be affected by water stress in the next 20 years. At these sites, we aim to take specific preventive action by developing site-specific action plans. That includes exploring alternative cooling systems or transportation options and options to reduce the use of process water. To reflect the special significance of freshwater, we take into account surface water, groundwater, and drinking water.

## THE ENVIRONMENT

### Water management

Evonik mainly uses water for cooling, for process purposes in production facilities, and to generate steam in power plants. To reduce the use of freshwater, we have established integrated supply systems with graduated water qualities. For example, we use water that is no longer suitable for cooling purposes to rinse filters or in industrial cleaning processes. In addition, the water that evaporates from cooling circuits is often replaced by condensate or recycled drinking water. In accordance with ISO 14046, the intake of sea water for cooling purposes at our methionine facility in Singapore is not taken into account in our overview of our water footprint; however, it is reported separately.

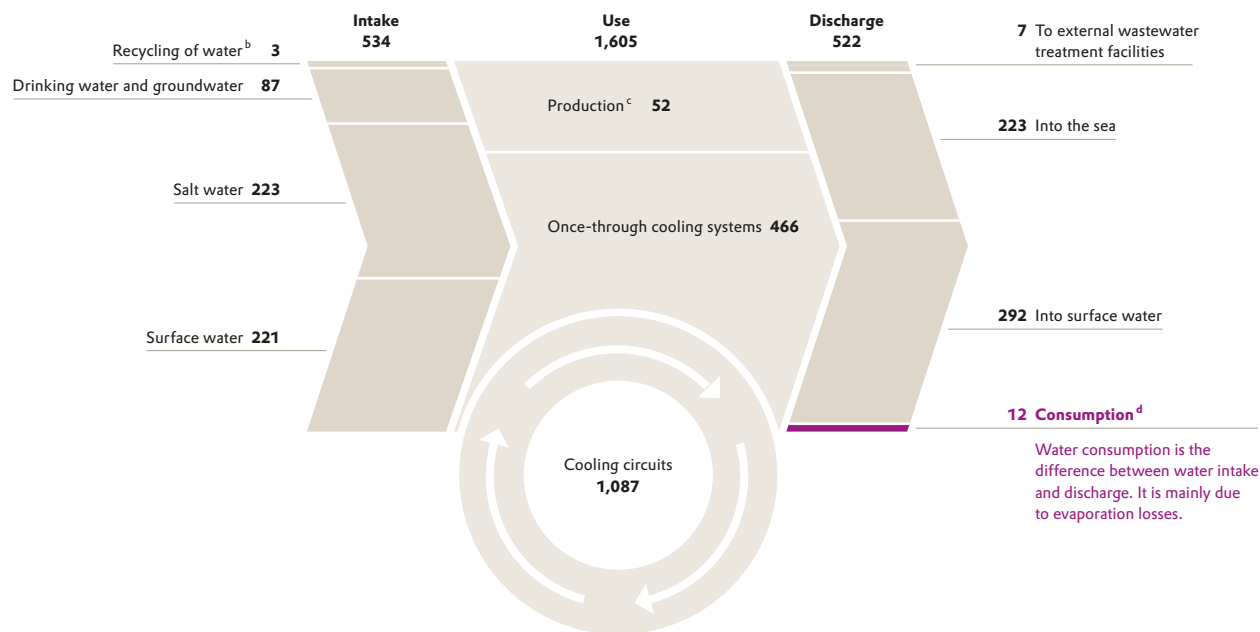
Water stress analysis is an important element in water management. Water stress is a condition that was originally used to describe the impact of water shortages on living organisms such as plants. It is increasingly being used with reference to the availability of water for industrial processes.

### Water data

In our water stress analysis in 2018, we looked at the availability of water for industrial purposes in the next two decades at 107 sites. In all, we identified 26 Evonik sites on four continents where water is in short supply. In the reporting period, we selected the worst affected sites and conducted detailed local interviews. These will be used as a starting point for developing specific action plans.



## Evonik's water data 2019

(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).

Evonik sourced a total of 534 million m<sup>3</sup> of water and discharged 522 million m<sup>3</sup>. The difference of 12 million m<sup>3</sup> between water intake (including water consumption) and discharge mainly comprises water used to replace evaporation losses. Around 97 percent (1,565 million m<sup>3</sup>) of our total water intake (including water consumption) was for cooling purposes in energy generation and production. Only 3 percent (52 million m<sup>3</sup>) was used for production purposes. Water used in closed cooling circuits is included when calculating the proportion of total water used for cooling and the evaporation losses.

Evonik's consumption of freshwater dropped to 311.2 million m<sup>3</sup> in 2019. While consumption of drinking water was unchanged from the previous year, there was a considerable drop in the amount of groundwater and surface water used. The reduction in the use of groundwater was mainly due to divestment of the methacrylates business. The drop in surface water requirements was due—in addition to this divestment—to a reduction in once-through cooling water requirements resulting from a demand-driven drop in production volume. There was an increase in the amount of salt water used for cooling purposes in 2019 due to the start-up of the second complex to produce methionine and strategically important precursors in Singapore.

## THE ENVIRONMENT

## Water management

C21

Water intake by source<sup>a</sup>

T14

in million m <sup>3</sup>	2012	2017	2018	2019
Drinking water <sup>b</sup>	18.2	17.7	20.0 <sup>c</sup>	20.7
Groundwater	84.7	77.6	78.3	66.1
Surface water <sup>c</sup>	242.4	274.2	267	221.1
Recycling of water from third parties and use of rainwater	4	3.8	3.4	3.3
<b>Total freshwater<sup>d</sup></b>	<b>349.3</b>	<b>373.3</b>	<b>368.7<sup>c</sup></b>	<b>311.2</b>
Salt water (sea water)		130.2	121.5 <sup>c</sup>	223.3
<b>Total</b>	<b>349.3</b>	<b>503.5</b>	<b>490.2</b>	<b>534.5</b>
<b>Production</b>				
in million metric tons	<b>9.71</b>	<b>10.98</b>	<b>11</b>	<b>9.2</b>
<b>Specific water intake</b>				
in m <sup>3</sup> freshwater per metric ton production	<b>33.8</b>	<b>32.3</b>	<b>31.8</b>	<b>32.1</b>

<sup>a</sup> Differences between the data and totals are due to rounding differences.<sup>b</sup> Water from municipal or other utilities.<sup>c</sup> Data corrected due to the "fast close" process, see "About this report" p. 84.<sup>d</sup> Excluding water for remediation purposes.

## 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. We continue these efforts in the operational phase. We also have high technology standards and infrastructure for the disposal of wastewater at our 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. Wastewater discharged from our sites is carefully monitored by regular sampling and continuous measuring equipment.

In 2019, a total of 522 million m<sup>3</sup> wastewater was discharged, including 7 million m<sup>3</sup> which was channeled to third-party facilities such as municipal wastewater treatment plants for treatment. 49 million m<sup>3</sup> were discharged after treatment in Evonik's facilities. That also includes amounts accepted from third parties for treatment at the wastewater treatment facilities operated by us at chemical parks.

Chemical oxygen demand (COD) accounts for the highest proportion of wastewater loads. This is the concentration of all substances in the wastewater that can be oxidized under certain conditions. As well as the divestment of the methacrylates business, the decline in COD, N, P, and AOX loads in 2019 was attributable, among other things, to process improvements, changes in the product mix, and lower output. The sharp drop in heavy metals was due to the divestment of the methacrylates business, which used zinc compounds as corrosion inhibitors in cooling towers.

#### Wastewater loads<sup>a</sup>

T15

in metric tons	2017	2018	2019
Chemical oxygen demand (COD)	5,399	4,844 <sup>b</sup>	4,643
Total nitrogen (N)	359	330	293
Total phosphorus (P)	100	104	74
Absorbable organic halogen compounds (AOX)	1.7	1.7	1.4
Heavy metals (As, Cd, Cr, Cu, Hg, Ni, Pb, Zn)	5.7	5.7	1.8

<sup>a</sup> The data on wastewater loads comprise all direct discharges into receiving water and proportionate indirect discharges.

<sup>b</sup> Data corrected due to the "fast close" process, see "About this report" p. 84.

## Waste management

**Clear priorities have been set for our efforts to further reduce production waste. 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.**

### Strategy and management

We use catalysts as one way to increase yields and reduce side reactions. Integrated material flows are another tool. We also use the benefits of integrated production sites and systems for systematic waste management. Sewage sludge is also within our integrated production structure. After dewatering, it is thermally processed by incinerating it in a separate incineration plant with integrated flue gas treatment. We use some of the exhaust gases from production plants as substitute fuels in this process. The incineration gases are then used to generate 20 bar steam. To conserve resources, at many of our sites we use substitute fuels such as liquid residues from production processes.

### Our activities in 2019

The drop in production waste in 2019 was mainly due to the divestment of the methacrylates business. The reduction in non-hazardous production waste was principally attributable to changes in the product mix of some fermentation products. There was a further significant increase in building and demolition rubble in 2019 as a result of the preparation of the construction site for the new combined gas and steam turbine power plant in Marl (Germany). 304-1, 103-2

## THE ENVIRONMENT

### Waste management

#### Waste<sup>a</sup> 306-2, 103-2

T16

in thousand metric tons	2017	2018 <sup>b</sup>	2019
<b>Hazardous production waste</b>	<b>244</b>	<b>242</b>	<b>204</b>
of which reprocessed	145	142	122
of which disposed of	98	100	82
<b>Non-hazardous production waste</b>	<b>153</b>	<b>151</b>	<b>117</b>
of which reprocessed	91	84	55
of which disposed of	63	67	62
<b>Subtotal production waste</b>	<b>396</b>	<b>393</b>	<b>321</b>
<b>Hazardous building and demolition rubble</b>	<b>42</b>	<b>24</b>	<b>51</b>
of which reprocessed	22	4	3
of which disposed of	20	20	48
<b>Non-hazardous building and demolition rubble</b>	<b>73</b>	<b>109</b>	<b>172</b>
of which reprocessed	55	78	114
of which disposed of	18	31	58
<b>Total</b>	<b>512</b>	<b>524</b>	<b>544</b>

<sup>a</sup> Differences between the data and totals are due to rounding differences.

<sup>b</sup> Data corrected due to the "fast close" process, see "About this report" p. 84.

The percentage of waste reprocessed comprises recycled substances, incineration with recycling of heat energy, and other disposal methods. The reprocessing rate dropped to 54 percent in 2019 (2018: 59 percent). This was due to lower output of fermentation products and the associated drop in recyclable waste. As a specialty chemicals company, we are involved in research and development work on mechanical and chemical recycling (see chapter "Value chain and products," circular economy, p. 39).

**Waste management<sup>a</sup>****T17**

in thousand metric tons	2017	2018 <sup>b</sup>	2019
Incineration with recycling of heat energy	61	58	55
Disposal by incineration	97	98	86
Recycling (including composting)	189	195	182
Landfill	62	70	131
Chemical/physical/biological treatment	19	21	16
Other reprocessing methods	62	55	57
Other disposal methods	22	27	17
<b>Total</b>	<b>511</b>	<b>524</b>	<b>544</b>

<sup>a</sup> Differences between the data and totals are due to rounding differences.

<sup>b</sup> Data corrected due to the "fast close" process, see "About this report" p.84.

## Biodiversity

**We are aware that our business operations involve both opportunities and risks for biological diversity. This applies, above all, to our global production but also includes the raw materials we purchase and the use of our products.**

### Strategy and management

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. We report regularly on these topics and have set ambitious emissions reduction and water management targets in our sustainability

strategy. Based on the feedback from internal and external stakeholders, biodiversity has been included in our materiality analysis since 2017.

We are aware that declining biodiversity has a negative effect on our business activities. At the same time, our value chains can harbor risks for biodiversity. However, our products also make a contribution to maintaining biodiversity. Examples are amino acids for the nutrition of poultry, pigs, and cattle. These products greatly reduce the agricultural land required to produce feed. In this way, they protect habitats. The use of our omega-3 fatty acids in aquaculture helps protect marine biodiversity: Evonik and Royal DSM have jointly developed an innovative feed process for salmon farming, using biotechnological production of omega-3 fatty acids from natural marine algae. This can greatly reduce the use of fish oil in feed. Our joint venture, Veramaris, started production in Blair (Nebraska, USA) in July 2019.

### Our activities in 2019

The UN Sustainable Development Goals (SDGs) of relevance for Evonik (see chapter "Strategy and growth" p.17) include SDG 12 (responsible consumption and production), which specifically addresses biodiversity. That was one of the reasons why we looked more closely at biodiversity in the reporting period. We intend to continue this in the future and to make a more detailed examination of the relevance of this topic for Evonik and the relevant value chains.


In 2018, we extended our biodiversity analysis by introducing a geoinformation system. Based on data from the IBAT Alliance<sup>1</sup>, we examine the potential impact of our global sites on areas of special significance for biodiversity. The next table shows our ten largest production sites adjacent to conservation areas.

 304-1, 103-2

**THE ENVIRONMENT**

Biodiversity

**Evonik production sites adjacent to conservation areas****T18**

Production site	Country	Area in km <sup>2</sup>	IUCN <sup>a</sup> categories	Ramsar <sup>b</sup> area
Marl	Germany	7.426	IV, V	
Lafayette	USA	7.004	V	
Mapleton	USA	2.349	V	
Morrisburg	Canada	1.132	Ia	
Antwerp	Belgium	1.077	IV	
Lülsdorf	Germany	1.003	V	
Hanau-Wolfgang	Germany	0.774	IV, V	
Rheinfelden	Germany	0.555	V	
Hopewell	USA	0.436	IV	
Wesseling	Germany	0.329	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 data underlying our biodiversity analysis are constantly being developed. Compared with 2018, we have added the Mapleton and Hopewell sites to our overview. By contrast, the sites in Worms and Weiterstadt (Germany) are no longer included due to the divestment of our methacrylates business. In principle, the industrial premises used by Evonik do not include any protected or restored natural habitats. However, some of our sites are adjacent to conservation areas. For example, as part of a project for which authorization was required, a flora, fauna, and habitat study was conducted at Marl Chemical Park in Germany to evaluate the potential adverse impact of our activities on the conservation area. Regular review and updating of environmental data are important to ensure that timely action can be taken in the event of any negative impact.




<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 site in Mobile (Alabama, USA) is close to the Fowl River. The US Environmental Protection Agency (EPA) is currently altering the status of the watershed area around this river (approx. 21,360 hectares) to a water conservation area. Evonik supports this plan and is a member of the Fowl River Forever steering committee that is working on a management plan to protect and improve the water quality. This should ensure long-term protection of the flora and fauna for the river and the water intake area. The area around the Fowl River is an important recreation area for many local inhabitants. Therefore, Evonik sponsored the Mobile Bay Annual Coastal Cleanup in 2019. Many employees participated directly in this, helping to remove trash from the Fowl River and Big Creek Lake.

## Our targets




**Below is an overview of the targets set for our environment area of action. The targets defined for 2020 and beyond have been sharpened and streamlined to enhance their strategic relevance.**

### Target attainment in 2019

-  Reduce absolute scope 1 and scope 2 emissions by 50 percent by 2025 (reference base: 2008)
-  Introduce a global water management system, including site-specific action plans
-  Further reduce production waste

### Targets for 2020 and beyond

- Reduce absolute scope 1 and scope 2 emissions by 50 percent by 2025 (reference base: 2008)
- Reduce absolute scope 3 emissions from the upstream value chain—principally from the “carbon backpack”—by 15 percent by 2025 (reference base: 2020)
- Develop site-specific action plans for sites that are potentially exposed to water stress as part of a global water management system

-  Target not achieved
-  Target partially achieved or target horizon extends beyond 2019
-  Target achieved

## EMPLOYEES ✓



People are at the heart of the workplace at Evonik. Our employees are the basis of our success. Their professional qualifications and commitment are their key attributes and make Evonik strong.



SDG of particular  
relevance for Evonik

### KEY TOPICS ▶

- Appeal as an employer
- Vocational training and continuing professional development
- Health protection and promotion
- Diversity and equal opportunity

# 5.5

Occupational  
health performance  
index

# 0.9%

Early employee  
turnover

# €79million

Spending on training  
and continuing professional  
development

**EMPLOYEES**

- 62 **Employees**  
62 Strategy and management
- 63 **Appeal as an employer** ⓘ 102-8, 103-2, 401-1, 401-2, 401-3, 402-1, 102-36, 102-37, 102-41, 404-2, 404-3
- 63 Strategy and management
- 64 Our activities in 2019
- 66 **Diversity and equal opportunity** ⓘ 202-2, 401-2, 404-2, 405-1
- 66 Strategy and management
- 67 Our activities in 2019
- 68 **Vocational training and continuing professional development** ⓘ 404-1
- 68 Strategy and management
- 69 Our activities in 2019
- 69 **Health protection and promotion** ⓘ 403-1, 403-2, 403-4, 403-5, 403-5, 403-6, 403-7, 403-8, 403-10
- 69 Strategy and management
- 70 Emergency medical management
- 70 Workplace-related preventive healthcare
- 70 Corporate health promotion
- 71 **Our targets** ⓘ 102-14, 102-15

## Employees

**Evonik aspires to be a best-in-class specialty chemicals company. To achieve that, we are continuously developing as an employer because we can only achieve our goal with first-class, skilled, motivated, and healthy employees.**

### Strategy and management

As part of our annual HR strategy process, we ensure continuous development of our human resources activities in line with our materiality analysis and human resources strategy. Our HR strategy

### Digital networking is changing how we work

How can we help our employees network across different levels and organizational units? And how can we help them work agilely and develop a future-oriented mindset? How can we drive change in the right direction?

One example is the Evonik Spirit initiative launched in April 2019. Based on our corporate values of speed and openness, we called on all our employees around the world to put forward ideas on these values in Connections, our internal social media network. The network is made up of many thousands of people with different experiences who are prepared to share their knowledge. The response was really good: In four weeks, more than 13,000 employees took part in this group-wide ideas forum. Overall, they submitted more than 300 proposals, 23,000 votes, and 1,500 comments.

Various teams were then set up via Connections to drive forward individual ideas. The 60 ideas that received the most votes qualified for regional speed-up meetings, which were attended

**EMPLOYEES**

Employees

comprises the areas attract, develop, perform, retain, and lead. We use a global system of HR performance indicators to measure our success.

In July 2019, we restructured the HR organization, which now comprises the HR Talent Management and HR Business Management divisions. Both divisions have a global leadership role and work closely with one another. HR Talent Management bundles local activities relating to attracting, developing, retaining, and leading employees. HR Business Management coordinates the Evonik Group’s regional employer function, all performance-related aspects, and the global HR Administration, HR IT, and Workforce Analytics units.



New corporate values and agile working methods.

by a member of the executive board. In a further selection process, the participants at these meetings chose 20 ideas that were developed, piloted, and in some cases implemented within a three-month period.

As a complement to traditional working methods such as email and meetings, this networked approach involving corporate activists shows how much creativity and meaningful content can be generated through intelligent use of modern technologies.





The heads of these two divisions report directly to the chief human resources officer. The HR Executive Committee is the highest decision-making body for HR. It adopts the global HR strategy and takes decisions on the group-wide HR organization. This committee comprises Evonik's chief human resources officer, the industrial relations directors of the segments, and the heads of Corporate Talent Management and Corporate Business Management. The permanent members of the Global HR Roundtable are the HR representatives of the segments and regions, and the process owners from the various HR organizational units (see chart c05 Sustainability governance structure at Evonik [p. 12](#)). The development of corporate executives is allocated directly to the chairman of the executive board.

#### Talent management

Clear processes, systematic job rotation, and high-quality development programs are essential to develop tomorrow's top executives. Potential is assessed and succession scenarios and development requirements for talents at Evonik are regularly discussed at HR meetings attended by the executive board. A differentiated development landscape gives equal priority to management requirements, leadership issues, and personal expectations. Mentoring programs and initiatives geared to specific topics round out the offering.

We expect executives to set an example by living our corporate values—performance, trust, openness, and speed—and to drive forward the development of our corporate culture. For this target group, we have established a learning journey to digital and start-up companies in Germany and the USA.

## Appeal as an employer

**The key demands made on modern HR work include gaining and developing the most talented staff. It is therefore important for us to ensure an attractive working environment and offer additional benefits and incentives to supplement our fair, performance-oriented remuneration. We place special emphasis on work-life balance.**

#### Strategy and management

Our global employer branding campaign, #HumanChemistry, places our employees in the spotlight and makes them the most important advocates of our company. Personal insights into real working life at Evonik can be viewed on our careers site at #HumanChemistry.

The success of our employer brand is measured by our position in external employer rankings and by internal employee surveys. Another key indicator used to measure our attractiveness as an employer is early employee turnover.

In our fifth group-wide employee survey in November 2018, around 35,000<sup>1</sup> employees were asked to give an anonymous assessment of their working environment. A new survey tool enables our executives to track the development of opinion after our employee survey. It is used to monitor the success of the action taken and the perception of the priority topics. In addition to the employee survey, in 2019 we conducted more than 25 surveys on specific issues. The topics ranged from monitoring the new performance management system introduced in 2019 to user experience of our IT applications. That all contributes to a lively feedback culture at Evonik.

## EMPLOYEES

### Appeal as an employer

To anchor our corporate values in the long term, we use the Evonik Spirit initiative, which comprises top-down incentives to encourage a strong performance culture and a wide range of bottom-up measures to strengthen employee engagement and the sharing of ideas (see Digital networking is changing how we work [p. 62](#)).

#### Performance management system

At the start of 2019, Evonik introduced a new global performance management system. The focus is on continuous dialogue, encouraging performance, and systematically reducing bureaucracy. From 2020, the field force will also be using the system. We hope that this will make our HR processes even leaner.

#### Employees by contractual status

Over 95 percent of our 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 650 agency staff in Germany as of December 31, 2019. That was nearly 4 percent of our workforce in Germany.

<sup>1</sup> Figure includes the methacrylates business, which was divested in July 2019.

## Employees by contractual status, region, and gender

T19

Number	Employees	of which employees on permanent contracts	of which employees on limited-term contracts	of which apprentices/trainees
Evonik	32,423	29,568	1,594	1,261
Asia-Pacific North	3,211	2,284	927	0
Asia-Pacific South	1,793	1,737	56	0
Central & South America	656	643	3	10
Eastern Europe	496	480	16	0
Western Europe	21,828	19,990	590	1,248
Middle East & Africa	152	149	2	1
North America	4,287	4,285	0	2
Women in %	26	25	37	25

## Our activities in 2019

For the second time in succession, our company received the Leading Employer award in Germany and was ranked as the best employer in the chemical sector. In China, Evonik was once again included in the list of the most popular employers (Top Employer Institute) in 2019. We also received several other accolades such as the European Digital Communication Award and the HR Excellence Award.



The campaign #EndlichMalEinRichtigerJob (the right job at last) produced by our training department with well-known YouTubers was also acclaimed. Clicks and comments show that Evonik was able to achieve high visibility and reach among the target group. In the Carbon Footprint Challenge, Evonik cooperates with Covestro, Bühler, Oracle, and nine European universities to raise upcoming engineers' awareness of socially relevant issues and position Evonik as a sustainable employer.

## Employee satisfaction and retention

Our employee survey in November 2018 covered topics such as our company, team and collaboration, and innovation and customer focus. The participation rate was very high at 85.2 percent. Following a detailed analysis of the results, we have derived 2,350 measures and held 992 workshops around the world to communicate the results (as of February 2020). [102-43](#)

Low turnover of newly hired employees within the past three years compared with other companies indicates a good level of identification and high employee satisfaction. Looking at employees giving notice within the first year, we score very well compared with our competitors with a rate of 0.7 percent in the USA and 0.6 percent in Germany.

## Length of service

T20

	2017 <sup>a</sup>	2018	2019
Early employee turnover in %	1.4	0.9	0.9
Total employee turnover in %	5.8	6.7	5.2
Average length of service in years	14.6	14.5	14.8

<sup>a</sup> Including the methacrylates business.

## EMPLOYEES

Appeal as an employer

## Employee turnover in 2019

T21

	Turnover in %	Number of employees who left the company <sup>a</sup>
<b>By region</b>		
Asia-Pacific North	8.6	285
Asia-Pacific South	9.9	183
Central & South America	13.0	88
Eastern Europe	5.6	30
Western Europe	3.2	709
Middle East & Africa	13.5	22
North America	8.5	370
<b>By gender</b>		
Female	5.9	497
Male	4.9	1,190
<b>By age</b>		
Under 30 years	6.9	470
30-50 years	4.6	738
Over 50 years	4.9	479
	<b>5.2</b>	<b>1,687</b>
thereof termination by the employee	2.3	749

<sup>a</sup> Employees who have left the company.

## Performance and remuneration

Fair, market- and performance-oriented remuneration is anchored in our human resources tools worldwide. The principles used 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. Personal attributes such as gender, age, etc., play no part in the process. In 2019, we paid out €2,483 million in wages and salaries. [102-36, 102-41, 103-2, 202-1, 401-2, 404-3](#)

**Personnel expense****T22**

in € million	2018	2019
Wages and salaries	2,629	2,483
Social security contributions	374	391
Pension expense	197	201
Other personnel expense	79	81
	<b>3,279</b>	<b>3,156</b>

In 2019, only eight employees asked for information under the German Remuneration Transparency Act. After examining their entitlement to obtain information, information was provided in just two cases.

Collective agreements on remuneration cover 100 percent of our employees in Germany and around 72 percent of our employees worldwide. Around 96 percent of our sites and regions have performance- or profit-oriented incentive systems. These systems cover around 99 percent of our employees. [102-41](#)

Evonik offers voluntary social benefits to employees 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 2019 we once again offered employees in Germany, the USA, China, Belgium, and Singapore the opportunity to take part in the Share employee share program. The participation rate remained high at 37 percent in 2019.

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 or by 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, but this can be increased or decreased individually. The employee's total contribution is topped up by graduated employer contributions.

**Work-life balance**

Evonik places value on an HR policy that is family-friendly and geared to different phases in people's lives. More than 93 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. In 2019, we were recertified following a berufundfamilie audit ("workandfamily audit") by the Hertie Foundation. In addition, Evonik was again honored by the German parenting magazine ELTERN as one of the most family-friendly companies and by the women's magazine BRIGITTE as one of the best employers for women.

**EMPLOYEES**

Appeal as an employer

We have many offers to foster the physical and mental fitness of our employees. In 2019, the staff restaurants at all our German sites extended the successful nutrition concept introduced in the previous year to raise awareness of healthy eating. Worldwide, many of our sites also offer a variety of sports activities.

Our generation pact has been extended to successfully counter demographic change. Take-up was again high. This pact enables people to retire far earlier and provides a basis for offering employment to qualified apprentices at the end of their training.

In Germany, all 19,607 employees, including our 14,585 male employees, have a statutory right to parental leave.

775 employees took parental leave in 2019. The proportion of male employees was around 46 percent. In 2019 they took an average of 1.7 months parental leave, while female employees took an average of 675 months. In the reporting period, 564 employees returned to work after parental leave. Apart from a few exceptions, all employees who returned from parental leave in 2018 were still working for us a year later. As of December 31, 2018, there were 275 employees on parental leave. 190 of them (including 21 men) returned to work in 2019. That was just under 69 percent. 81 of the employees who did not return to work in 2019 were still on parental leave at year-end 2019. The proportion remaining in the company is therefore over 93 percent.

[102-8](#), [102-41](#), [401-2](#)

The regular, contractually defined working hours for more than 75 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. Over 80 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.

Some employees ask about the possibility of taking paid or unpaid leave for an extended period, for example, to ensure the compatibility of private and professional phases in their lives. However, interest is very low. In percentage terms it is in the low single-digit range, based on our total headcount.

Nearly 10 percent of employees in Western Europe take up the option of working part-time to balance work and private life. By contrast, this option is hardly used in other regions because it has no social relevance in there.

#### Ability to take extended periods of leave<sup>a</sup>

T23

	Employees in %
Western Europe	94
Eastern Europe	100
Asia-Pacific North	93
Asia-Pacific South	59
Central & South America	100
North America	93
Middle East & Africa	33

<sup>a</sup> Option to take an extended period of paid or unpaid leave (more than three months).

102-8, 102-41, 103-2, 407-1, 408-1, 409-1

#### Trustful collaboration

Evonik's success is based on trustful collaboration between representatives of the management and employees. This takes account of operating conditions and the laws applicable in the various countries. 102-43

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 the legislation on executive staff councils. There are elected bodies representing our employees at all sites in Germany. Works councils represent exempt and non-exempt employees, while executive staff councils represent our executives. Timely discussion of all major changes with these bodies is ensured. These take place several weeks or months prior to implementation of such measures, depending on the significance of the upcoming changes. Where necessary, during this period written agreements are made on the upcoming measures and their impact on our workforce.

There are comparable rules on the type and scope of consultation and negotiation in many other regions where Evonik has employees.

At company level in Germany, employees' interests are represented by employee representatives on the supervisory board.

The information and consultation rights of employees on cross-border European issues are represented by the Evonik Europa Forum, which is composed of employee and employer representatives.

Evonik does not restrict employees' rights to freedom of association or the right to collective bargaining. These rights are also ensured in countries where freedom of association is not protected by the state. Based on our sites worldwide, there are employee representatives for more than 96 percent of our employees. 102-41

## EMPLOYEES

Diversity and equal opportunity

## Diversity and equal opportunity

**We are an international company and see diversity as an opportunity. In our view, diversity is not simply a social or political obligation. We see it as a key to the success of our business.**

### Strategy and management

Evonik does business in many markets worldwide. Diversity is therefore normal in our business activities. Employees with different backgrounds and personalities enrich our teams and our company. They enhance our creativity, innovative capability, and proximity to customers.

Our diversity council ensures that diversity is a success factor that is deeply embedded in our organization and drives it forward through cross-business criteria. The council includes members of the executive board, the heads of the segments and regions, and executives from various organizational units. Fostering diversity goes well beyond this group of individuals and is a central demand made on all management functions at Evonik.

Our diversity strategy consists of the following three levers:

- **Measurability:** The parameters we use to manage diversity often exceed the legal requirements. The executive board is informed quarterly of the development of key diversity indicators. It is important to us to ensure that the gender ratio and cultural mix are transparent across organizational levels.
- **Communication:** We raise our employees' awareness of the importance of diversity in our day-to-day work through our corporate media and inclusive activities.
- **Training:** We train our executives and talents to deal with both conscious and unconscious bias.

Our code of conduct and global social policy forbid discrimination on the basis of origin, race, religion, age, gender, sexual orientation, and disability. Employees who feel they have been discriminated against have a right to lodge a complaint. Contacts for reporting cases of discrimination are available at all sites. Information on complaints procedures is available to all employees via internal media and personal discussions in all regions. We have introduced additional measures and activities to prevent discrimination. These reach over 90 percent of our workforce.

**Our activities in 2019**

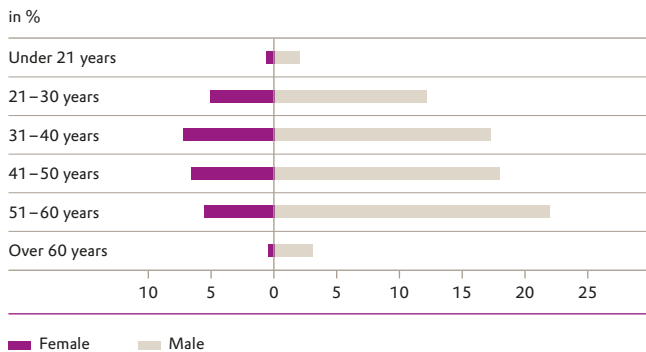
We measure progress in diversity during the year using a range of indicators on age, gender, and nationality. These are outlined below.

**Age**

In 2019, the average age of Evonik employees was 42 years. 50 percent of new hires (800 employees) were under 30. 43 percent were in the 30–50 age group (679 employees). 7 percent of new hires (108 employees) were over 50.

**Age structure in the Evonik Group**

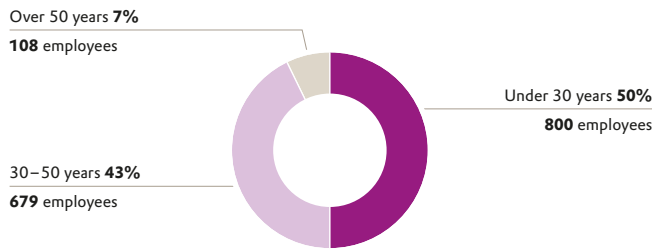
**C22**



Longer working lives and altered job requirements are starting to change the world of work. In line with this, we foster and stretch our employees in all phases of their working lives, for example, through our well@work initiative and the Learning and Individualized Library (LILY) online platform for lifelong learning.

**External hires by age**

**C23**

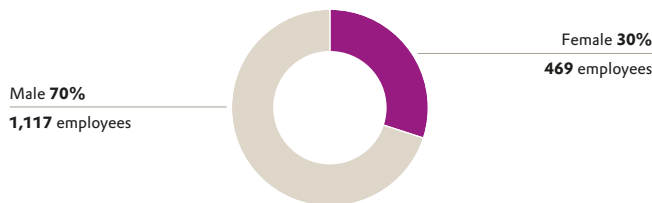


**Gender**

Increasing the proportion of women in our company worldwide and at all levels is one of Evonik’s declared objectives. At present, women make up 26 percent of our workforce (8,338 employees) and men make up 74 percent (24,085 employees). 30 percent of external hires (469 employees) were female and 70 percent (1,117 employees) were male.

**External hires by gender**

**C24**



**EMPLOYEES**

Diversity and equal opportunity

Overall, the proportion of female employees in management functions increased from 17 percent in 2011 to 25 percent in 2019. When recruiting staff for management functions, we focus on academic disciplines of relevance to us, including gender distribution.

**Percentage of women in management**

**T24**

in %	2011 <sup>a</sup>	2018	2019
Executives <sup>b</sup>	8.2	12.3	11.2
Executives and senior management <sup>c</sup>	8.1	11.1	12.6
Management <sup>d</sup>	17.8	25.6	26.4
<b>All management functions</b>	<b>16.6</b>	<b>24.3</b>	<b>25.2</b>

<sup>a</sup> Including the methacrylates business.

<sup>b</sup> Management circle 1.

<sup>c</sup> Management circles 1 + 2.

<sup>d</sup> Management circle 3.

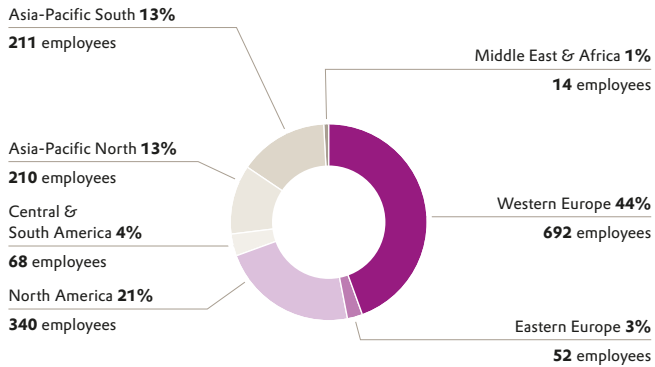
An extensive range of measures supports the attainment of these targets. These include development activities, networking events, mentoring, and support programs. Examples are special offerings to increase the compatibility of work and family life and a new job-sharing platform. The offer is graduated, so it is available to women at all management levels. We are starting to see initial positive effects, especially among younger age groups. In the under-40s age group, the proportion of female employees in management now nearly 35 percent. That is an improvement of 7 percentage points compared with 2011. To provide further social impetus, Evonik has been part of the “Chefsache” gender equality initiative since 2018. [102-8, 405-1](#)

Nationality

As a global company, it is particularly important to us to ensure that our workforce includes a broad spectrum of different nationalities. Evonik currently employs people of 101 different nationalities at 195 sites in more than 50 countries. The proportion of employees in management functions who come from countries other than Germany is stable at around 43 percent. Group-wide, the proportion in middle management is around 27 percent.

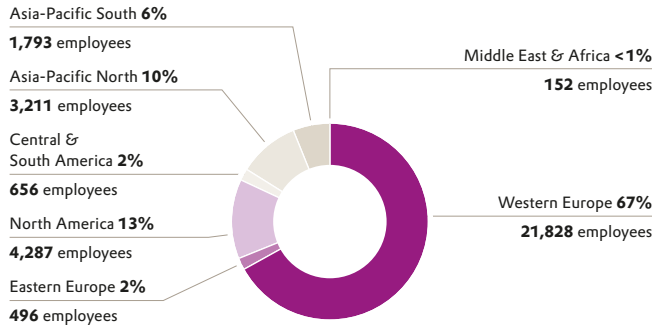
External hires by region  202-2

C25



Employees by region


C26



Integrating people with disabilities

The employment and inclusion of people with disabilities is another expression of how 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. In the reporting period, employees with disabilities accounted for 8.4 percent of Evonik’s workforce in Germany.

Discrimination

Eight cases of discrimination were reported to us in 2019. There are no outstanding measures or complaints relating to five of these cases. In the other cases, action was taken to clarify and remedy the situation.  406-1

EMPLOYEES

Vocational training and continuing professional development

Vocational training and continuing professional development

**Well-trained employees are a clear competitive advantage. Our learning strategies and personnel development programs focus on our corporate targets and future business needs.**

Strategy and management

Our training and continuing professional development activities comprise further training of our employees as well as vocational training of young people. Evonik’s learning strategy was developed in consultation with employees. It comprises two offerings: the global development portal (GDP) as a central platform for all learning needs and the Learning and Individualized Library (LILY), which provides constant access to learning resources.

The GDP is available to all employees worldwide. The aim is to ensure full transparency about learning offerings, contacts, and costs. In addition, our online offerings reflect the progress of digitalization. LILY provides structured learning journeys that help our employees deal with the demands made by the faster pace of work and changing demands in the workplace. Indicators of digital use that we keep a special eye on are page views and the total number of users.

To secure the need for skilled workers, especially in production and related areas, back in 2016 Evonik started to train apprentices based on requirements. On this basis, following the summer examinations in 2019, we were able to offer jobs to those apprentices who were able and willing to take up employment. With the intake of 2019, we completed the strategic realignment of our vocational training activities. As a result, the number of apprentices being trained for Evonik has decreased from around 1,600 to around 1,200. By contrast, the number of apprentices being trained for other companies was unchanged in the same period at around 400.



### Our activities in 2019

Evonik trained around 1,600 young people, including more than 400 on behalf of other companies. Our training covered more than 32 recognized vocational training courses and combined vocational training and study programs at 15 sites.

Apprentices accounted for around 6.8 percent of our workforce in Germany, which is still well above the national average of around 5 percent. In all, we invested €60 million in vocational training of employees. Our high commitment to vocational training is also reflected in their examination results. Over 99 percent of our apprentices passed their examinations and more than 13 percent received an overall grade of “very good.”

In 2019, 90 places for young people who were not ready for an apprenticeship were taken up on the “Start in den Beruf” pre-apprenticeship program. That figure includes the 20/20/20 training initiative of the Evonik Foundation, which financed 40 places, including 20 for young refugees. Following completion of the Evonik Foundation’s 20/20/20 initiative, participation in the pre-apprenticeship program was reduced to 50 places at year-end 2019.

In 2019, Evonik invested around €500 per employee in training and continuing professional development. That was a total of €16 million. Face-to-face training, which still accounts for the majority of training sessions, totaled around 8 hours per employee. These indicators cover 99 percent of employees worldwide.

Our learning strategy doubled user numbers in the reporting period. While around 4,650 employees used the digital learning platform LILY in 2018, the number rose to around 10,000 in 2019. The time spent on this platform was nearly 11,000 hours in total. That represents an average digital learning time of 2.3 hours per user, in addition to time spent in face-to-face training.


 404-1, 404-2

## Health protection and promotion

**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.**

### Strategy and management

Our approach 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. In addition, we offer a selective range of health promotion measures, which are bundled in the group-wide well@work initiative. In this way, we help our employees adopt a healthy lifestyle. Our health protection and promotion measures are also available to employees from staffing agencies.

The main goals and aspects of our occupational health strategy are outlined in the Evonik Global Health Program. On this basis, we systematically refine our strategy and adapt 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 resulting from digitalization and Work 4.0. Based on these challenges, we have derived priorities for our occupational health activities. The corporate policy “Occupational Health and Health Promotion” sets binding worldwide standards for health protection and promotion.  401-2

## EMPLOYEES

### Health protection and promotion

In Germany, issues relating to occupational safety and health protection have to be agreed with the employee representatives. On this 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 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 sites outside Germany.

Fulfillment of the relevant requirements is checked regularly by corporate audits and regional environment, safety, and health audits, and through an extensive occupational health and reporting system. Action is taken if there are indications of scope for improvement or deviations from the applicable guidelines. Where necessary, improvements are suggested or required. As an overriding indicator, we have established an occupational health performance index.

### Occupational health performance index

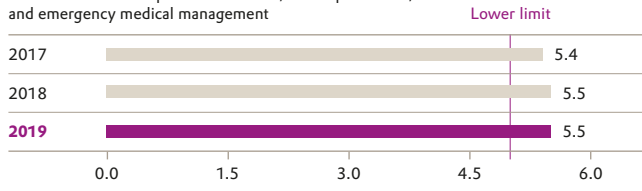
This index shows the extent to which internal requirements have been implemented and goals achieved. It enables us to measure progress in the area of occupational health and drive forward continuous improvement. The index is calculated from two parameters from each of the following areas: occupational 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 2019, it covered 85 sites and 88 percent of Evonik employees.

We have defined a long-term annual target of  $\geq 5.0$  for the occupational health performance index. In both 2019 and 2018, the index was 5.5 (maximum: 6.0).

## Occupational Health Performance Index<sup>a</sup>

C27

Calculated from occupational medicine, health promotion, and emergency medical management



<sup>a</sup> Figures for 2017 and 2018 include the methacrylates business.

For Germany, we also calculate a health ratio, which was 94.8 percent in 2019 (2108: 94.9 percent<sup>1</sup>). This is the ratio of target working hours less sickness-related hours lost to target working hours.

### Emergency medical management

The Medical Incident and Emergency Management standard defines binding basic requirements for emergency medical management at Evonik's 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 require special medical treatment. 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.

### Workplace-related preventive healthcare

The results of our hazard assessment help us proactively implement 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.

<sup>1</sup> Figure for 2018 includes the methacrylates business.

Information for, and training of, employees also play an important part in avoiding health impairments. Such training is mandatory for all employees worldwide. Preventive healthcare includes providing advice for employees on their individual health risks, and 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.

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 (i.e., those where the causes lie well in the past). 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 consistently low figures for occupational illness are evidence of the effectiveness of our occupational safety measures. For Evonik employees and contractors' employees working under Evonik's direct supervision, the risk of sustaining an occupational illness is therefore very low. In the reporting period, there were no reported deaths of members of our active workforce as a result of work-related illness.

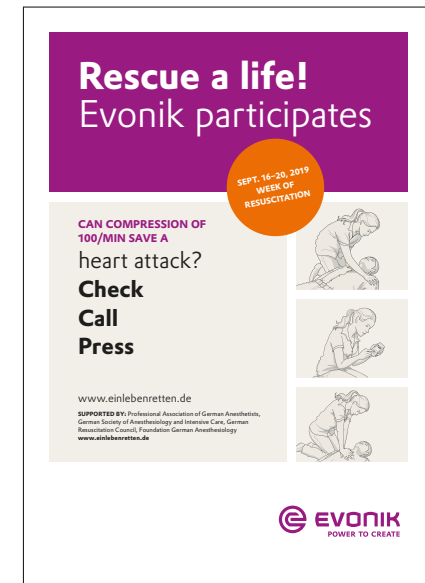
The ODR for 2019 will probably be available in spring 2020 and will be published on our website. In 2018, the ODR for the Evonik Group was 0.19. All new occupational illnesses reported in Germany are included, giving an ODR for Germany of 0.33.

## EMPLOYEES

Health protection and promotion

### Corporate health promotion

Our well@work program centers on three aspects: exercise, a healthy diet, and work-life balance. Corporate health promotion has a firm place in this: Evonik uses basic programs with a long-term focus to encourage employees to adopt a healthy lifestyle. These are supplemented by special topics, which change every year.



At all of our German sites, there are interdisciplinary health task forces to implement well@work.




Maintaining the long-term employability and well-being of our employees is also at the heart of our fit-for-life seminars, which run over several days.

Worldwide, more than 94 percent of our workforce can seek advice on workplace-related, health, personal, or family problems from social and employee counseling centers.




## Our targets



Below is an overview of the targets set for our employees area of action. The targets defined for 2020 and beyond have been sharpened and streamlined to enhance their strategic relevance.

### Target attainment in 2019

-  Analyze the results of the global employee survey and implement measures in all units
-  Ongoing development of the global development strategy supported by modern learning tools
-  Discuss and implement Evonik's new corporate values worldwide




#### Further support for diversity at Evonik:

-  Increase the percentage of women in middle and senior management
-  Recruitment of women for management positions should reflect the gender distribution in relevant disciplines
-  Increase the proportion of international managers in middle management

-  Occupational health performance index  $\geq 5.0$
-  Include further sites in the calculation of this index (+5 sites in 2019)

### Targets for 2020 and beyond

- Occupational health performance index  $\geq 5.0$
- Increase flexibilization of worktime<sup>1</sup>

-  Target not achieved
-  Target partially achieved or target horizon extends beyond 2019
-  Target achieved

<sup>1</sup> For example:

- by encouraging greater use of the "PairFect" job-sharing platform.
- by concluding a collective agreement on lifetime working and demographic change with a €750 demographic change contribution.

# SAFETY ✓



Safety has priority over sales and profits at Evonik. We have established a safety culture that allows continuous improvement of our systems and processes.



SDGs of particular relevance for Evonik

## KEY TOPICS ▶

- Plant safety
- Occupational safety
- Transportation safety/logistics

# 1.10

Incident frequency  
(number of incidents  
per 1 million working hours)

# 1.18

Accident frequency  
(number of accidents  
per 1 million working hours)

**SAFETY**

- 73 Safety**
- 73 Strategy and management
- 73 Our activities in 2019
- 74 Occupational safety** 📄 102-11, 102-13, 102-43, 403-1, 403-2, 403-4, 403-5, 403-7, 403-8, 403-9
- 74 Strategy and management
- 74 Plant safety** 📄 102-11, 102-13, 102-43, 403-1, 403-2
- 74 Strategy and management
- 75 Transportation safety and logistics**
- 75 Strategy and management
- 75 Our activities in 2019
- 76 Our targets** 📄 102-14, 102-15

## Safety

**Our materiality analysis and regular discussions with our stakeholders confirm the high priority we give to occupational and plant safety. That is also reflected in the UN Sustainable Development Goals (SDGs) of relevance to Evonik.**

### Strategy and management

We have defined environment, safety, health, and quality values, which address our responsibility and are used to continuously improve our processes and systems.

We have developed the Safety at Evonik initiative into a group-wide management approach to implement a safety culture in all areas of occupational and transportation safety. It defines binding

### Framework of the safety culture

C28

The behaviors are linked—supporting each other through four common themes across the three groups of employees.

Theme	Everyone	Supervisors	Managers
Standards	Follow rules	Ensure compliance	Set high standards
Communication	Speak up	Encourage the team	Communicate openly
Risk management	Be mindful	Promote risk awareness	Confront risk
Involvement	Get involved	Involve the team	Involve the workforce

principles of action that give our managers and employees reliable guidance on safety-compliant conduct in their daily work. 📄 102-43

At Evonik, the management of occupational and plant safety is ensured by globally binding policies and operating procedures that form an integral part of our management system. Observance of these rules is monitored by central audits, while business-specific implementation is assigned to the segments. Steering bodies at group level ensure that mission-critical processes are standardized for all segments (see chapter “The environment” 📄 p.50). Group-wide targets based on key performance indicators are used to check implementation of the requirements and identify the need for further action. The frequency and severity of accidents are also reflected in the variable remuneration of members of the executive board.

Our crisis and incident management focus on preventing and limiting damage if accidents nevertheless happen. To build and share the necessary experience, we are actively involved in various national and international networks. We analyze incidents carefully so we can learn from them and further improve our safety performance. Our global newsletter “Learning from one another” provides information on incidents and topical safety issues.

### Our activities in 2019

In 2019, we introduced our new global server-based platform ESTER (Evonik Standard Tool ESHQ and Reporting). This was rolled out first in the North America region, followed by Europe and Asia. Inclusion of all Evonik sites is scheduled for completion by mid-2020. The aim of this integrated software platform is to harmonize processes worldwide, make workflows leaner, and broaden our database to improve our safety performance.

To sharpen our focus on specialty chemicals, on August 1, 2019, we divested the methacrylates business (see “About this report” 📄 p.83). This divestment had only a slight impact on our safety indicators but a more significant impact on our transportation and logistics indicators. However, since separate management of the methacrylates business was no longer undertaken in 2019, the presentation of the safety data in the reporting period only covers the continuing operations (excluding the methacrylates business).





**ESTER software platform for ESHQ processes**

ESTER (Evonik Standard Tool ESHQ and Reporting), our new digital platform, has established uniform global standards for the environment, safety, health, and quality (ESHQ) for the first time. In future, we will have key performance indicators and facts at our fingertips throughout the Evonik Group. Fast availability of all data greatly enhances transparency. As well as harmonizing processes, we expect ESTER to make workflows leaner and broaden the data available on our safety performance. Additional indicators can also be derived to improve Evonik’s ESHQ performance.

**Target 1**  
Group-wide ESH software

**Target 2**  
Replace many IT solutions

**Target 3**  
Improve ESH performance

**Target 4**  
Reduce the time and expense for ESH

The software platform was configured in the first half of 2019, paving the way for the global rollout. The first phase comprised introducing the incident management, management of change, hazard assessment, and legal compliance modules, first in North America (Mobile, Wichita), then in Asia (Singapore, Shanghai) and Europe (Wesseling, Rheinfelden). ESTER should be available at all sites by mid-2020. Planning of the second phase will then start.

**Occupational safety**

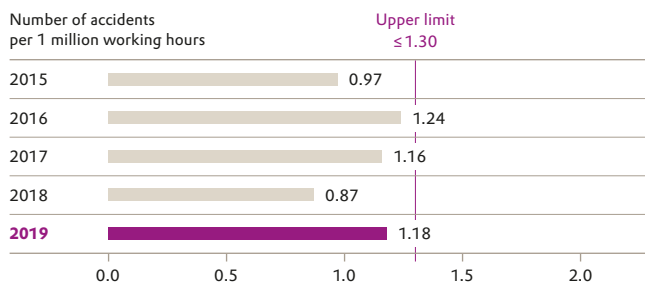
**We pay special attention to occupational safety. The safety of our employees covers safety on the way to and from work as well as safety at work. Contractors’ employees working at our sites are also included.**

**Strategy and management**

Accident frequency is our key performance indicator for occupational safety. In 2019, we achieved our target of remaining below the defined maximum accident frequency rate<sup>1</sup> of 1.30 for Evonik employees<sup>2</sup>. The accident frequency rate was 1.18, which was above the rate recorded in the previous year (0.87). In the reporting period, most accidents occurred in the service units, especially in the area of logistics. Specific action will be taken in 2020 at the sites that were most affected.

**Accident frequency indicator**

**C29**



There were no fatal accidents at work involving our employees or contractors’ employees at our sites in the reporting period. However, there was one fatal traffic accident involving an employee traveling to work in Belgium.

<sup>1</sup> This indicator contains all work-related accidents (excluding traffic accidents) resulting in absences of at least one full shift per 1 million working hours.  
<sup>2</sup> Evonik employees including employees from staffing agencies.  
<sup>3</sup> The method of calculating working hours has been changed. This prevents direct comparison with the prior-year figure. 306-3

**SAFETY**

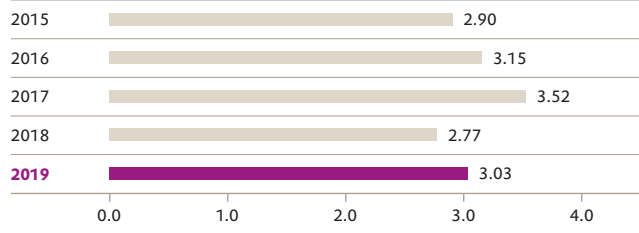
Occupational safety | Plant safety

The accident frequency rate<sup>1,3</sup> for contractors’ employees was 3.03, slightly above the previous year’s very good rate of 2.77. The catering area was responsible for the increase in accident frequency, however only minor injuries were involved.

**Accident frequency indicator, contractors’ employees<sup>a</sup>**

**C30**

Number of work-related accidents involving non-Evonik employees resulting in absence from work per 1 million working hours



<sup>a</sup> Calculation based on assumptions and estimates.

**Plant safety**

**Safety is part of our DNA: It is the basic precondition for the operation of our facilities and their performance.**

**Strategy and management**

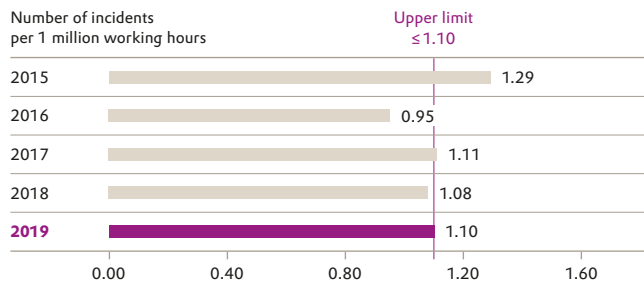
Incident frequency is used to measure the safety of our plants. In 2019, we once again documented the process safety of our plants based on the number of incidents involving the release of substances, fire, or explosion (process safety performance indicator defined by the European Chemical Industry Council, Cefic). There were no incidents involving the release of hazardous substances resulting in serious injury or a significant impact on human health, the soil, flora, surface water, or groundwater.



The number of incidents per 1 million working hours was 1.10. Therefore, we once again achieved our target, which sets an upper limit of 1.10. The development of the incident frequency indicator in recent years shows that the measures introduced are having a long-term effect.

### Incident frequency indicator

C31



In addition, we raised the efficiency of our safety management system in the reporting period. We use an ESHQE<sup>1</sup> management handbook, which is applicable everywhere in the world, and new rules for cybersecurity in the operation of our production facilities (see chapter “Governance and compliance” p.32).

Our goal is to continually improve our safety performance. In order to direct our safety management measures more efficiently and more effectively, we have reduced the threshold for recording incidents. In line with a Cefic definition, we have therefore introduced a new key performance indicator (KPI) to measure energy and product leakages below the present thresholds<sup>2</sup>. This new KPI measures the number of incidents per 200,000 working hours in our production facilities, compared with per 1 million working hours in the past. We expect more detailed data collection and evaluation to deepen our under

standing of the potential for improvement. In this way, Evonik has also adopted the recommendations of the International Council of Chemical Associations (ICCA). In the reporting period, we achieved a reference level of 0.31.

## Transportation safety and logistics

**Our aim is to minimize risk at all stages, from loading through transportation to unloading. The standards we set for the transportation of dangerous goods are even higher than the national and international regulations.**

### Strategy and management

To support safe transportation by logistics partners, the use of requirements profiles for logistics service providers and collection by customers 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. We extended this concept in 2019: A requirements profile for warehouse service providers was almost completed and should be implemented in 2020. This requirements profile focuses principally on meeting quality standards, general safety regulations, risk management, and general compliance with legal requirements and environmental protection guidelines.

### Our activities in 2019

Extensive training on safe filling and emptying of tanks and tankers was carried out at our site in Wesseling (Germany) in 2019. The topics covered by this specially designed training course ranged

## SAFETY

Transportation safety and logistics

### Outgoing shipments of hazardous goods<sup>a</sup>

T25

in thousand metric tons	2017	2018	2019
Air	0.4	0.4	0.9
Ocean	408	646	552
Inland waterway	752	808	830
Rail	586	751	648
Pipeline <sup>b</sup>	826	807	656
Road	1,569	1,992	1,759
<b>Total</b>	<b>4,141</b>	<b>5,005</b>	<b>4,446</b>

<sup>a</sup> Excluding goods collected by customers.

<sup>c</sup> External shipments only.

### Outgoing shipments of other goods<sup>a</sup>

T26

in thousand metric tons	2017	2018	2019 <sup>b</sup>
Air	5	6	4
Ocean	1,221	1,332	1,177
Inland waterway	52	116	50
Rail	459	331	170
Pipeline <sup>b</sup>	20	36	9
Road	2,712	2,684	2,549
<b>Total</b>	<b>4,469</b>	<b>4,504</b>	<b>3,959</b>

<sup>a</sup> Excluding goods collected by customers.

<sup>b</sup> External shipments only.

from the duties of people charged with filling and emptying tanks to handling of valves, couplings, and seals, including both theoretical examples and practical exercises on road and rail tankers and model valves. The training also included appropriate safety measures in the event of spills and incidents.

<sup>1</sup> ESHQE = Environment, safety, health, quality, and energy.

<sup>2</sup> The new volume thresholds are 1/10/100 kg depending on the hazard class, compared with the conventional reporting thresholds of 5/100/2,000 kg.

### Focus on digitalization and sustainability

The establishment of our group-wide transport management system is progressing. It is now used at our sites in Marl, Herne/Witte, Lülsdorf, and Wittenburg (Germany). Introduction of the basic functionality has therefore been completed. Alongside conventional transportation planning and billing processes, we have therefore paved the way for digitalization of site-specific processes (yard and slot management) and the creation of a collaboration platform for the placement of orders with transportation companies.

Monitoring of workflows in operating processes should enable us to provide timely information for customers and implement any planning adjustments across networks. Transparency in respect of demand for, and supply of, freight capacity, freight agreements, and prices allows optimal allocation of means of transportation, with the best possible delivery quality and adherence to delivery schedules. Transparent planning enables us to reduce empty runs and idling times and improve the use of transportation capacity by selective consolidation of loads. Control room functionalities contribute to efficient management and execution of transportation at our sites.

As part of our digital agenda, we have developed a training module for checking vehicles transporting dangerous goods. This has been optimized for computer use. All learning content required to meet the dangerous goods regulations integrated into the ADR<sup>1</sup> check is now provided in an entertaining format to improve training of our staff.

In 2019, we continued to optimize the intralogistics of our fleet. In accordance with our locomotive strategy, two old engines

at our Rheinfelden site were replaced by a modern locomotive and a road/rail shunter. The modernization of our fleet helps us reduce fuel consumption and emissions.

Together with the Federal Ministry of Transport and Digital Infrastructure, the German international cooperation organization GIZ, and private-sector companies, Evonik is involved in a development partnership to improve the safety of dangerous goods transportation in China. Our contribution includes raising stakeholders' awareness of the importance of correct classification of dangerous goods. The aim is to reduce cases of transportation that are incorrectly classified or not classified as dangerous goods.

Evonik evaluates accidents in the shipment goods using the criteria set out in section 1.8.5 ADR.

In Germany, a slight leakage in coupling components occurred when coupling a railroad tanker containing methacrylonitrile. This resulted in a slight spillage. The incident was investigated thoroughly, and action was derived from this.

Evonik uses load securing equipment to optimize the secure loading of industrially packaged goods. The introduction of Drumguard® combines economic benefits with a sustainable use concept. Drumguard® comprises two components and is therefore far easier to use than conventional straps and shrink-wrap film. This reusable system replaces non-reusable plastic or metal materials. Drums can be secured quickly on pallets to form load units in compliance with national and international regulations on transportation and dangerous goods.

## SAFETY

Our targets

### Our targets

**Below is an overview of the targets set for our safety area of action. The targets defined for 2020 and beyond have been sharpened and streamlined to enhance their strategic relevance.**




#### Target attainment in 2019

-  Accident frequency rate  $\leq 1.30$
-  Incident frequency rate  $\leq 1.10$
-  Pilot ESTER; global rollout from the second half of the year
-  Locomotive strategy: replace two old shunters in Rheinfelden by one modern locomotive and a road/rail shunter
-  Implement the requirements profile for warehouse service providers; implement the global minimum standard for logistics service providers; define details of the evaluation of European rail logistics providers using SQAS Rail<sup>2,3</sup>

#### Targets for 2020 and beyond

Accident frequency rate  $\leq 1.30$

Incident frequency rate  $\leq 1.10$

-  Target not achieved
-  Target partially achieved or target horizon extends beyond 2019
-  Target achieved

<sup>1</sup> Accord européen relatif au transport international des marchandises Dangereuses par Route, English: European Agreement concerning the International Carriage of Dangerous Goods by Road.

<sup>2</sup> SQAS Rail stands for a Cefic safety and quality evaluation system for rail transport.

<sup>3</sup> Since we streamlined and sharpened our targets with a view to strategic relevance in 2019, we have not set targets for 2020 and beyond. We will continue to work on these objectives and to report on them.

# COMMITMENT TO SOCIETY




As a company, our aim is to create value for society that goes beyond our own growth targets.

Focal areas:

Social projects  
Education &  
science  
Sports  
Culture

## COMMITMENT TO SOCIETY

- 78 Our commitment to society**  203-1, 415-1
- 78 Strategy and management
  - 78 The Evonik Group's activities in 2019
  - 79 The Evonik Foundation's activities in 2019


## Our commitment to society

**Our donations and sponsorship activities complement the wide-ranging contributions made by the personal commitment of our employees worldwide.**

### Strategy and management

Our commitment comprises donations and sponsorship activities, with a special focus on Evonik's core competencies: creativity, specialization, self-renewal, and reliability. We only sponsor projects and initiatives that fit our core brand. In addition, our aim is to foster the positive development of society around our sites worldwide.

Our operating units support their own projects tailored to their business and local communities—within our strategic guidelines, which are set out in our policies on donations and sponsorship. Overall, we concentrate our social commitment on the areas of education and science, social projects, culture, and sports.

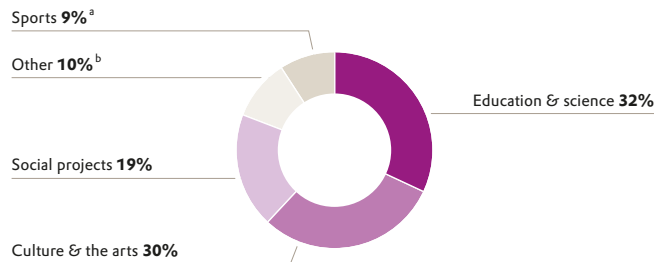
In addition, Evonik contributes to society in a variety of different ways. These are outlined in further detail in the chapter "Strategy and growth"  p.12.

### Donations and sponsorship

**C32**

#### Focus on public projects

Evonik provided €3.7 million for donations and sponsorship projects in 2019. This budget was used principally for science & education, social projects, culture & the arts, and sports.



<sup>a</sup> Excluding sponsorship of the Borussia Dortmund soccer club.

<sup>b</sup> Including donations of €210,000 to political parties in Germany: €90,000 was donated to the CDU, €80,000 to the SPD, €20,000 to Bündnis 90/Die Grünen, and €20,000 to the FDP.

The Evonik Foundation has a special place in Evonik's social commitment. Its motto is supporting people because it is people who shape the future. The Evonik Foundation pursues its goals through its own programs and projects and by making donations to support projects by other organizations. The foundation's mission defines young people, science, and integration as its key areas of focus. Every application for support is evaluated on the basis of the foundation's mission. To qualify for assistance, a project must meet at least two of the key criteria and must fall within one of the focal areas of the foundation's mission: education, science, culture and the arts, the church, social projects, and sports. The Evonik Foundation's support centers primarily on Germany, with a special focus on the regions close to Evonik's sites.

## COMMITMENT TO SOCIETY

Our commitment to society

### The Evonik Group's activities in 2019

The Young Spirit initiative lives from the commitment of our employees, who enjoy passing on their enthusiasm for science to children aged between four and ten on a voluntary basis. A new digital collaboration platform with video-based content enables the volunteers to pass on their knowledge without being tied to specific times or locations. This initiative is increasingly becoming an international network, with volunteers conducting self-organized experimental days at schools and preschools and encouraging children's passion for science with the aid of hands-on experiments. The number of volunteers has now increased to around 250.



Young Spirit brings science to a class in Dubai.

We have close contact with many schools close to our sites. In 2019, we continued to develop the Evonik Cyber Classroom for our partner schools. This virtual 3D learning system is now also available as an app for smartphones and tablet PCs for use in chemistry lessons. In Mumbai (India), we provided educational materials for children and teachers at an elementary school. In Myanmar, we supported a project to improve the infrastructure at a local elementary school. In Tippecanoe (Indiana, USA), we helped teachers organize special educational programs in science, technology, engineering, and math.



Given the history of our company, we are sensitive to attempts to trivialize the Nazi period. In the reporting period, Evonik therefore sponsored a trip to Auschwitz by Holocaust studies students in Frankfurt and made a financial contribution to an exhibition at the Historical Museum in Frankfurt on the city in the Nazi period. Other activities included an excursion by a 40-member delegation comprising employees of Evonik and Borussia Dortmund to the Auschwitz memorial. We also supported an exhibition about the history of I.G. Farben and the Monowitz concentration camp by organizing an extensive supplementary program of events in Dortmund.

In 2019, we continued our partnership with the intonations chamber music festival in Berlin, the Balthasar-Neumann choir and ensemble conducted by Thomas Hengelbrock, the Ruhr festival in Recklinghausen, the lit.RUHR literature festival in Essen, the Küppersmühle museum in Duisburg, and the "TUP in schools" theater program for children and young people in Essen.

Evonik supports both popular and professional sports activities. For example, through the BVB Evonik Soccer Academy, we aim to encourage kids' passion for soccer around the world. In summer 2019, the academy once again toured the USA for Evonik: during a foreign tour by the team, the professional soccer players once again provided training sessions for several hundred children.

In addition, Evonik supported many social and ecological projects in 2019, including Saber Viver (learning to live) at the Barra do Riacho site in Brazil. Through various educational and socio-cultural offerings, this initiative fosters children and young people in order to strengthen bonds with families, schools, and the community. In South Africa, we supported various projects by the Utho Ngathi organization, which encourages the integration of young people with disabilities in rural areas.

### The Evonik Foundation's activities in 2019

The Evonik Foundation supports measures aimed, in particular, at upcoming scientists, and educational programs for socially disadvantaged children and young people. Both were a focus of the tenth anniversary of the Evonik Foundation in 2019. In close cooperation with twelve Evonik sites in Germany, the foundation sponsored 26 projects for disadvantaged children and young people, ranging from help with language and reading, through the use of media to riding therapy and support for homeless youngsters.

The anniversary project focusing on scientific education for the younger generation was a Perspectives Forum on future-oriented issues organized in conjunction with the Jugend forscht foundation. 40 former contestants in the Jugend forscht science competition aged between 21 and 27 were given an opportunity to find out more about Evonik's corporate foresight research under the motto "Towards a digital green chemistry." In workshops, they worked on future scenarios for education, nutrition, health, mobility, and production, and developed innovative ideas for new products.

A range of other projects are aimed at educationally disadvantaged children and young people. One example is the "Do it better" project devised in collaboration with the Essener Chancen organization and the Essen Nord-Ost high school, where the majority of pupils have a migration background: The children received assistance with homework and subjects they found difficult in order to help them achieve the best possible grades in the school-leaving examinations.

In 2018, the Evonik Foundation and the Westerwelle Foundation opened the "Westerwelle Startup House powered by Evonik Stiftung" in Kigali (Rwanda). This has become a central point for young entrepreneurs and start-ups. In May 2019, the centerpiece was opened: a "makerspace" designed by Evonik's training unit. The aim is to drive forward the professional abilities of young entrepreneurs in order to open up new local business prospects.

## COMMITMENT TO SOCIETY

Our commitment to society



The Evonik Foundation supports organizations in Essen that give disadvantaged children and young people a perspective for the future.

The Evonik Foundation awards scholarships through the following programs:

- **Evonik Foundation scholarship for science doctorates:** In 2019, a total of 16 doctoral students at eleven universities received industry-related scholarships.
- **Germany Scholarship:** For students who have a good academic record and social commitment. In 2019, 45 students at nine universities received a Germany Scholarship from the Evonik Foundation.
- **Scholarships for refugees studying for a bachelor's or master's degree at the Ruhr University in Bochum:** In 2019, we supported a total of 16 scholarship students.
- **START scholarship in cooperation with the START Foundation:** Since 2018, the Evonik Foundation has supported five talented youngsters with a migration background in their personal development and schoolwork.









## Overview of sustainability indicators for the Evonik Group

The following overview contains the main indicators for our six sustainability areas of action. You can find more detailed information in the relevant chapters.

Sustainability indicators 2019  201-1, 103-2

T27

	2016	2017	2018	2019
 <b>STRATEGY AND GROWTH</b>				
Value added in € million	4,616	4,684 <sup>a</sup>	4,740	5,994
Women at the first management level below the executive board in %	16.7	25.0	27.3	26.1
Women at the second management level below the executive board in %	9.5	15.4	20.0	24.1
 <b>GOVERNANCE AND COMPLIANCE</b>				
Training rate <sup>b</sup> antitrust law in %	937	59	74	82
Training rate <sup>b</sup> fighting corruption in %	828	84	83	91
Training rate <sup>b</sup> code of conduct in %	12,025	71	77	89
Internal investigations	33	27	90 <sup>c</sup>	109
Disciplinary measures	17	12	106 <sup>d</sup>	60
 <b>VALUE CHAIN AND PRODUCTS</b>				
Procurement volume in € billion	7.6	9.1	9.9	9.4
Production output in million metric tons	10.58	10.98	11.03	9.16
Use of renewable resources in production in %	9.2	10.4	9.7	7.9
Raw material suppliers covered by TFS assessments <sup>e</sup>	--	--	--	66
No. of sustainability audits (TFS)	241	441	358	309
No. of sustainability audits (Evonik)	29	28	22	26
No. of sustainability assessments (TFS)	1,773	1,794	1,491	1,043
No. of sustainability assessments (Evonik)	145	149	130	117
R&D expenses in € million	438	476 <sup>f</sup>	459	428
 <b>THE ENVIRONMENT</b>				
Scope 1 greenhouse gas emissions in million metric tons <sup>g</sup>	5.4	5.6	5.7	4.9
Scope 2 greenhouse gas emissions in million metric tons <sup>h</sup>	1.0	0.9	0.9	0.6
Scope 3 greenhouse gas emissions in million metric tons <sup>i</sup>	19.5	20.4	21.0	-- <sup>j</sup>
Reduction in greenhouse gas emissions (scope 1/2) in million metric tons	--	--	-31	-42
 <b>EMPLOYEES</b>				
Early employee turnover in %	1.2	1.4	0.9	0.9
Continuing professional development per employee in hours <sup>k</sup>	16	12	16	16
Female managers in % <sup>l</sup>	22.0	23.2	24.3	25.2
Occupational health performance index <sup>m</sup>	5.5	5.4	5.5	5.5
 <b>SAFETY</b>				
Accident frequency <sup>n</sup>	1.24	1.16	0.87	1.18
Incident frequency <sup>o</sup>	43	1.11 <sup>p</sup>	1.08	1.10

<sup>a</sup> Prior-year figures adjusted in some cases due to IFRS 15.

<sup>b</sup> From 2017, the training rates are given as a percentage; the figure for 2016 is an absolute figure and is therefore not comparable. 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, 2019.

<sup>c</sup> From 2018, reporting extended to include all internal investigations in the Evonik Group.

<sup>d</sup> In some cases, more than one measure was taken as a result of an investigation.

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

<sup>f</sup> The costs of Corporate Innovation are included from 2017; 2017 figure restated.

<sup>g</sup> CO<sub>2</sub> equivalents.

<sup>h</sup> CO<sub>2</sub> equivalents, net (market-based).

<sup>i</sup> In some cases, calculation is based on assumptions and estimates.

<sup>j</sup> The figure for 2019 is expected to be published in mid-2020.

<sup>k</sup> From 2016, excluding apprentices in Germany.

<sup>l</sup> Management circles 1–3; prior-year figure restated, excluding the methacrylates business.

<sup>m</sup> Max. 6.0 (index takes account of key aspects of occupational medicine, health promotion, and emergency medical management).

<sup>n</sup> This indicator contains all work-related accidents (excluding traffic accidents) resulting in absences of at least one full shift per 1 million working hours.

<sup>o</sup> Number of incidents per 1 million working hours.

<sup>p</sup> From 2017, the indicator is shown as an absolute amount defined as the number of incidents per 1 million working hours (previous years in percent).

## Status of our sustainability targets for 2019

 102-14, 102-15, 103-2

### Sustainability targets 2019

T28

#### Strategy and growth

p. 22

- Anchor sustainability in strategy dialogues
- Synchronize the publication date of financial and non-financial reports
- Review the SDGs of relevance for Evonik (from 2020)
- Impact valuation:
  - Complete the global monetary valuation of the impact of our business along the value chain
  - Update the data to include 2017 and 2018
- Conduct a sustainability analysis of our business using the extended methodology

#### Governance and compliance

p. 32

- Proportion of female executive board members: 25 percent up to June 30, 2022
- Women at the first two management levels below the executive board: 20 percent at each level by year-end 2019
- Structure and implement the revised internal regulations on gifts and hospitality
- Introduce uniform group-wide standards on monitoring business partners
- Update the rules on internal investigations

#### Value chain and products

p. 42

- Conduct at least 20 supplier sustainability audits p.a. under the shared audit principle of the Together for Sustainability initiative. 2019 and beyond
- Continue the analysis of suppliers by reviewing at least 80 TfS assessments. 2019 and beyond
- Evaluate the sustainability performance of 90 percent of suppliers of critical raw materials by 2020
- Generate more than €1 billion in additional sales by 2025 in our six innovation growth fields by 2025
- Increase sales of products and applications developed in the past five years to 16 percent in the mid term
- Develop recommendations for action on palm oil, palm kernel oil, and their derivatives at Evonik. 2019 and beyond
- External monitoring of suppliers of renewable raw materials and in-house supplier criteria. 2019 and beyond
- Establish a risk estimate for >99 percent of substances placed on the market in quantities of >1 metric ton p.a. by the end of 2020
- Conduct a more far-reaching assessment of all products containing >0.1 percent hazardous chemicals of high concern (hChC)<sup>a</sup>, e.g., CMR<sup>b</sup> 1A/1B, PBT<sup>c</sup> (CMS<sup>PLUS</sup>) by the end of 2020

#### The environment

p. 60

- Reduce absolute scope 1 and scope 2 emissions by 50 percent by 2025 (reference base: 2008)
- Develop site-specific action plans for sites that are potentially exposed to water stress as part of a global water management system
- Further reduce production waste. 2019 and beyond

#### Employees

p. 71

- Analyze the results of the global employee survey
- Ongoing development of the global development strategy, supported by modern learning tools
- Discuss and implement Evonik's new corporate values worldwide
- Further support for diversity at Evonik
  - Increase the percentage of women in middle and senior management
  - Recruitment of women for management positions should reflect the gender distribution in relevant disciplines
  - Increase the proportion of international managers in middle management
- Occupational health performance index  $\geq 5.0$ . 2019 and beyond
- Include further sites in the calculation of this index (+5 in 2019)

#### Safety

p. 76




- Accident frequency rate should be  $\leq 1.30$ . 2019 and beyond
- Incident frequency rate should be  $\leq 1.10$ . 2019 and beyond
- Pilot ESTER; global rollout from the second half of 2019
- Locomotive strategy: replace two old shunters in Rheinfelden by one modern locomotive and a road/rail shunter
- Implement the requirements profile for warehouse service providers. 2019 and beyond; implement the global minimum standard for logistics service providers. 2019 and beyond; define details of the evaluation of European rail logistics providers using SQAS Rail<sup>d</sup>

<sup>a</sup> hChC = hazardous chemicals of high concern.

<sup>b</sup> CMR = carcinogenic, mutagenic, reprotoxic.

<sup>c</sup> PBT = persistent, bioaccumulative, toxic.

<sup>d</sup> SQAS Rail stands for a Cefic safety and quality evaluation system for rail transport.

-  Target not achieved
-  Target partially achieved or target horizon extends beyond 2019
-  Target achieved

## About this report

### Evonik's sustainability report 2019





This is the twelfth full sustainability report published by Evonik. The report covers the year 2019 (January 1 to December 31, 2019), except where otherwise indicated, and is based on Evonik's organizational structure in 2019. The aim is to give our customers, suppliers, employees, owners, and the general public an insight into how we run our business and drive forward sustainability in the Evonik Group. The sustainability report supplements the ecological and societal aspects included in the financial report 2019. The next sustainability report will be published in 2021.


### Method


This year, the focus was on implementing the Sustainability Strategy 2020+, which was adopted by the executive board in February 2019. One element is continuously improving our sustainability reporting. In view of this, the report on 2019 has been aligned even more stringently than in the past to our materiality analysis. The structure is systematically aligned to the 19 sustainability topics identified as material. The topics with the highest priority are sustainable products/solutions for our customers, climate change, and efficient use of scarce resources/circular economy. Several case studies are used to show how we manage the associated sustainability issues in the company.

 102-48, 102-49

The strategic aspiration of our sustainability report 2019 has risen further compared with previous years. For the specific areas of action, we have set fewer targets, but their relevance has been streamlined and sharpened. They are monitored using performance indicators. The introductory pages to the chapters also focus on selected key performance indicators. Overall, we place great importance on the measurability of our sustainability activities. Therefore, the texts relating to the sustainability analysis of our business and our impact valuation are now contained in the chapter on strategy; in the past they were included in the chapter on the value chain and products.

Our sustainability strategy underscores our endeavors to gain a precise understanding of the principal influences and impacts on the value created by Evonik. These complex interrelationships are illustrated by three charts in this report: resources and value contributed (C06  p.13), impact of our business activities (C07  p.14), and monetary impact valuation (C08  p.15). In addition, the chart headed areas of action and impact of Evonik's business (C13  p.23) provides an insight into the possibilities and limits of our influence within the value chain—for example, through our procurement volume, our management systems, or current business processes.




Non-financial risks have been given a more prominent place in our conventional risk reporting since 2017: Sustainability opportunities and risks are systematically identified, monitored, and reported via our risk management system. In view of the rising importance of climate-related opportunities and risks, we have extended our reporting on these factors. For the first time, this report contains climate-related information in the categories governance, strategy, risk management, and metrics and targets in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD, see  p.85). This is additional to the facts and figures that we have published in connection with our participation in CDP Climate Change.

Evonik supports the United Nations' Sustainable Development Goals (SDGs) and has systematically taken them into account for several years. In 2018, we developed our own methodology to identify the most important SDGs for Evonik. In 2019, the SDGs of relevance to the Evonik Group were included for the first time in the sustainability analysis of our business 2.0 (see chapter "Strategy and growth"  p.14). Moreover, for the first time we have linked the GRI content index to the 17 SDGs and there is also an index with references to information on the sub-targets for the four SDGs of relevance to Evonik.

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. Additional



## BASIS OF REPORTING

About this report

charts have been included to enhance the content and improve transparency. These include charts on our water data (C21  p.57), the audit escalation process for suppliers (C19  p.36), and an overview of more than 140 years of active responsibility at Evonik (C03  p.6).

The executive board bears overall responsibility for sustainability, and direct responsibility is assigned to the chief human resources officer, who is also responsible for all climate-related aspects. He approved the content of this report and confirmed that it addresses all material sustainability topics of relevance for Evonik and its stakeholders.

As well as continuing to develop the content of this report, our processes were organized to ensure that, for the second time, the publication date coincides with the publication of the financial report. At our financial press conference on March 4, 2020, journalists and members of the financial community can obtain a full view of Evonik's financial and non-financial performance.

This report is published in English and German and is available solely in electronic form. It can be downloaded from the responsibility section of Evonik's website  <https://corporate.evonik.com/en/responsibility/>.  102-8, 103-2, 302-1, 302-4, 305-1, 305-2, 305-3, 305-4, 305-5, 305-6, 305-7, 306-2, 306-3

### 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, 2019. 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. Joint operations are included on a pro rata basis. 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. [📍 102-45, 102-46, 102-48, 102-49](#)

In 2019, the Evonik Group comprised 40 German and 115 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 thus the limits of our report are based principally on the sustainability topics derived from our materiality analysis.

The ecological data<sup>2</sup> comprise emissions and consumption data for 96 production sites in 26 countries and thus cover our entire production volume. Occupational safety data<sup>2</sup> include other small production sites and non-production locations (mainly administration sites), so the data here cover 197 locations in 54 countries. The data are compiled using sustainability reporting software developed specifically for this purpose (SuRe 2.0). In the mid term, the data will be compiled using the new ESTER platform (Evonik Standard Tool ESHQ and Reporting). Rollout of this tool started in the reporting period. We aim to complete the rollout to all Evonik locations worldwide by mid-2020.

Since the sustainability report and the financial report are now published on the same date, the closing date for the environmental data is September 30, 2019 (see the section headed “Fast close process and corrections” [📄 p. 84](#)). The HR data obtained from the HR information collector are based on the actual data as of September 30, 2019. In this context, only the number of hours of continuing professional development have been projected for a twelve-month period.

The segmentation used in this report reflects group and segment interests in order to provide a detailed reflection of production activities. In some cases, data are reported at plant level to ensure this.

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 level as well as a detailed regional analysis of the data. The ecological data are updated annually without taking changes in the Evonik Group into account. The prior-year figures are not adjusted for changes in the portfolio of companies consolidated. The figures for each company are included in full, without adjustment to reflect Evonik’s stake in them.

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.

## BASIS OF REPORTING

About this report

### Material portfolio changes of relevance for ESH

In order to sharpen its focus on specialty chemicals, Evonik sold its methacrylates business on August 1, 2019. As a result, some data in this report have been adjusted to reflect this divestment:

#### Data on the methacrylates business in our report

T29

Chapter	2018	2019
At a glance	Adjusted	Adjusted
Strategy and growth		
Sustainability analysis of our business	---	Adjusted
Impact valuation	---	Adjusted
Governance and compliance	---	Adjusted
Value chain and products		
Supply chain	Not adjusted	Not adjusted
Research and development	Adjusted	Adjusted
Production inputs	Not adjusted	Not adjusted
Production volume	Not adjusted	Adjusted
Renewable raw materials	Not adjusted	Not adjusted
The environment	Not adjusted	Adjusted
Employees	Adjusted	Adjusted
Safety	Not adjusted	Adjusted

From an environmental perspective, the effect of the divestment was significant and had a considerable impact on the development of the environmental data in 2019. Since the methacrylates business was no longer managed separately in 2019, the presentation of the key environmental data in the reporting period only contains the continuing operations (without the methacrylates business). The impact of the other acquisitions and divestments on the environmental reporting in 2019 was not significant.

[📍 102-48, 102-49](#)

<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. [www.evonik.com/list-of-shareholdings](http://www.evonik.com/list-of-shareholdings)

<sup>2</sup> Excluding the methacrylates business.

### Fast close process and corrections

Since the financial report and the sustainability report are published on the same date, it was necessary to speed up our annual environmental reporting ("fast close" process). To achieve this, quarterly reporting has been extended, and the remaining annual reporting has been 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, waste, and water requirements, especially with reference to the progress towards attaining our environmental targets.

For the data still 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, Corporate ESHQ 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, and the data have to be submitted by mid-January of the following year. In the first quarter, Corporate ESHQ compares the actual Q4 data entered in the system with the forecast or calculated data for the fast close report, analyzes any discrepancies, and takes steps to continuously improve calculation methods as necessary.




If the difference between the actual and published data is more than 5 percent, this is drawn to the attention of the auditors and corrected in the next report. In the sustainability report 2019, corrections have been made to the 2018 data on investment in environmental protection and construction and demolition waste. Naturally, these items depend on specific measures, so they can vary considerably from year to year.

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. If these show errors in the data, a correction is made in the sustainability report if the difference in the data for the Evonik Group exceeds 5 percent.

### GRI and UN Global Compact

This report has been prepared in accordance with GRI Standards, core option. Insofar as possible, we have applied the new GRI Standards 303 "Water and wastewater" and 403 "Occupational health and safety" from 2018. Further, this report takes account of the ten principles of the UN Global Compact and constitutes Evonik's progress report on these principles.

### External assurance

To ensure it is up-to-date, we have included all relevant data available to us as of the editorial deadline on February 18, 2020. The chapters titled "Strategy and growth," "Governance and compliance," "Value chain and products," "The environment," "Employees," and "Safety," and the sections headed "Our business model" and "Fiscal 2019" were subject to a limited assurance review by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (indicated by ). The independent practitioner's limited assurance report is printed on  p. 97/98.  102-56



## TCFD index

We are following the objectives of the **Task Force on Climate-related Financial Disclosures (TCFD)** and the ongoing development of established reporting standards with great interest. In keeping with its participation in **CDP Climate Change** (see sustainability report "Ratings and indices 2019" [p.100](#)), in 2019 Evonik again issued detailed strategies, data, and development paths on climate change. This information is available on our website [http://evonik.com/CDP-ClimateChange\\_2019](http://evonik.com/CDP-ClimateChange_2019). For many years, we have also reported climate-related facts and figures in our combined management report and sustainability report. For the first time, 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.

### TCFD index

T30

#### 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. Responsibility for our group-wide sustainability and climate strategy, monitoring, and reporting is assigned to the member of the executive board responsible for human resources, sustainability, and ESHQ (environment, safety, health, and quality). The head of Corporate ESHQ reports regularly to the executive board on climate-related issues. These include environmental indicators, including climate-related performance indicators, as well as targets and target attainment. In addition, the responsible member of the executive board and the heads of Corporate ESHQ and Corporate Sustainability are members of the human resources executive committee, which defines the strategic approach on climate-related issues. The other members of this committee are representatives of the segments, corporate functions, and regions, and technical experts. The executive board discusses relevant issues relating to sustainability, the environment, safety, health, and quality, and the status and progress of the various programs with the heads of the segments and corporate functions on a quarterly basis. The new Climate Strategy 2020+ was presented to the supervisory board in 2019.

Management report, chapter 5.3 The environment [p.48 ff.](#)

Sustainability report, chapter Strategy and growth [p.10](#)

2019 CDP Climate Change response: chapter Governance [http://evonik.com/CDP-ClimateChange\\_2019](http://evonik.com/CDP-ClimateChange_2019)

##### Strategy

Climate change involves perceptible opportunities and risks for Evonik. Therefore, all material elements along the value chain are considered in the development of our strategy. The most important upstream factor is the raw material "backpack" of the starting products we source; in the operation of our production facilities, it is scope 1 and 2 emissions. Downstream, our products improve our customers' CO<sub>2</sub> performance. Examples can be found in the Evonik Carbon Footprint brochure, which is revised every year. We want to increase this proportion by developing further innovative products. In view of the increasing climate awareness, we expect a further rise in demand, with a correspondingly positive impact on our business.

Management report, chapter 6. Opportunity and risk report [p.53 ff.](#)

Evonik Carbon Footprint [www.evonik.com/responsibility](http://www.evonik.com/responsibility)

2019 CDP Climate Change response: chapter Business Strategy [http://evonik.com/CDP-ClimateChange\\_2019](http://evonik.com/CDP-ClimateChange_2019)

To reduce our climate-driven risks, our strategy defines ambitious targets.

#### 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. 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.

Management report, chapter 6. Opportunity and risk report [p.53 ff.](#)

2019 CDP Climate Change response: Chapter Risks and opportunities [http://evonik.com/CDP-ClimateChange\\_2019](http://evonik.com/CDP-ClimateChange_2019)

##### Metrics and targets

Evonik and its predecessor companies have defined ambitious environmental targets since 2004. As part of their continuous development, the executive board adopted new environmental targets in February 2019. Our target of a 50 percent reduction in absolute scope 1 and 2 emissions by 2025, compared with the level in 2008—the first full year after the establishment of Evonik—affirms our commitment to the Paris Agreement on Climate Change. In addition to this, we intend to improve our scope 3 emissions in the upstream value chain by 3 percent a year. Out of the various categories of scope 3 emissions, the most relevant for Evonik is category 1 (purchase of chemical raw materials, packaging materials, and indirect goods) as it accounts for over 40 percent of our scope 3 emissions.

Our CO<sub>2</sub>eq<sup>a</sup> emissions are calculated on the basis of the Greenhouse Gas Protocol.

In 2019, our CO<sub>2</sub>eq emissions were:  
Scope 1 emissions: 4.9 million metric tons  
Scope 2 emissions<sup>b</sup>: 0.6 million metric tons  
Scope 3 emissions 21.0 million metric tons (2018)

Management report, chapter 1.2 Principles and objectives [p.15 ff.](#), chapter 5.3 The environment [p.48 ff.](#)

Sustainability report, chapter The environment [p.49](#)

2019 CDP Climate Change response: chapter Targets and performance [http://evonik.com/CDP-ClimateChange\\_2019](http://evonik.com/CDP-ClimateChange_2019)

<sup>a</sup> CO<sub>2</sub> equivalents.

<sup>b</sup> Scope 2 emissions, net (market-based). In the net view, electricity and steam supplied to third parties are subtracted from the input volumes.

## 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 chapter "Strategy and growth" p.17), 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:



T31

### Targets for the SDGs of relevance for Evonik

Relevant targets	Reference in sustainability report 2019
<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 p.10, 17</li> <li>● Value chain and products p.33</li> <li>● The environment p.49, 52, 56</li> </ul>
3.c: Substantially increase health financing and the recruitment, development, training, and retention of the health workforce in developing countries, especially in least developed countries and small island developing states	<ul style="list-style-type: none"> <li>● Employees p.61, 68</li> </ul>
3.d: Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction, and management of national and global health risks	<ul style="list-style-type: none"> <li>● Employees p.61, 69</li> <li>● Safety p.72, 74, 75</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 p.49, 56</li> </ul>
6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals 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 p.49, 56</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 p.49, 59</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 p.10, 15</li> <li>● Value chain and products p.33, 39, 43</li> <li>● The environment p.49, 52, 56, 58</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 p.10, 12</li> <li>● Value chain and products p.33, 45</li> <li>● The environment p.49, 52, 56, 58</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 p.33, 42</li> <li>● The environment p.49, 58</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 p.10, 12, 14</li> <li>● Governance and compliance p.25</li> <li>● Value chain and products p.33, 43</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 p.24, 28</li> </ul>
13.2: Integrate climate change measures into national policies, strategies, and planning	<ul style="list-style-type: none"> <li>● Strategy and growth p.10, 11</li> <li>● The environment p.49, 52</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 p.10, 11</li> <li>● The environment p.49, 52</li> </ul>

## GRI content index including the ten principles of the UN Global Compact (UNGC) and the 17 UN Sustainable Development Goals 102-55

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 GRI Standards 2016, core option, except where otherwise indicated. For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for disclosures 102-40 to 102-49 align with the appropriate sections of the report. For the first time, we have mapped the 17 UN Sustainable Development Goals to the GRI indicators. This was additionally reviewed by GRI Services for the SDG Mapping Service. Both GRI Services were performed on the German version of this report.



### GRI 101 Foundation 2016

Basis for using the GRI standards

### GRI 102 General disclosures 2016

Contextual information about the company

### GRI 103 Management approach 2016

The management approach used for each material topic

### GRI 200 Economic performance 2016

### GRI 300 Ecological performance 2016

### GRI 400 Social performance 2016

Selection of specific information on each material topic

## GRI content index and UN Global Compact progress report

T32

Relevant SDG	UNGC Principle	GRI standard	Page <sup>a</sup>	Omissions
<b>General Disclosures</b>				
<b>GRI 101: Foundation 2016</b>				
<b>GRI 102: General Disclosures 2016</b>				
<b>Organizational profile</b>				
		GRI102-1	Name of the organization	82, 102
7		GRI102-2	Activities, brands, products, and services	8, 45
		GRI102-3	Location of headquarters	102
		GRI102-4	Location of operations	82, 99, (30)
		GRI102-5	Ownership and legal form	6, 102
		GRI102-6	Markets served	43, (14)
		GRI102-7	Scale of the organization	6, (U2)
8	6	GRI102-8	Information on employees and other workers	15, 65, 66, 67, 82
		GRI102-9	Supply chain	34
		GRI102-10	Significant changes to the organization and its supply chain	34, 82
		GRI102-11	Precautionary principle or approach	25, 28
		GRI102-12	External initiatives	25, 27
		GRI102-13	Membership of associations	25, 45
<b>Strategy</b>				
		GRI102-14	Statement from senior decision-maker	5, 34, 81
		GRI102-15	Key impacts, risks, and opportunities	13, 14, 28, 34, 81 (53)
<b>Ethics and integrity</b>				
16	10	GRI102-16	Values, principles, standards, and norms of behavior	25, 28, 34
16		GRI102-17	Mechanisms for advice and concerns about ethics	28, 29, 30, 31
<b>Governance</b>				
		GRI102-18	Governance structure	12, 27
		GRI102-19	Delegating authority	12

<sup>a</sup> Page no. in sustainability report (page no. in financial report)/Further information.

Relevant SDG	UNGC Principle	GRI standard	Page <sup>a</sup>	Omissions
		GRI102-20	12, 27	
		Executive-level responsibility for economic, environmental, and social topics		
16		GRI102-21	18, 27	
		Consulting stakeholders on economic, environmental, and social topics		
5, 16		GRI102-22	12, 27, (67)	
		Composition of the highest governance body and its committees		
16		GRI102-23	27, (67)	
		Chair of the highest governance body		
5, 16		GRI102-24	27, (67)	
		Nominating and selecting the highest governance body		
16		GRI102-25	27, 32, (67), (77)	
		Conflicts of interest		
		GRI102-26	(67) <sup>b</sup>	
		Role of highest governance body in setting purpose, values, and strategy		
4		GRI102-27	27, 32 <sup>b</sup> , (81)	
		Collective knowledge of highest governance body		
		GRI102-28	27, (67), (86)	
		Evaluating the highest governance body's performance		
16		GRI102-29	12, 18, (74), (77)	
		Identifying and managing economic, environmental, and social impacts		
		GRI102-30	28, (53), (74)	
		Effectiveness of risk management processes		
		GRI102-31	28, (53), (74)	
		Review of economic, environmental, and social topics		
		GRI102-32	5, 12	
		Highest governance body's role in sustainability reporting		
		GRI102-33	18, 29	
		Communicating critical concerns		
		GRI102-34	31	
		Nature and total number of critical concerns		
		GRI102-35	28, 64, (86)	
		Remuneration policies		
16		GRI102-36	28, 64, (86)	
		Process for determining remuneration		
		GRI102-37	28, 64, (74)	
		Stakeholders' involvement in remuneration		

<sup>a</sup> Page no. in sustainability report (page no. in financial report)/Further information.

<sup>b</sup> [www.evonik.com/nonfinancial-report](http://www.evonik.com/nonfinancial-report)

Relevant SDG	UNGC Principle	GRI standard	Page <sup>a</sup>	Omissions
		GRI102-38		
		Annual total compensation ratio		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 results are confidential and are not published.
		GRI102-39		
		Percentage increase in annual total compensation ratio		See comment on GRI 102-38
		<b>Stakeholder engagement</b>		
		GRI102-40	18, 19, 21	
		List of stakeholder groups		
8	3	GRI102-41	64, 65, 66	
		Collective bargaining agreements		
		GRI102-42	18, 19, 21	
		Identifying and selecting stakeholders		
		GRI102-43	18, 19, 20, 21, 64, 66, 73	
		Approach to stakeholder engagement		
		GRI102-44	18, 20, 21, 43	
		Key topics and concerns raised		
		<b>Reporting practice</b>		
		GRI102-45	83	
		Entities included in the consolidated financial statements		
		GRI102-46	21, 22, 23, 83	
		Defining report content and topic boundaries		
		GRI102-47	19, 21, 22, 23	
		List of material topics		
		GRI102-48	18, 21, 82, 83	
		Restatements of information		
		GRI102-49	21, 82, 83	
		Changes in reporting		
		GRI102-50	82	
		Reporting period		
		GRI102-51	82, 102	
		Date of most recent report		
		GRI102-52	82	
		Reporting cycle		
		GRI102-53	102	
		Contact point for questions regarding the report		

Relevant SDG	UNGC Principle	GRI standard		Page <sup>a</sup>	Omissions
		GRI102-54	Claims of reporting in accordance with the GRI Standards	84, 87	
		GRI102-55	GRI content index	87	
		GRI102-56	External assurance	82	
<b>Topic-specific Disclosures</b>					
<b>Strategy and growth</b>					
<b>GRI 201: Economic Performance 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
	7, 8, 9	GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 8, 12, 15, 18, 21, 23, 25, 31, 32, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 11, 18, 21, 29, 31, 80, 81, 82	
2, 5, 7, 8, 9		GRI 201-1	Direct economic value generated and distributed	8, 80	
13	7	GRI 201-2	Financial implications and other risks and opportunities due to climate change	15, 28, (53), (61)	
		GRI 201-3	Defined benefit plan obligations and other retirement plans	64, (86), (88)	
		GRI 201-4	Financial assistance received from government	37 We only report on financial assistance received from the EU or Germany for research purposes.	
<b>GRI 202: Market Presence 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 26, 27, 31, 62, 64, 66, 71, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 64, 80, 81, 82	

Relevant SDG	UNGC Principle	GRI standard		Page <sup>a</sup>	Omissions
1, 5, 8	6	GRI 202-1	Ratios of standard entry level wage by gender compared to local minimum wage	64	Evonik believes it is very important to offer market-oriented and performance-related salaries based on uniform global evaluation criteria. Evonik pays at least the local minimum wage worldwide, regardless of gender.
8		GRI 202-2	Proportion of senior management hired from the local community	66	We report on external hires by region, not by function.
<b>GRI 203: Indirect Economic Impacts 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
	7, 8, 9	GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 32, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 80, 81, 82	
2, 5, 7, 9, 11		GRI 203-1	Infrastructure investments and services supported	13, 15	
1, 2, 3, 8, 10, 17		GRI 203-2	Significant indirect economic impacts	13, 15, (30)	
<b>Governance and compliance</b>					
<b>GRI 205: Anti-corruption 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 32, 34, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 80, 81, 82	
	10	GRI 205-1	Operations assessed for risks related to corruption	25, 28, 29, 30	Through our compliance systems, we examine all sites, not just individual business and training locations, for the risk of corruption and ensure regular risk-based training of all relevant employees.

<sup>a</sup> Page no. in sustainability report (page no. in financial report)/Further information.

Relevant SDG	UNGC Principle	GRI standard		Page <sup>a</sup>	Omissions
		GRI 205-2	Communication and training about anti-corruption policies and procedures	30	We do not provide a breakdown of training data for top management by regions and do not report explicitly on training of business partners.
		GRI 205-3	Confirmed incidents of corruption and actions taken	31	
<b>GRI 206: Anti-Competitive Behavior 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 32, 34, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 80, 81, 82	
		GRI 206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	31	
<b>GRI 406: Non-discrimination 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 26, 31, 34, 66, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 68, 80, 81, 82	
5, 8, 16	6	GRI 406-1	Incidents of discrimination and corrective actions taken	68	
<b>GRI 407: Freedom of Association and Collective Bargaining 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 26, 31, 34, 66, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 26, 29, 31, 34, 80, 81, 82	

Relevant SDG	UNGC Principle	GRI standard		Page <sup>a</sup>	Omissions
8	3	GRI 407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	26, 29, 31, 35, 36, 66	At present, this is only assessed at country level. Our supplier evaluation is based on compiling/quantifying risk factors. Our evaluation includes the threats to freedom of association and collective bargaining.
<b>GRI 408: Child Labor 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 26, 31, 34, 66, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 34, 80, 81, 82	
8	5	GRI 408-1	Operations and suppliers at significant risk for incidents of child labor	26, 29, 31, 35, 36, 66	At present, this is only assessed at country level. Our supplier evaluation is based on compiling/quantifying risk factors. Our evaluation includes the risk of child labor.
<b>GRI 409: Forced or Compulsory Labor 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 26, 31, 34, 66, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 34, 80, 81, 82	

<sup>a</sup> Page no. in sustainability report (page no. in financial report)/Further information.



Relevant SDG	UNGC Principle	GRI standard		Page <sup>a</sup>	Omissions
8	4	GRI 409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	26, 29, 31, 35, 36, 66	At present, this is only assessed at country level. Our supplier evaluation is based on compiling/quantifying risk factors. Our evaluation includes the risk of forced or compulsory labor.
<b>GRI 412: Human Rights Assessment 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 26, 31, 34, 66, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 34, 80, 81, 82	
	1	GRI 412-1	Operations that have been subject to human rights reviews or impact assessments	26, 30	Ongoing development of our human rights risk map at country level, using the MVO Netherlands' CSR Risk Check.
		GRI 412-2	Employee training on human rights policies or procedures	26, 30	Human rights are an integral part of compliance training on our code of conduct, which is compulsory for all employees. In countries where the potential human rights risk is elevated, training is conducted, especially at management level.
<b>GRI 415: Public Policy 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 32, 80, 81	

<sup>a</sup> Page no. in sustainability report (page no. in financial report)/Further information.



Relevant SDG	UNGC Principle	GRI standard		Page <sup>a</sup>	Omissions
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 80, 81, 82	
		GRI 415-1	Political contributions	32	Evonik does not make any donations to political parties outside Germany.
<b>GRI 418: Customer Privacy 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 32, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 32, 80, 81, 82	
16		GRI 418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	31, 32, (53), (75)	
<b>GRI 419: Socioeconomic Compliance 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 32, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 80, 81, 82	
		GRI 419-1	Non-compliance with laws and regulations in the social and economic area	28, 31, 32, (53), (75)	
<b>Value chain and products</b>					
<b>GRI 204: Procurement Practices 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 26, 31, 34, 35, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 34, 35, 36, 80, 81, 82	
12		GRI 204-1	Proportion of spending on local suppliers	36	All locations and the total procurement value are taken into account.

Relevant SDG	UNGC Principle	GRI standard	Page <sup>a</sup>	Omissions
<b>GRI 301: Materials 2016</b>				
<b>GRI 103: Management Approach 2016</b>				
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 34, 39, 80, 81
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 34, 39, 80, 81, 82
8, 12	7, 8	GRI 301-1	Reclaimed products and their packaging materials	40
		GRI 301-3	Reclaimed products and their packaging materials	40 We intend to provide quantitative data in the future.
<b>GRI 308: Supplier Environmental Assessment 2016</b>				
<b>GRI 103: Management Approach 2016</b>				
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 34, 35, 36, 80, 81
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 34, 35, 36, 80, 81, 82
	8	GRI 308-1	New suppliers that were screened using environmental criteria	35, 37 All new suppliers are screened.
		GRI 308-2	Negative environmental impacts in the supply chain and actions taken	36, 37
<b>GRI 414: Supplier Social Assessment 2016</b>				
<b>GRI 103: Management Approach 2016</b>				
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 26, 31, 34, 35, 36, 80, 81
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 34, 35, 36, 80, 81, 82
5, 8, 16		GRI 414-1	New suppliers that were screened using social criteria	35, 37 All new suppliers are screened.
5, 8, 16		GRI 414-2	Negative social impacts in the supply chain and actions taken	35, 37

<sup>a</sup> Page no. in sustainability report (page no. in financial report)/Further information.

Relevant SDG	UNGC Principle	GRI standard	Page <sup>a</sup>	Omissions
<b>GRI 416: Customer Health and Safety 2016</b>				
<b>GRI 103: Management Approach 2016</b>				
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 45, 80, 81
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 45, 80, 81, 82
		GRI 416-1	Assessment of the health and safety impacts of product and service categories	45 Our assessments focus on products, not services.
		GRI 416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	45, (53), (75) We do not report on the number of incidents of non-compliance with regulations and voluntary codes of conduct relating to the health and safety impact of products and services. Any incidents and legal proceedings are outlined in the financial report in the section on legal/compliance opportunities and risks.
<b>GRI 417: Marketing and Labeling 2016</b>				
<b>GRI 103: Management Approach 2016</b>				
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 45, 80, 81
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 45, 80, 81, 82
12		GRI 417-1	Requirements for product and service information and labeling	45 As a matter of principle, for all products we check compliance with laws and regulations.

Relevant SDG	UNGC Principle	GRI standard	Page <sup>a</sup>	Omissions
		GRI 417-2	45, (53), (75)	There were no violations of product labeling requirements in the reporting period.
<b>The environment</b>				
<b>GRI 302: Energy 2016</b>				
<b>GRI 103: Management Approach 2016</b>				
		GRI103-1	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	4, 11, 12, 15, 21, 23, 25, 31, 50, 52, 80, 81	
12, 13		GRI103-3	4, 18, 21, 29, 31, 50, 52, 80, 81, 82	
7, 8, 12, 13	7, 8	GRI 302-1	52, 82	We do not report separately on the consumption and sale of energy for heating and cooling. They are included in the reported data.
7, 8, 13	8, 9	GRI 302-4	52, 82	We constantly strive to make the provision of energy more efficient, and optimize the structure of our integrated energy and management systems. Nevertheless, our focus is on avoiding GHG emissions; this is underpinned by a target.
<b>GRI 303: Water and Effluents 2018</b>				
<b>GRI 103: Management Approach 2016</b>				
		GRI103-1	11, 13, 15, 18, 21, 23	
		GRI103-2	4, 11, 12, 15, 21, 23, 25, 31, 50, 52, 80, 81	
		GRI103-3	4, 18, 21, 29, 31, 50, 56, 80, 81, 82	

Relevant SDG	UNGC Principle	GRI standard	Page <sup>a</sup>	Omissions
6	7, 8	GRI 303-1	14, 15, 34, 50, 56, 59, 82	
6		GRI303-2	50, 56, 59, 82	
6, 8, 12	8	GRI 303-3	56, 57, 82	Data are not available for points b, c, and d. The aim of our water stress analysis is to develop site-specific action plans (including extended data availability) as part of our global water management in the future for sites with potential exposure to water stress.
6		GRI 303-4	56, 57, 82	Data are not available for points b, c, and e.  303-3
6		GRI 303-5	56, 57, 82	Data are not available for points b, c, and e.  303-3
<b>GRI 304: Biodiversity 2016</b>				
<b>GRI 103: Management Approach 2016</b>				
		GRI103-1	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	4, 11, 12, 15, 21, 23, 25, 31, 50, 59, 80, 81	
		GRI103-3	4, 18, 21, 29, 31, 50, 59, 80, 81, 82	
6, 14, 15		GRI 304-1	59	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas
<b>GRI 305: Emissions 2016</b>				
<b>GRI 103: Management Approach 2016</b>				
		GRI103-1	11, 13, 15, 18, 21, 23	

<sup>a</sup> Page no. in sustainability report (page no. in financial report)/Further information.

Relevant SDG	UNGC Principle	GRI standard		Page <sup>a</sup>	Omissions
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 18, 21, 29, 31, 50, 52, 80, 81, 82	
12, 13, 14, 15		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 50, 52, 80, 81, 82	
3, 12, 13, 14, 15	7, 8	GRI 305-1	Direct (Scope 1) GHG emissions	50, 52, 54, 82 We do not report biogenic CO <sub>2</sub> emissions separately in metric tons CO <sub>2</sub> equivalents.	
3, 12, 13, 14, 15		GRI 305-2	Energy indirect (Scope 2) GHG emissions	50, 52, 54, 82	
3, 12, 13, 14, 15		GRI 305-3	Other indirect (Scope 3) GHG emissions	50, 52, 54, 82 We do not report biogenic CO <sub>2</sub> emissions separately in metric tons CO <sub>2</sub> equivalents.	
13, 14, 15	8	GRI 305-4	GHG emissions intensity	50, 52, 54, 82	
13, 14, 15	8, 9	GRI 305-5	Reduction of GHG emissions	50, 52, 54, 55, 82 Further information on CO <sub>2</sub> avoidance can be found in the brochure Evonik Carbon Footprint 2018.	
3, 13	7, 8	GRI 305-6	Emissions of ozone-depleting substances (ODS)	50, 52, 56, 82	
3, 13, 14, 15		GRI 305-7	Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other significant air emissions	50, 52, 56, 82	
<b>GRI 306: Effluents and Waste 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 18, 21, 29, 31, 50, 58, 80, 81, 82, 97	
12, 13, 14, 15		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 50, 58, 80, 81, 82	
3, 6, 12		GRI 306-2	Waste by type and disposal method	58, 82	
3, 6, 12, 14, 15		GRI 306-3	Significant spills	74, 82	

<sup>a</sup> Page no. in sustainability report (page no. in financial report)/Further information.

Relevant SDG	UNGC Principle	GRI standard		Page <sup>a</sup>	Omissions
<b>GRI 307: Environmental Compliance 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 18, 21, 29, 31, 50, 80, 81, 82	
12, 13, 14, 15		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 50, 80, 81, 82	
	8	GRI 307-1	Non-compliance with environmental laws and regulations	31, (75) No significant fines exceeding €100,000, and no non-monetary penalties were imposed on Evonik in 2019 for failure to comply with laws or regulations.	
<b>Employees</b>					
<b>GRI 401: Employment 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 26, 31, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 62, 80, 81, 82	
	6	GRI 401-1	New employee hires and employee turnover	64, 67	
8		GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	64, 65, 69 As a rule, part-time employees also 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.	
5, 8		GRI 401-3	Parental leave	65	

Relevant SDG	UNGC Principle	GRI standard	Page <sup>a</sup>	Omissions
<b>GRI 402: Labor/Management Relations 2016</b>				
<b>GRI 103: Management Approach 2016</b>				
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 80, 81
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 62, 80, 81, 82
8	3	GRI 402-1	Minimum notice periods regarding operational changes	66
<b>GRI 403: Occupational Health and Safety 2018</b>				
<b>GRI 103: Management Approach 2016</b>				
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 80, 81
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 62, 80, 81, 82
8		GRI 403-1	Occupational health and safety management system	69, 73
3, 8		GRI 403-2	Hazard identification, risk assessment, and incident investigation	28, 29, 69, 70, 73
		GRI 403-3	Occupational health services	69
		GRI 403-4	Worker participation, consultation, and communication on occupational health and safety	69, 73
		GRI 403-5	Worker training on occupational health and safety	69, 70, 73
		GRI 403-6	Promotion of worker health	70

Relevant SDG	UNGC Principle	GRI standard	Page <sup>a</sup>	Omissions
		GRI 403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	
		GRI 403-8	Workers covered by an occupational health and safety management system	69, 73
		GRI 403-9	Work-related injuries	96 Presented in the chapter on safety
		GRI 403-10	Work-related ill health	69, 70, 73
<b>GRI 404: Training and Education 2016</b>				
<b>GRI 103: Management Approach 2016</b>				
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 80, 81
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 62, 80, 81, 82
4, 5, 8	6	GRI 404-1	Average hours of training per year per employee	69 Drawing a distinction by gender or employee category is not significant for us; employees have access to the global development portal (GDP) and LILY.

<sup>a</sup> Page no. in sustainability report (page no. in financial report)/Further information.



Relevant SDG	UNGC Principle	GRI standard		Page <sup>a</sup>	Omissions
8		GRI 404-2	Programs for upgrading employee skills and transition assistance programs	69	Our generation pact was extended to actively address the challenges of demographic change. Take-up was once again high. The GDP is available to all employees worldwide and should ensure full transparency about learning offerings, contacts, and costs.
5, 8		GRI 404-3	Percentage of employees receiving regular performance and career development reviews	64	
<b>GRI 405: Diversity and Equal Opportunity 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 27, 29, 31, 62, 66, 80, 81, 82	

Relevant SDG	UNGC Principle	GRI standard		Page <sup>a</sup>	Omissions
5, 8	6	GRI 405-1	Diversity of governance bodies and employees	27, 67	We do not provide a percentage breakdown of members of our governance bodies by age. The diversity concept and competency profile for the supervisory board and the executive board contain various criteria, including age. The age structure in the Evonik Group is not explicitly reported by employee category.
<b>Safety</b>					
<b>GRI 403<sup>b</sup>: Occupational Health 2018</b>					
<b>GRI 103: Management Approach 2016</b>					
		GRI103-1	Explanation of the material topic and its boundary	11, 13, 15, 18, 21, 23	
1, 5, 8, 16		GRI103-2	The management approach and its components	4, 11, 12, 15, 21, 23, 25, 31, 50, 73, 75, 80, 81	
		GRI103-3	Evaluation of the management approach	4, 18, 21, 29, 31, 69, 73, 74, 80, 81, 82	
		GRI 403-9	Work-related injuries		We only report accident frequency and, where applicable, the number of fatalities for employees and contractors' employees but not the types of injury.

<sup>a</sup> Page no. in sustainability report (page no. in financial report)/Further information.

<sup>b</sup> You can find further information on GRI 403 in the employees area of action, see [p. 95](#).

## Independent Practitioner's Limited Assurance Report

102-56

### Independent Practitioner's Report on a Limited Assurance Engagement on Sustainability Information<sup>1</sup>

#### To the Evonik Industries AG, Essen

We have performed a limited assurance engagement on the chapters denoted with ✓ with the exception of disclosures marked as "non-audited" in the sustainability report of Evonik Industries AG, Essen (hereinafter: "the Company"), for the period from 01 January 2019 to 31 December 2019 (hereinafter: "Report"). Our engagement in this context relates solely to the chapters and sections denoted with the symbol ✓ with the exception of disclosures marked as "non-audited".

#### Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the Report in accordance with the principles stated in the Sustainability Reporting Standards of the Global Reporting Initiative (hereinafter: "GRI-Criteria") and for the selection of the disclosures to be evaluated.

This responsibility of Company's executive directors includes the selection and application of appropriate methods of sustainability reporting as well as making assumptions and estimates related to individual sustainability disclosures, which are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal control as they have considered necessary to enable the preparation of a Report that is free from material misstatement whether due to fraud or error.

#### Independence and Quality Control of the Audit Firm

We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors ("Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer": "BS WP/vBP") as well as the Standard on Quality Control 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality control for audit firms (IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis - IDW QS 1) – and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

#### Practitioner's Responsibility

Our responsibility is to express a limited assurance conclusion on the chapters denoted with ✓ with the exception of disclosures marked as "non-audited" in the Report based on the assurance engagement we have performed.

Within the scope of our engagement we did not perform an audit on external sources of information or expert opinions, referred to in the Report.

We conducted our 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, issued by the IAASB. This Standard requires that we plan and perform the assurance engagement to allow us to conclude with limited assurance that

#### BASIS OF REPORTING

Independent Practitioner's  
Limited Assurance Report

nothing has come to our attention that causes us to believe that the chapters and sections denoted with ✓ with the exception of disclosures marked as "non-audited" in the Company's Report for the period from 01 January 2019 to 31 December 2019 has not been prepared, in all material aspects, in accordance with the relevant GRI-Criteria. This does not mean that a separate conclusion is expressed on each chapter so denoted.

In a limited assurance engagement the assurance procedures are less in extent than for a reasonable assurance engagement and therefore a substantially lower level of assurance is obtained. The assurance procedures selected depend on the practitioner's judgment.

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

- Obtaining an understanding of the structure of the sustainability organization and of the stakeholder engagement
- Inquiries of personnel involved in the preparation of the Report regarding the preparation process, the internal control system relating to this process and selected disclosures in the Report
- Identification of the likely risks of material misstatement of the Report under consideration of the GRI-Criteria
- Analytical evaluation of selected disclosures in the Report
- Performance of site visits or web conferences as part of the inspection of processes and guidelines for data collection at the following locations Marl (Germany), Rheinfelden (Germany), Antwerp (Belgium).
- Comparison of selected disclosures with corresponding data in the consolidated financial statements and in the group management report
- Evaluation of the presentation of the selected disclosures regarding sustainability performance

<sup>1</sup> PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the German version of the sustainability report and issued an independent assurance report in German, which is authoritative. The following text is a translation of the independent assurance report.

### Assurance Conclusion

Based on the assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the chapters and sections denoted with ✓ with the exception of disclosures marked as "non-audited" in the Company's Report for the period from 01 January 2019 to 31 December 2019 have not been prepared, in all material aspects, in accordance with the relevant GRI-Criteria.

### Intended Use of the Assurance Report

We issue this report on the basis of the engagement agreed with the Company. The assurance engagement has been performed for purposes of the Company and the report is solely intended to inform the Company as to the results of the assurance engagement. The report is not intended to provide third parties with support in making (financial) decisions. Our responsibility lies solely toward the Company. We do not assume any responsibility towards third parties.

Munich, February 20, 2020

### PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft

Hendrik Fink                      ppa. Pia Schnüch  
Wirtschaftsprüfer  
(German Public Auditor)

## Principal locations

### Principal locations<sup>a</sup>

No. of employees		2017	2018 <sup>b</sup>	2019 <sup>b</sup>
<b>Western Europe</b>				
Marl	Germany	7,018	7,033	7,111
Hanau	Germany	3,398	3,218	3,185
Essen	Germany	1,666	1,716	1,802
Darmstadt	Germany	1,728	1,311	1,312
Rheinfelden	Germany	1,174	1,153	1,157
<b>Eastern Europe</b>				
Slovenská L'upča	Slovakia	238	232	225
Arifiye	Turkey	0	0	109
Istanbul	Turkey	142	149	69
Moscow	Russian Federation	61	57	59
Warsaw	Poland	14	14	13
<b>Asia-Pacific North</b>				
Shanghai Xingzhuang	China	753	711	718
Shanghai MUSC	China	716	419	422
Nanping	China	373	364	342
Nanning	China	355	344	337
Taoyuan	Taiwan	161	167	163
<b>Asia-Pacific South</b>				
Singapore	Singapore	597	660	652
Dombivli	India	280	283	276
Selangor	Malaysia	107	153	183
Mumbai	India	146	140	146
Gajraula	India	101	100	101
<b>North America</b>				
Mobile	Alabama, USA	845	829	818
Lafayette	Indiana, USA	633	618	629
Parsippany	New Jersey, USA	429	308	302
Allentown	Pennsylvania, USA	211	231	235
Birmingham	Alabama, USA	153	160	166

T33

No. of employees		2017	2018 <sup>b</sup>	2019 <sup>b</sup>
<b>Central &amp; South America</b>				
São Paulo	Brazil	221	199	196
Americana	Brazil	111	125	119
Castro – Parana	Brazil	110	108	103
San José	Costa Rica	87	89	86
Barra do Riacho	Brazil	42	48	48
<b>Middle East &amp; Africa</b>				
Umbogintwini	South Africa	30	32	39
Midrand	South Africa	52	44	34
Dubai	United Arab Emirates	25	21	22
Teheran	Iran	27	24	21
Cairo	Egypt	15	17	18

As of December 31 of the respective year.

<sup>a</sup> The list covers around 65 percent of Evonik employees.

<sup>b</sup> Continuing operations only (excluding the methacrylates business).

## Ratings and indices 2019



MSCI once again included Evonik in its World ESG Leaders Index and the Socially Responsible Index Europe. MSCI is a US financial services company that mainly provides services for investment banking. In addition to international equity indices, its services include portfolio and risk analyses and research.



Evonik was included in the renowned Dow Jones Sustainability Index Europe for the third time in succession. The best 20 percent of the 600 largest European companies on the Dow Jones Global Index are selected for inclusion.



Evonik's sustainability performance again received a B- rating from ISS-oekom. The company therefore has Prime Status, the highest level awarded, ranking it among the top 10 percent of companies in the chemical sector.



Evonik received a grade of B from CDP for reporting relevant data on climate protection (CDP Climate Change). For its water reporting (CDP Water), it was also awarded a grade of B.



Evonik's sustainability performance was also analyzed by the Sustainalytics rating agency. Evonik is among the top 10 percent of the around 130 companies ranked in the chemical sector.



FTSE4Good

Evonik is a member of the FTSE4Good index. This index family of the London-based FTSE Group rates 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, which was launched by Deutsche Börse among others, 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, which evaluates corporate ESG performance, Evonik was once again included in the Europe 120 and Eurozone 120 indices. The evaluation is based on up to 330 indicators covering 38 sustainability criteria.



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. The EcoVadis rating agency, partner of TfS, awarded us a gold rating for our sustainability performance for the sixth time in succession.



Sustainability experts at Belgium-based non-profit organization Forum Ethibel found Evonik's commitment convincing, so the company was once again included in the Ethibel® Sustainability Index (ESI) Excellence Europe. This Europe-wide index contains 200 companies.

## FURTHER INFORMATION

Ratings and indices 2019 | Sustainability awards

## Sustainability awards



In the regional Responsible Care® competition in 2019, VCI Hessen, the Hesse section of the German chemical industry association, awarded Evonik second place for its innovative approach to the evaluation of geodata.



Evonik received the Sustainability Award 2019 for its continuous contribution to sustainability of the product and project pipeline at Henkel Adhesive Technologies.



The League of American Communications Professionals (LACP) honored Evonik with the Vision Award in gold for its sustainability report 2018. The jury awarded us 98 out of 100 points.



Our sustainability report 2018 received a bronze award at the ARC Awards in the category PDF Version of Annual Report: Sustainability Report: Americas & Europe.



Evonik's sustainability report 2018 won gold in the FOX Finance Awards and silver in the FOX Visuals Awards.

## List of tables and charts

Table	Page	Chart	Page
<b>T01</b> Breakdown of value added	8	<b>C01</b> Top 10 sustainability targets	3
<b>T02</b> Uniform global training concept	29	<b>C02</b> Shareholder structure	5
<b>T03</b> Compliance training and training rate	30	<b>C03</b> Responsibility—an integral part of our business for more than 140 years	6
<b>T04</b> Internal investigations in 2019	31	<b>C04</b> Corporate structure	7
<b>T05</b> Supplier validation, assessments, and audits, including corrective action	37	<b>C05</b> Sustainability governance structure at Evonik	12
<b>T06</b> Trend in greenhouse gas savings over the life cycle of applications of the Evonik products sold in the specified year	43	<b>C06</b> Resources and value contributed in 2019	13
<b>T07</b> Status of our environmental targets	51	<b>C07</b> Impact of Evonik's business activities	14
<b>T08</b> Environmental protection investment and operating costs	52	<b>C08</b> Monetary impact valuation of our business activities in 2018	15
<b>T09</b> Energy inputs	52	<b>C09</b> Sustainability analysis of our business	16
<b>T10</b> Greenhouse gas emissions	54	<b>C10</b> Stakeholder groups and their influence on Evonik	18
<b>T11</b> Change in greenhouse gas emissions along Evonik's value chain	55	<b>C11</b> Stakeholder engagement in 2019	20
<b>T12</b> Evonik Carbon Footprint	55	<b>C12</b> Materiality analysis 2019	21
<b>T13</b> Other emissions into the air	56	<b>C13</b> Areas of action and impact of Evonik's business along the value chain	23
<b>T14</b> Water intake by source	57	<b>C14</b> Voluntary commitments	25
<b>T15</b> Wastewater loads	58	<b>C15</b> House of Compliance	28
<b>T16</b> Waste	58	<b>C16</b> Compliance Management System (CMS)	29
<b>T17</b> Waste management	59	<b>C17</b> Evonik's procurement organization	34
<b>T18</b> Evonik production sites adjacent to conservation areas	59	<b>C18</b> Supplier validation and evaluation	35
<b>T19</b> Employees by contractual status and region	64	<b>C19</b> Audit escalation process	36
<b>T20</b> Length of service	64	<b>C20</b> Breakdown of R&D expenses	38
<b>T21</b> Employee turnover in 2019	64	<b>C21</b> Evonik's water data 2019	57
<b>T22</b> Personnel expense	65	<b>C22</b> Age structure in the Evonik Group	67
<b>T23</b> Ability to take extended periods of leave	66	<b>C23</b> External hires by age	67
<b>T24</b> Percentage of women in management	67	<b>C24</b> External hires by gender	67
<b>T25</b> Outgoing shipments of hazardous goods	75	<b>C25</b> External hires by region	68
<b>T26</b> Outgoing shipments of other goods	75	<b>C26</b> Employees by region	68
<b>T27</b> Sustainability indicators 2019	80	<b>C27</b> Occupational Health Performance Index	70
<b>T28</b> Sustainability targets 2019	81	<b>C28</b> Framework of the safety culture	73
<b>T29</b> Date on the methacrylates business in our report	83	<b>C29</b> Accident frequency indicator	74
<b>T30</b> TCFD index	85	<b>C30</b> Accident frequency indicator, contractors' employees	74
<b>T31</b> Targets for the SDGs of relevance for Evonik	86	<b>C31</b> Incident frequency indicator	75
<b>T32</b> GRI content index and UN Global Compact	87	<b>C32</b> Donations and sponsorship	78
<b>T33</b> Principal locations	99		



## Credits

 102-56

### Publisher

Evonik Industries AG  
Rellinghauser Strasse 1–11  
45128 Essen  
Germany  
www.evonik.com

### Contact

#### Corporate Responsibility

Head of Corporate Responsibility: Stefan Haver  
stefan.haver@evonik.com

#### Corporate Responsibility Relations

Hannelore Gantzer  
hannelore.gantzer@evonik.com  
Kathrin-Maria Beermann  
kathrin-maria.beermann@evonik.com  
Michaela Hauberg  
michaela.hauberg@evonik.com

### Consultant

PB Consulting GmbH

### Concept, design, and realization

HGB Hamburger Geschäftsberichte GmbH & Co. KG

### Picture credits

Page 4	Bernd Brundert/Evonik
Page 5	iStock Signature/mariusFM77
Page 5, 44	fotolia/Evonik
Page 5, 42	Dirk Bannert/Evonik
Page 5	CLOUD No. 7 GmbH
	Adobe Stock/Alexander Rath
	Adobe Stock/Angelov
	shutterstock/JIANG HONGYAN
	Adobe Stock/akr11_f
	Adobe Stock/TobiasW
Page 6	Mark Ansorg/Evonik
Page 10	Harald Reusmann/Evonik
Page 19, 26	Anna-Lina Nickelowski/Evonik
Page 24	iStock Signature/courtneyk
Page 33	Karsten Bootmann/Evonik
Page 41	Adobe Stock/akademie
Page 47	shutterstock/Arildina/Evonik
Page 49	iStock Signature/oversnap
Page 53	Bernd Thissen/Evonik
Page 61	fotolia/Robert Kneschke
Page 72	iStock Signature/Charlie Chesvick
Page 78	Reagen Manalese/Evonik
Page 79	Kerstin Neumann/Evonik
Page 5, 6, 9, 41, 44, 53, 62, 77	Evonik

This report contains forward-looking statements based on the present expectations, assumptions, and forecasts made by the executive board and the information available to it. These forward-looking statements do not constitute a guarantee of future developments and earnings expectations. Future performance and developments depend on a wide variety of factors which contain a number of risks and unforeseeable factors and are based on assumptions that may prove incorrect.

EVONIK INDUSTRIES AG  
Rellinghauser Strasse 1–11  
45128 Essen, Germany  
[www.evonik.com](http://www.evonik.com)

