FINANCIAL REPORT 2019

EVONIK
Leading Beyond Chemistry

Key figures for the Evonik Group

T01

in € million	2015	2016	2017	2018	2019
Sales	13,507	12,732	14,383	13,267	13,108
Research and development expenses	434	438	476	437	428
Adjusted EBITDA [a]	2,465	2,165	2,357	2,150	2,153
Adjusted EBITDA margin in %	18.2	17.0	16.4	16.2	16.4
Adjusted EBIT [b]	1,752	1,448	1,486	1,361	1,201
Income before financial result and income taxes, continuing operations (EBIT)	1,664	1,298	1,225	1,049	1,086
ROCE [c] in %	16.6	14.0	11.2	10.2	8.6
Net income	991	844	713	932	2,106
Adjusted net income	1,128	930	1,007	1,014	902
Earnings per share in €	2.13	1.81	1.53	2.00	4.52
Adjusted earnings per share in €	2.42	1.99	2.16	2.18	1.94
Total assets as of December 31	17,005	19,645	19,940	20,282	22,023
Equity ratio as of December 31 in %	44.6	39.5	37.7	38.6	41.1
Cash flow from operating activities	1,971	1,769	1,551	1,760	1,321
Cash flow from operating activities, continuing operations	1,968	1,769	1,551	1,474	1,352
Cash outflows for capital expenditures [d]	916	948	1,040	948	880
Free cash flow [e] (after tax payments relating to the carve-out of the methacrylates business)	1,052	821	511	526	472
Free cash flow before tax payments relating to the carve-out of the methacrylates business	1,052	821	511	526	717
Net financial assets/debt as of December 31	1,098	1,111	−3,023	−2,907	−2,141
Accident frequency [f]	0.97	1.24	1.16	0.87	1.18
Incident frequency [g]	1.29	0.95	1.11	1.08	1.10
No. of employees as of December 31	33,576	34,351	36,523	32,623	32,423

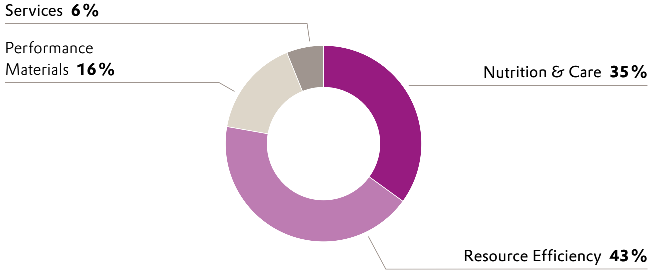
Prior-year figures restated. The figures for 2018 and 2019 contain the methacrylates business as a discontinued operation.

[a] Earnings before financial result, income taxes, depreciation, amortization, after adjustments, continuing operations.
[b] Earnings before financial result, income taxes, after adjustments, continuing operations.
[c] Return on capital employed.
[d] Capital expenditures for intangible assets, property, plant and equipment, continuing operations.
[e] Cash flow from operating activities, continuing operations, less cash outflows for capital expenditures on intangible assets, property, plant and equipment.
[f] Number of work-related accidents involving Evonik employees and contractors under Evonik's direct supervision, per 1 million working hours.
[g] Number of incidents involving the release of substances or energy, fire or explosion per 1 million working hours.

Due to rounding, some figures in this report may not add up exactly to the totals stated.

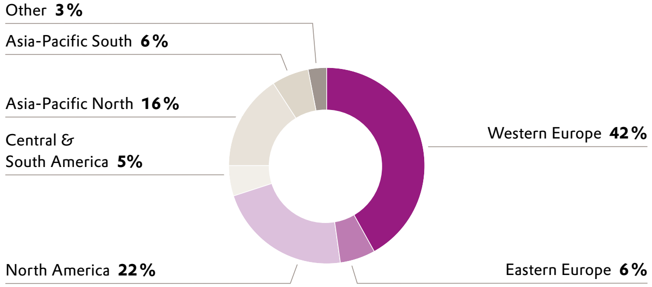
Sales by segment

C01



Sales by region [a]

C02



[a] By location of customer.

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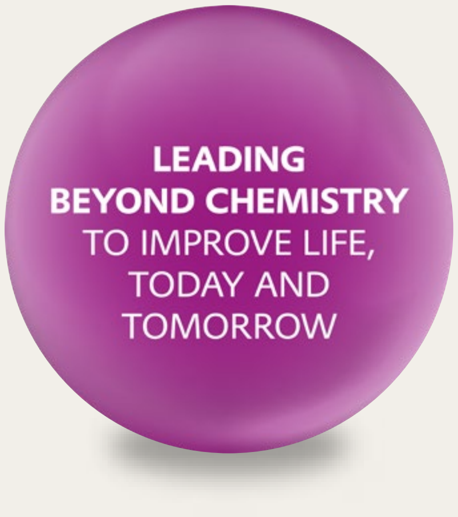
Building a best-in-class specialty chemicals company

Our purpose highlights our strengths



As we strive to become the best specialty chemicals company in the world, we are moving beyond chemistry.

We are interlinking disciplines, skills, and perspectives with one another so that as a partner of our customers we can create value-generating and sustainable solutions.

As a result, we play a leading role in our markets and in the development of our industry.

The answer to the question of why we exist lies in the passion with which we provide our customers' products with special characteristics:

in order to make people's lives better, day after day.

Living better with Evonik

CAR TIRES
more fuel efficient

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

We make …

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

The creative power of specialty chemicals

Evonik stands for appealing businesses and innovative strength. We work in a results-focused corporate culture that is geared to profitable growth and increasing the value of the company. In more than 100 countries, we benefit from our proximity to customers and our leading market positions. More than 32,000 employees are bound by a claim:

No product is so perfect that it couldn't be improved.

If you'd like to know what else gets better with Evonik specialty chemicals:
www.better-with-evonik.com

Evonik held up well in a challenging environment

- Considerable progress in **strategic** development
- **Forecast** for adjusted EBTIDA and free cash flow achieved in 2019
- **Sales slipped** 1 percent to €13.1 billion with slightly lower volumes and prices
- **Adjusted EBITDA** around prior-year level at €2,153 million
- **Free cash flow** improved to €717 million before tax payments relating to the carve-out of the methacrylates business
- High **net income** of €2.1 billion due to proceeds from divestment of the methacrylates business
- **Outlook for 2020:** adjusted EBITDA between €2.0 billion and €2.3 billion; free cash flow expected to be slightly higher

GROWTH

Nutrition & Care

€ 4,582 million sales

€ 728 million adjusted EBITDA

Resource Efficiency

€ 5,685 million sales

€ 1,290 million adjusted EBITDA

EFFICIENCY

Performance Materials

€ 2,043 million sales

€ 224 million adjusted EBITDA

Letter from the chairman of the executive board

Ladies and Gentlemen,

2019 was a challenging year for us. A global specialty chemicals company is not immune to the effects of trade disputes and political conflicts. Nor can it escape the effects of fundamental transformations like those in the energy and automotive sectors. Against this international economic background, Evonik was called on to make quite clear what it is that we stand for: reliability and stability.

Today I can say, we have kept our word; we have delivered. We held earnings steady, even though market conditions were far tougher than in the previous year. And we demonstrated that we stick consistently to our course, even when the going gets rough.

The key factors to accomplishing this were the refocusing of our portfolio, which we initiated in the previous year, our cultural change, and strict cost discipline. We would especially like to thank our workforce of more than 32,000 people for their contribution. Sales slipped 1 percent to €13.1 billion in 2019, against a backdrop of slightly lower volumes and selling prices. Adjusted earnings before taxes, financial result, depreciation, and amortization were around the previous year's level at €2.15 billion. Our free cash flow increased substantially from €526 million to over €700 million. At the annual shareholders' meeting, the executive board and supervisory board will be proposing another attractive dividend of €1.15 per share for 2019.

Although we made good progress with the transformation of our company, we have not yet reached our goal. Since the global economic situation is still challenging, we will be continuing our efforts to make Evonik leaner and more efficient, so we can achieve our mid-term target of an adjusted EBITDA margin of between 18 percent and 20 percent and deliver an appropriate return on capital employed (ROCE) that is above the cost of capital.

The divestment of the methacrylates business in 2019 was an important initial step in the strategic realignment of Evonik and the restructuring of our portfolio. We decided to sell this business to sharpen our focus on less cyclical specialty chemicals. In our view, the purchaser, Advent International, is an optimum owner, both for the roughly 3,500 employees and for the continued development of the business.

We are using the proceeds of this divestment to strengthen our balance sheet and, above all, to finance selected growth projects. Examples are the acquisition of the US company PeroxyChem and our biggest investment in Germany, a new production facility for the high-performance polymer polyamide 12 (PA 12), costing around €400 million. The groundbreaking ceremony was held in summer 2019 and start-up is planned for 2021. In this way, Evonik is strengthening its position as the market leader in PA 12 and reinforcing an attractive business in Smart Materials, which is one of our four strategic growth engines.

We will be driving forward our corporate restructuring in 2020 by aligning our structure to these growth engines. On July 1, our present operating segments will become four divisions. The size and profitability of their businesses will be more balanced, and they will be easier to manage thanks to a clearer alignment to technology platforms. The four new divisions will be: Specialty Additives, Nutrition & Care, Smart Materials, and Performance Materials.

In keeping with Evonik's systematic focus on growth markets and high-margin businesses, in summer 2019 we officially started up a second production complex for MetAMINO® (DL-methionine) and key strategic precursors in Singapore. The new facility mainly serves the growing Asian market.

At almost the same time, a unique production plant came on stream in Blair (Nebraska, USA). Here, Veramaris—a 50:50 joint venture of Evonik and DSM—produces omega-3 fatty acids for sustainable salmon farming. Produced by fermentation of natural algae, they make a contribution to sustainable animal nutrition and maintaining the biodiversity of the oceans.

Another element geared to securing our future and, at the same time, implementing our Climate and Sustainability Strategy 2020+ is exiting coal-fired generation of electricity and steam. Evonik is replacing the last coal-fired power plant at its site in Marl (Germany) by a flexible modern gas and steam turbine plant. This will reduce carbon emissions by up to 1 million metric tons a year.

Evonik's aim is to halve absolute greenhouse gas emissions by 2025, compared with 2008. Our Sustainability Strategy 2020+ also introduced carbon pricing for key investments. In addition, we will go on working to improve our processes and technologies and continuously optimize our energy supply, integrated production structures, and management systems.

Innovations are a cornerstone of our corporate strategy. Therefore, we have defined six growth fields where we see particularly good scope for successful innovations. In this way, we aim to generate additional sales of €1 billion by 2025.

We regard digitalization as both an opportunity and a structural task. For instance, we are working on various e-commerce solutions so we can offer a digital customer experience. These include platform-based business models as an efficient way to enable chemical transactions and offer customer solutions. We increasingly use the opportunities of digitalization in production and technology, from the planning and operation of facilities to maintenance and decommissioning. Our understanding is that people are always at the heart of digitalization activities.

During the past year, we examined a fundamental issue: Why is it good that Evonik exists? How do we see our role as a company? On the basis of our considerations, we developed a corporate purpose. This does not retell the Evonik story, it simply tells it better. Our purpose is our compass. Because understanding what we are means we know what drives us forward: "Leading beyond chemistry to improve life, today and tomorrow."

CHRISTIAN KULLMANN
Chairman of the Executive Board

The executive board

CHRISTIAN KULLMANN
Chairman of the Executive Board

"We are systematically focusing our portfolio on growth markets and high-margin businesses."

DR. HARALD SCHWAGER
Deputy Chairman of the Executive Board

"The combination of innovative strength and proximity to customers is a key success factor for Evonik and drives profitable growth."

UTE WOLF
Chief Financial Officer

"To achieve our goal of profitable growth, we work consistently to achieve our six ambitious financial targets."

THOMAS WESSEL
Chief Human Resources Officer

"Performance, trust, openness, and speed: Evonik's values are the bedrock of our open and performance-oriented corporate culture."

Evonik on the capital markets

Performance of Evonik shares

Overall, 2019 was a year of considerable volatility for both Evonik shares and the stock market as a whole. Evonik shares started 2019 at around €22. In the first quarter, both the share price and the overall market picked up. Sentiment initially remained optimistic after the first quarter, and shares in Evonik outperformed the market. Positive factors were the announcement that the company was divesting its methacrylates business and the solid Q1 results. In the following months, both Evonik shares and the overall market were dominated by price fluctuations. The main reasons for this were the uncertainty caused by the trade dispute between the USA and China, decisions taken by the European Central Bank on interest rate policy, and initial profit warnings from the chemicals sector.

As a result, the share price dropped to a low of €21.23 on August 15. It subsequently rebounded, especially following confirmation of the outlook when the Q3 results were published in early November, which resulted in a sustained uptrend. Thereafter, the share price moved in tandem with the slightly more optimistic market trend, rising to a high for the year of €27.36 on December 23. Evonik shares ended 2019 at €27.21, a gain of around 25 percent over the year. The STOXX® Europe 600 Chemicals rose by just under 29 percent in the same period, while the more broadly based MDAX index gained just over 28 percent.

Price performance of Evonik shares January 1 – December 31, 2019 C03

Dividend payment

Evonik has a long-term dividend policy aligned to continuity and reliability. At the annual shareholders' meeting on May 27, 2020, the executive board and supervisory board will propose payment of another attractive dividend of €1.15 per share for 2019. The total dividend payment would be €536 million, giving a payout ratio of 59 percent based on adjusted net income and a dividend yield of around 4.2 percent, positioning it among the leaders in the chemical industry.

Key data T02

	Jan. 1– Dec. 31, 2019
Highest share price[a] in €	27.36
Lowest share price[a] in €	21.23
Closing price[a] on December 30, 2019 in €	27.21
Market capitalization[a] on December 30, 2019 in € billion	12.68

[a] Xetra trading.

Higher free float

The shareholder structure did not change significantly in in 2019. In mid-January 2020, Evonik's majority shareholder, RAG-Stiftung, sold around 5 percent of its shares in Evonik. This contributed to further diversification of the shareholder structure. RAG-Stiftung remains Evonik's largest shareholder with a stake of nearly 59 percent of the capital stock. As of mid-January 2020, the free float is around 41 percent

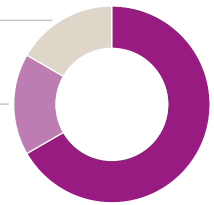
Dialogue with the capital markets

Evonik continued its intensive capital markets communication in 2019. The company gave its shareholders and potential investors opportunities to gain impressions and engage in personal discussions at conferences and roadshows around the world, as well as at several private investor events and field trips. Evonik's future strategic development was a focus of the company's capital markets communication.

Analysts' valuations of Evonik shares

At the end of 2019, Evonik was covered by 24 analysts. Sixteen of them rated the share as a buy, four as a sell, and four issued "neutral" recommendations. A broad majority of analysts forecast an above-average performance by Evonik shares. The price targets ranged from €21 to €40, giving a median of €29.

Analysts' ratings C04



Solid investment grade rating confirmed

Both Moody's and Standard & Poor's (S&P) confirmed their credit ratings for Evonik Industries AG in 2019. The Moody's and S&P ratings are unchanged at Baa1 and BBB+, respectively, with a stable outlook in both cases. Therefore, our solid investment-grade rating has not altered.

Basic data on Evonik stock T03

WKN	EVNK01
ISIN	DE000EVNK013
Ticker symbol	EVK
Reuters (Xetra trading)	EVKn.DE
Bloomberg (Xetra trading)	EVK GY
Trading segments	Regulated market (Prime Standard), Frankfurt am Main
Indices	MDAX, MSCI World, STOXX® Europe 600 Chemicals, Dow Jones Sustainability Index Europe, FTSE4Good, STOXX® Global ESG Leaders, Euronext Vigeo Eiris Indices Europe 120 and Eurozone 120

Inclusion in important sustainability indices

Evonik has established itself among the leaders in the chemicals sector in renowned sustainability ratings and indices such as the Dow Jones Sustainability Index Europe, ISS-oekom, Sustainalytics, and the MSCI. It is also represented in a range of SRI funds and sustainability-oriented index families. This good positioning shows that the capital markets reward Evonik's commitment to sustainability.

INVESTOR RELATIONS

For further information on our investor relations activities, visit our website at www.evonik.com/investor-relations. The financial calendar on our website provides a convenient overview of important dates. The website also contains key facts and figures, especially financial and segment data, and details of the company's structure and organization. This is supplemented by information on Evonik shares, the terms of bond issues, and an overview of our credit ratings. Current presentations, analysts' estimates, and reports on our business performance are also available.

Contact: Phone +49 201 177-3146
investor-relations@evonik.com

COMBINED MANAGEMENT REPORT

Parts of the combined management report included in the corporate governance chapter:

Combined management report for 2019

This management report is a combined management report for the Evonik Group and Evonik Industries AG.

Given the influence of the segments, statements relating to the development of the segments in the Evonik Group also apply for Evonik Industries AG. The consolidated financial statements for the Evonik Group have been prepared in accordance with the International Financial Reporting Standards (IFRS) and the financial statements of Evonik Industries AG have been prepared in accordance with the provisions of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG).

The remuneration report and the takeover-relevant information are printed in the corporate governance chapter **p. 66 ff.** and form part of the audited combined management report. The declaration on corporate governance is also included in the corporate governance chapter and is available on our website at **www.evonik.com/declaration-on-corporate-governance**. It is an unaudited component of the combined management report. The separate combined non-financial report can be found in the financial report in the supplementary information section **p. 181** and is also available on our website at **www.evonik.com/nonfinancial-report.** It is a non-audited component of the combined management report.

1. Basic information on the Evonik Group

A specialty chemicals company focused on strong market positions, a clear innovation structure, and sustainable business activities

Six financial targets support our corporate goal of profitable growth

- Volume growth > GDP
- Adjusted EBITDA margin between 18 percent and 20 percent
- Free cash flow significantly above the dividend
- ROCE above the cost of capital
- Solid investment grade rating
- Attractive and reliable dividend

"We produce specialty chemicals. That means, our expertise in products and solutions makes an indispensable contribution to our customers."

Thomas Hermann
Head of Corporate Strategy

None of our end-markets accounts for more than

20%

of sales

More than **80%** of sales come from leading market positions

1.1 Business model

Evonik is one of the world's leading specialty chemicals companies. Our strengths include the balanced spectrum of our business activities, end-markets, and regions. Around 80 percent of sales come from **market-leading positions**[1], 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 and extensive technical service. 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. Good ideas are rapidly recognized, driven forward, and implemented with our customers.

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.

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. Sustainability has long been a growth driver in many of our businesses.

In the light of this, we adopted 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_2 emissions and the introduction of global water management.

Corporate structure 2019 C05

Evonik				
Segments	**Nutrition & Care**	**Resource Efficiency**	**Performance Materials**	**Services**
	Specialty chemicals for consumer goods for daily needs, animal nutrition, and healthcare products.	High-performance materials and specialty additives for environment-friendly and energy-efficient system solutions for the automotive, paints, coatings, adhesives, and construction industries, and many other sectors.	Production of precursors for polymer materials and intermediates, mainly for the rubber, plastics, and agriculture industries.	Site services and group-wide administrative, operational, and technical services.

New corporate structure

In the reporting period, our specialty chemicals operations were divided into three chemical manufacturing segments. These operate close to their markets, and customers and have a high degree of entrepreneurial independence. They are supported by a Services segment.

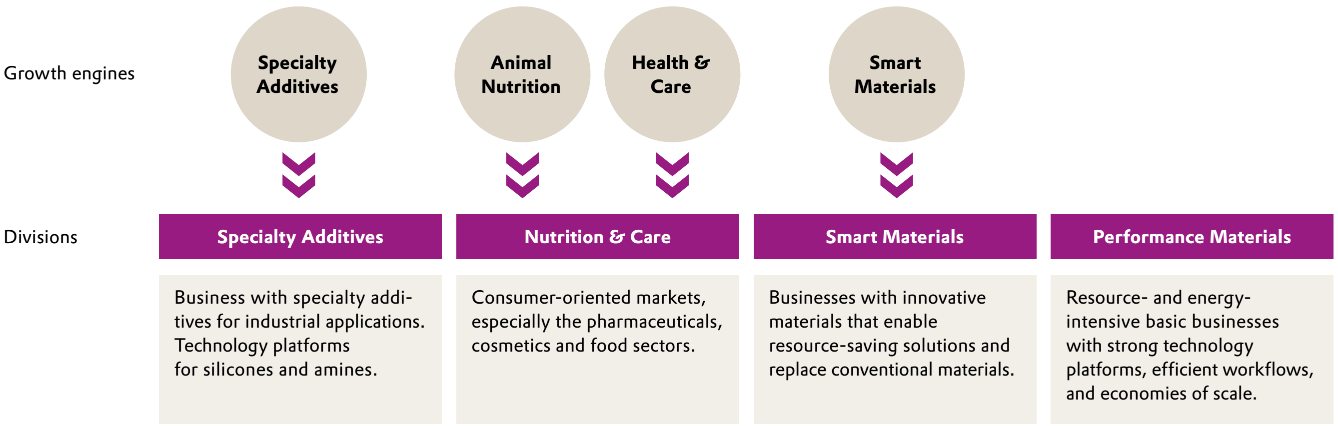
The Nutrition & Care and Resource Efficiency segments operate principally in attractive markets with above-average growth rates. Both segments offer customers customized, innovation-driven solutions and the aim is for them to achieve above-average, profitable growth through innovations, investments, 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.

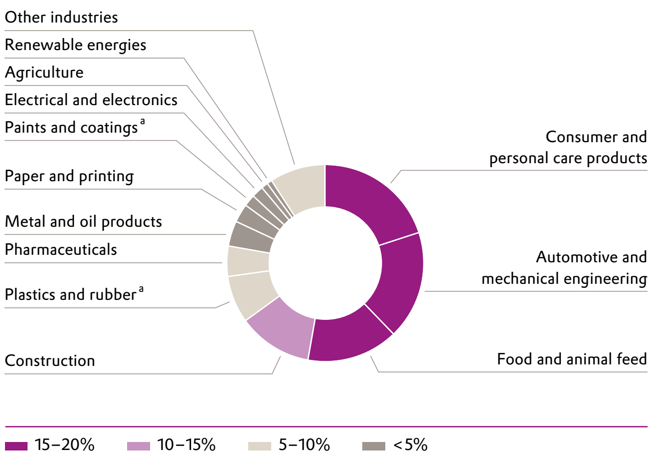
As of July 1, 2020, our corporate structure will be reorganized and aligned to our four growth engines. The size and profitability of the new chemical divisions will be more balanced and they will be easier to manage thanks to a clearer alignment to technology platforms.

[1] We define these as ranking 1st, 2nd, or 3rd in the relevant markets. Source: internal analyses based on 2018.

New chemical divisions from July 1, 2020 C06



Evonik's end-markets C07



[a] Where not directly assigned to other end-customer industries.

Broadly diversified end-markets

Most of our customers are industrial companies that use our products for further processing. The range of markets in which they operate is diverse and balanced. None of these end-markets accounts for more than 20 percent of our sales.

Global production

Evonik has a presence in more than 100 countries, and 83 percent of sales are generated outside Germany. We have production facilities in 26 countries on six continents and are therefore close to our markets and our customers. Our largest production sites, for example, Marl, Wesseling, and Rheinfelden (Germany), Antwerp (Belgium), Mobile (Alabama, USA), Shanghai (China), and Singapore, have integrated technology platforms used by various units.

Integrated technology platforms are a competitive advantage

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

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, marketing and sales, and research and development. The use of artificial intelligence, for instance, in the planning and optimization of production facilities, offers potential for an enormous improvement in efficiency and effectiveness.

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.

1.2 Principles and objectives

Building a best-in-class specialty chemicals company

We want to make Evonik a best-in-class specialty chemicals company. This global aspiration is closely linked to our goal of profitable growth. To increase the value of our company, our strategy has the following three focal areas:

- A more balanced and more specialty portfolio
- Leading in innovation
- An open and performance-oriented culture

Our goal is to step up our focus on businesses with clear specialty chemicals with clear specialty chemicals' characteristics. To ensure an even better balance within our **portfolio** and to grow in areas where Evonik is already strong but where the prospects are still especially promising, our strategy concentrates on four growth engines: Specialty Additives, Animal Nutrition, Health & Care, and Smart Materials. We will be aligning our corporate structure to them from July 1, 2020.

Capital allocation for new developments and enhancements, investments, and acquisitions will be concentrated principally on these growth engines. Each of the four growth engines focuses on different markets, but they have one thing in common: They are aligned consistently to delivering innovative solutions for issues and developments of relevance to industry and end-customers in the coming decades.

Growth engines

Specialty Additives: Specialty additives improve the properties of countless everyday products. Small quantities of these additives are used in production processes to achieve a variety of different effects, for example, to regulate the hardness of cushioning or the viscosity of lubricants.

Animal Nutrition: Sustainable food production is one of the big challenges of our time. Globally, meat production is increasing as a result of rising living standards in emerging markets. Consequently, more land is being required for farming, and methane gas emissions from cattle are increasing. Evonik already offers many solutions to address this development. Markets are also influenced by the desire for safer and better-quality food, and criticism of the use of antibiotics in animal nutrition.

Health & Care: This growth engine comprises products and services for pharmaceuticals, medical technology, cosmetics, and nutritional supplements. Examples are pharmaceutical polymers, which release the active ingredients in medicines in the body exactly when and where they are needed.

Smart Materials: Smart materials have specially tailored functionalities that help to optimize products and product properties. Examples are silica and polyamide 12.

Innovation is an important driver of profitable growth as it leverages the development of new products and applications. Our focus here is on working intensively with customers and partners along the supply chain. Within the four growth engines, Evonik has defined six innovation growth fields[1] that target highly attractive new markets where we can effectively deploy our core competencies.

The third element is a performance-oriented **culture** based on our new corporate values: performance, trust, openness, and speed. We initiate change, keep our promises, reward performance and readiness to take risks, foster thinking outside the box, and are open to new ideas. We are agile, decisive, and quick to react. We regard ourselves as an international company and see diversity as an opportunity.

Ambitious targets

To support our goal of profitable growth, we have set six ambitious **financial targets:**

Financial targets for the Evonik Group T04

Volume growth	> GDP
Adjusted EBITDA margin	Between 18% and 20%
Free cash flow	Significantly about the dividend
ROCE	Above the cost of capital
Rating	A solid investment grade rating
Dividend	Attractive and reliable

[1] See section 4. Research and development p. 39 ff.

As a responsible specialty chemicals company, we are also continuing to pursue our ambitious **non-financial targets**[1]. Since we achieved our target for the reduction in specific greenhouse gas emissions[2] ahead of schedule, we have adopted a new environmental target. Our target is a 50 percent reduction in absolute scope 1 and 2[3] 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.

Non-financial targets for the Evonik Group T05

Accident frequency[a] in 2020	Maximum 1.30
Incident frequency[b] in 2020	Maximum 1.10
Specific greenhouse gas emissions in 2020	Reduction of 12%[c]
Specific water intake in 2020	Reduction of 10%[c]
Absolute scope 1 and 2 CO_2 emissions in 2025	Reduction of 50%[d]

[a] Number of work-related accidents (excluding traffic accidents) resulting in absences of at least one full shift per 1 million working hours.
[b] Number of incidents per 1 million working hours.
[c] Reference base 2012.
[d] Reference base 2008.

1.3 Business management systems

Most important financial key performance indicators

Financial management of Evonik is based on a consistent system of value-oriented indicators. These are used to assess the business performance of the operational units and the Evonik Group. Through systematic alignment to these indicators, Evonik endeavors to create value by raising profitability and ensuring profitable growth.

We use **adjusted EBITDA** (i.e., EBITDA after factoring out special items) as a financial performance indicator. Adjusted EBITDA and the corresponding relative indicator, the adjusted EBITDA margin, show operating performance irrespective of the structure of the assets and the investment profile. We use this, in particular, for internal and external comparisons of the cost structure and profitability of our businesses.

The return on capital employed **(ROCE)** is used as a further indicator of value-driven management of the company. It is calculated from adjusted EBIT in relation to average capital employed. Comparison with the cost of capital, which shows the risk-adjusted return expectations of our investors, indicates relative value creation. This is calculated using a weighted average cost of capital, which reflects the return expectations of both shareholders, derived from the capital asset pricing model, and providers of debt capital.

The special items that are factored out when calculating adjusted EBITDA and adjusted EBIT include restructuring, impairment losses/reversals of impairment losses, income and expenses in connection with the purchase/disposal of investments in companies, and other income and expense items that, due to their nature or amount, do not reflect the typical operating business. We consider that the adjusted earnings figures are more suitable than unadjusted data for comparing the performance of operating units over several periods.

We also use **free cash flow** as an operational performance indicator. This is calculated from the cash flow from operating activities, continuing operations, less outflows for capital expenditures on intangible assets, property, plant and equipment. The free cash flow shows the remaining scope for financing. It therefore shows the company's internal financing capacity.

Most important non-financial key performance indicators

Evonik also uses a wide variety of non-financial performance indicators. Traditionally, we accord special significance to safety, which is regarded as a holistic management task that has to be lived at all management levels. Our guiding principles for safety are binding for staff at all levels. In accordance with corporate policy, all organizational units at Evonik have an occupational safety target. In addition, all production units have a plant safety target. The relevant indicators are **accident frequency** and **incident frequency.**[4]

[1] See sections 5.2 Safety p. 47 f. and 5.3 The environment p. 48 ff.
[2] Greenhouse gas emissions relative to production volume.
[3] Scope 1 comprises direct energy and process emissions, and scope 2 comprises emissions from purchased electricity and heat. Scope 3 contains indirect emissions such as emissions from the production of purchased raw materials.
[4] See section 5.2 Safety p. 47 f.

2. Business review

Evonik held up well in a challenging economic environment

Strategic focus

- Successful divestment of the methacrylates business
- Focus on growth engines
- Investments to strengthen our market positions
- Efficiency enhancement program
- Establishment of a new corporate culture

Corporate objective: profitable growth

Operational focus

- Adjusted EBITDA in line with previous year as expected
- Free cash flow target achieved
- High net income thanks to divestment of the methacrylates business
- Very good financial profile
- Adjusted EBITDA margin and ROCE still below target

"All employees can play a part in delivering our financial targets—including placing a stronger focus on the free cash flow."

Simone Hildmann
Member of the Board of Management
Evonik Resource Efficiency GmbH

€ **2,153** million
adjusted EBITDA

16.4 %
adjusted EBITDA margin

2.1 Overall assessment of the economic situation

Strategically, we made considerable progress in the ongoing development of Evonik in 2019. We sharpened our focus on specialty chemicals at the end of July by divesting 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. Our strategy is focused on our four growth engines—Specialty Additives, Animal Nutrition, Health & Care, and Smart Materials—where we are concentrating our investments. With effect from July 1, 2020, we will be aligning our corporate structure to the growth engines.

Major **capital expenditures** capital expenditures such as those for the construction of construction of the methionine complex in Singapore and the AEROSIL® facility in Antwerp (Belgium) have been completed. In 2019, we embarked on significant new projects. These include construction of a production complex for polyamide 12 specialty polymers in Marl (Germany)—the biggest investment in Germany in Evonik's history—and the construction of a modern gas and steam turbine power plant, also in Marl. In addition, we strengthened our hydrogen peroxide activities by acquiring the US company PeroxyChem at the start of 2020.

Since global economic conditions remain challenging, we are working consistently to make our structures leaner and to enhance efficiency. We have made good headway with the **SG&A 2020** program[1] introduced at the end of 2017 with the aim of global optimization of processes and a lasting reduction in selling and administrative expenses. The **Oleo2020** program and other activities to enhance efficiency are also making good progress. We expect further impetus to come from the cultural change towards a more open, performance-oriented **corporate culture.**

Operationally, 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[2]. However, earnings were held back by price erosion in the Nutrition & Care and Performance Materials segments.

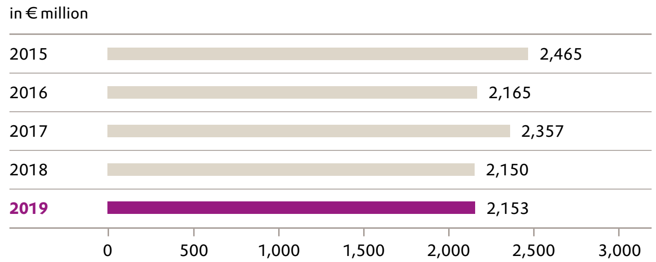
The **adjusted EBITDA margin** improved to 16.4 percent (2018: 16.2 percent) but was nevertheless below the target mid-term range of 18 percent to 20 percent. ROCE declined, principally as a consequence of lower adjusted EBIT, accompanied by an increase in capital employed to 8.6 percent, and ROCE was below the cost of capital.

Net income improved by 126 percent to €2,106 million thanks to the income from the divestment of the methacrylates business. Adjusted net income, continuing operations, was 11 percent lower at €902 million. At the annual shareholders' meeting, the executive board and supervisory board will again propose a dividend of €1.15 per share.

We generated a **free cash flow** of €717 million before one-off tax payments relating to the carve-out of the methacrylates business. The year-on-year improvement of €191 million was due in part to initial application of IFRS 16. The free cash flow before these tax payments exceeded the dividend payout of €536 million for 2018.

Our **financial profile** is still very good: Evonik has a solid investment grade rating. Net financial debt was reduced significantly thanks to the receipt of the proceeds of the divestment of the methacrylates business.

Development of adjusted EBITDA in the Evonik Group C08



Prior-year figures restated. The figures for 2015–2017 contain the methacrylates business, which was divested in July 2019.

[1] See section 2.4 Business conditions and performance p. 20 ff.
[2] See notes 3.4 p. 104 f. and 9.2 p. 145 f.

2.2 Economic background

Considerably lower global economic momentum

The development of **global economic conditions** was poorer than we had anticipated at the start of the year. We estimate that the global economy as a whole grew by around 2.6 percent in 2019. At the start of the year, we had forecast growth of 2.9 percent. In 2019, the economy therefore grew considerably more slowly than in the previous year, when growth was still 3.2 percent.

Trade conflicts, stagnating global trade, and the uncertainty arising from Brexit, which had been postponed several times, led to a drop in investment and industrial output, especially in the industrialized countries. However, first signs of economic stabilization towards year-end led to a slight improvement in sentiment. This was driven by an initial rapprochement in the trade dispute between the USA and China and the continued expansionary central bank policy.

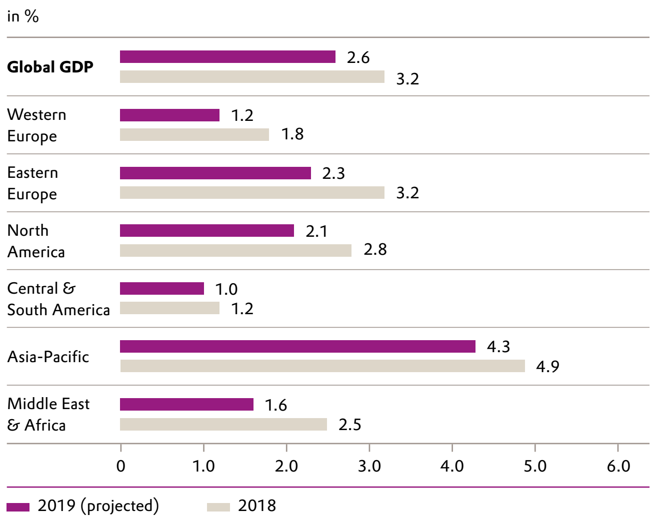
In Western Europe, economic momentum slowed further, and industrial output declined significantly. This was attributable to the dependence on exports and global trade flows, especially in Germany. The European Central Bank continued its expansionary policy, including a decision to resume bond purchases in September. Together with the continued good employment situation and the resulting stable consumer behavior, this provided positive growth impetus, resulting in a slight stabilization of the economic situation at the end of the year.

Growth also slowed in Eastern Europe, mainly due to less dynamic growth in Turkey and Russia. By contrast, some economies, such as Poland and Hungary, reported robust growth, driven principally by rising wages.

Growth in North America was very stable at first, driven mainly by the US economy, but lost momentum at year-end. The reasons for this were the end of the fiscal policy impact of the 2018 tax reform and a drop in exports and investment. In view of the deteriorating economic situation, the Federal Reserve started to cut interest rates in the summer. The key interest rate was reduced by a total of 0.75 percentage points in three steps to 1.5 percent.

Economic momentum in Central & South America was low in 2019. Contributory factors included the weakness of global trade and declining worldwide demand, which had a negative impact on export-oriented raw material suppliers. Growth was also held back by political uncertainty. Following the interest rate cuts in the USA, many central banks in Central & South America were also able to cut rates to counter the economic downturn.

Development of GDP 2018/2019 C09



The Asia-Pacific region posted slower growth than in the previous year. In Japan, strong domestic demand brought an improvement in economic momentum. In China, economic growth was probably 6.1 percent, the lowest since 1992, mainly as a result of the trade dispute with the USA.

Weaker development of end-customer industries

Worldwide, the development of Evonik's **end-customer industries** differed by region and by sector in 2019. We anticipate that overall industrial growth was lower than in the previous year.

Demand for consumer and care products increased significantly in the Asia-Pacific region and was also slightly higher in Europe. By contrast, demand declined in North America and Central & South America. Growth momentum in the food and feed sectors gained pace in all regions, especially Asia-Pacific. By contrast, automotive and mechanical engineering output declined considerably in Europe and was also lower in North America. In the construction sector, growth remained high in Europe and Asia-Pacific.

Raw material prices fell slightly in 2019, mainly because of the slowdown in the global economy, which resulted in lower demand for raw materials. Prices for fossil-based raw materials dropped analogously to the price of crude oil, especially between May and August. Overall, Evonik's raw material price index was lower than in the previous year.

The average annual exchange rate for the euro against Evonik's most important currency—the US dollar—decreased to US$1.12, compared with an average exchange rate of US$1.18 in the previous year.

2.3 Major events

As part of the consistent implementation of our corporate strategy, on July 31, 2019 we divested the **methacrylates business** to Advent International Corporation, Boston (Massachusetts, USA)[1]. The methacrylates business was reclassified to discontinued operations following signature of the sale agreement in March 2019 and deconsolidated as of July 31, 2019. The prior-year figures have been restated in the income statement, cash flow statement, and the key figures used for management purposes. The methacrylates business comprised large-volume monomers such as methylmethacrylate (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 and the US$640 million acquisition was closed on February 3, 2020. [2]

2.4 Business conditions and performance

Sales slightly below prior year

The Evonik Group's **sales** slipped 1 percent to €13,108 million, impacted by a reduction in both volumes and selling prices. Currency and other effects had a slight positive effect.

Change in sales 2019 versus 2018 T06

in %	
Volumes	–1
Prices	–2
Organic sales growth	**–3**
Exchange rates	1
Portfolio/other effects	1
Total	**–1**

Adjusted EBITDA around the prior-year level

Adjusted EBITDA was around the prior-year level at €2,153 million. This amount includes €142 million from initial application of IFRS 16 Leases. In addition, our cost-cutting measures had a positive impact. By contrast, negative effects came from lower prices for amino acids in the Nutrition & Care segment and C_4 chemicals in the Performance Materials segment. The adjusted EBITDA margin improved to 16.4 percent, up from 16.2 percent in 2018.

Adjusted EBITDA by segment T07

in € million	2018	2019	Change in %
Nutrition & Care	810	728	–10
Resource Efficiency	1,283	1,290	1
Performance Materials	239	224	–6
Services	100	122	22
Corporate, other operations, consolidation	–282	–211	25
Evonik	**2,150**	**2,153**	**–**

Prior-year figures restated.

The adjusted EBITDA reported by corporate, other operations, including consolidation, contains, among other things, expenses for the corporate center and strategic research. The successful cost-saving measures were a significant factor in the year-on-year improvement.

As a result of initial application of IFRS 16 with effect from January 1, 2019, depreciation includes depreciation of right-of-use assets amounting to €130 million. Adjusted EBIT dropped 12 percent to €1,201 million.

The **adjustments** totaled –€115 million, compared with –€312 million in 2018. Impairment losses of –€47 million mainly related to the coal-fired power plant in Marl (Germany), which is to be replaced by a natural gas-fired plant in 2022, and one

[1] See note 4.2 p. 109 f.
[2] See note 9.7 p. 169.

investment in the Nutrition & Care segment. Further adjustments of –€30 million related to the acquisition/divestment of shareholdings, specifically the divestment of the methacrylates business, the planned acquisition of PeroxyChem, and the integration of the Air Products specialty additives business. The restructuring expenses of €18 million were incurred for the SG&A 2020 program to reduce selling and administrative expenses, and the Oleo 2020 project to raise the efficiency of oleochemicals in the Nutrition & Care segment. The prior-year adjustments of –€312 million principally comprised restructuring expenses, mainly relating to the SG&A 2020 program. In addition, they contained project expenses for the purchase of equity investments.

The **financial result** improved to –€132 million. It contains special items of €53 million, mainly from the reversal of provisions. The adjusted financial result deteriorated by €34 million to –€185 million due to higher interest expense for provisions and the initial application of IFRS 16 (€16 million).

Income before income taxes, continuing operations, rose 7 percent to €954 million. The income tax rate on the continuing operations was 19 percent, and the adjusted income tax rate was 20 percent, partly as a result of the remeasurement of deferred tax assets. Income after taxes, discontinued operations, contains the methacrylates business and increased from €246 million to €1,353 million thanks to the high divestment gain.

Net income therefore improved by 126 percent to €2,106 million.

Sales and reconciliation from adjusted EBITDA to net income T08

in € million	2018	2019	Change in %
Sales	**13,267**	**13,108**	**–1**
Adjusted EBITDA	**2,150**	**2,153**	**–**
Adjusted depreciation, amortization, and impairment losses	–789	–952	
Adjusted EBIT	**1,361**	**1,201**	**–12**
Adjustments	–312	–115	
thereof attributable to			
Restructuring	*–204*	*–18*	
Impairment losses/reversals of impairment losses	*7*	*–47*	
Acquisition/divestment of shareholdings	*–31*	*–30*	
Other	*–84*	*–20*	
Income before financial result and income taxes, continuing operations (EBIT)	**1,049**	**1,086**	**4**
Financial result	–155	–132	
Income before income taxes, continuing operations	**894**	**954**	**7**
Income taxes	–186	–180	
Income after taxes, continuing operations	**708**	**774**	**9**
Income after taxes, discontinued operations	246	1,353	
Income after taxes	**954**	**2,127**	**123**
thereof income attributable to non-controlling interests	22	21	
Net income	**932**	**2,106**	**126**
Earnings per share	**2.00**	**4.52**	

Prior-year figures restated.

We use **adjusted net income** to assess the earnings power of the continuing operations, especially on a long-term view, and to forecast future development. The calculation starts from EBITDA after adjustment for special items[1]. The financial result is then adjusted for income and expenses in connection with the purchase/disposal of equity investments and other income and expense items that, by nature or amount, do not form part of typical current financing activities. Further, we deduct amortization of intangible assets, which mainly results from acquisitions, and adjust income tax for taxes on special items.

In 2019, adjusted net income was €902 million, down 11 percent from the high level reported for 2018.

Cost-saving programs exceeded targets in 2019

To support our financial targets, especially the improvement in the adjusted EBITDA margin, we introduced the **SG&A 2020** program in November 2017. The aim is to achieve a lasting reduction of €200 million in selling and administrative expenses by 2021. The target of €50 million set for 2019 was exceeded by almost €20 million. By year-end 2019, measures had been identified for all savings still required to meet the overall target of €200 million.

The measures implemented through the ongoing program of continuous improvements in process efficiency, especially in the production function, exceeded the savings target of €120 million in 2019. In addition, in the fourth quarter of 2019, we took effective short-term steps to secure earnings.

Reconciliation to adjusted net income T09

in € million	2018	2019	Change in %
Adjusted EBITDA	**2,150**	**2,153**	**–**
Adjusted depreciation, amortization, and impairment losses	–789	–952	
Adjusted EBIT	**1,361**	**1,201**	**–12**
Adjusted financial result	–151	–185	
Amortization and impairment losses on intangible assets	143	136	
Adjusted income before income taxes [a]	**1,353**	**1,152**	**–15**
Adjusted income taxes	–317	–229	
Adjusted income after taxes [a]	**1,036**	**923**	**–11**
thereof adjusted income attributable to non-controlling interests	22	21	
Adjusted net income [a]	**1,014**	**902**	**–11**
Adjusted earnings per share in € [a]	**2.18**	**1.94**	

Prior-year figures restated.
[a] Continuing operations.

Efficient and effective procurement

Reliable supply, gaining access to new procurement markets, and ongoing optimization of material costs are key tasks for our procurement function.

Planned and unplanned production shutdowns by key suppliers, production shortfalls in China resulting from plant closures as a consequence of more restrictive environmental policy, and the trade dispute between the USA and China restricted the availability of raw materials in 2019. Nevertheless, the lower pace of growth in the global economy and the related reduction in demand for materials resulted in lower average annual raw material prices compared with 2018.

As part of an all-round optimization of the procurement of raw materials, demand for very small quantities was bundled in the tender process for the first time at the end of 2019. The objective is to greatly improve workflows and reduce primary costs.

[1] See section 1.3 Business management systems p.16.

For indirect procurement (procurement of general and technical goods and services), worldwide introduction of a new cloud-based IT solution for catalog orders was completed in 2019. As a consequence, further progress was made in increasing the level of automation. Another focus of indirect procurement in 2019 was procurement for the new polyamide 12 plant in Marl (Germany).

The procurement function continued to drive forward the use of new digital solutions in 2019 to automate further operational tasks (for example, with the aid of bots) and to increase the value contributed to strategic activities. This included introducing a cloud-based platform to forecast raw material prices, accompanied by automated reporting. For key strategic raw materials, data-based raw material price forecasts with self-learning algorithms was developed and introduced step by step in order to improve the quality and objectiveness of price forecasts.

As well as participating in procurement alliances with other companies and validating new suppliers, we worked intensively to extend strategic relationships with suppliers. In our relationship with strategic suppliers, the focal areas are finding additional ways of reducing risk, enhancing the cost situation, cooperation, and innovation.

In 2019, Evonik spent around €9.4 billion on raw materials and supplies, technical goods, services, energy, and other operating supplies. Raw materials make up around 55 percent of procurement volume. Spending on petrochemical feedstocks is around €3.4 billion and accounts for 66 percent of our raw material base.

Using renewable resources remains very important to Evonik. In 2019, renewables accounted for around 8 percent of raw materials. The main applications for these raw materials are amino acids and starting products for the cosmetics industry.

Return on capital employed lower than in previous year

Within our value-oriented management approach, our success is measured principally by **ROCE**, which was 8.6 percent in 2019 and therefore below our cost of capital, which was 10.0 percent before taxes. In our regular review, it will be adjusted to 9.0 percent before taxes for 2020 as a result of lower borrowing costs and a lower beta factor.

Capital employed, ROCE, and economic value added (EVA®) T10

in € million	2018	2019
Intangible assets	5,837	5,883
+ Property, plant and equipment	6,093	6,333
+ Right-of-use assets	–	489
+ Investments	38	40
+ Inventories	1,925	2,032
+ Trade accounts receivable	1,650	1,626
+ Other interest-free assets	431	421
– Interest-free provisions	–872	–845
– Trade accounts payable	–1,288	–1,326
– Other interest-free liabilities	–515	–618
= Capital employed [a]	**13,299**	**14,035**
Adjusted EBIT	**1,361**	**1,201**
ROCE (adjusted EBIT/capital employed) in %	**10.2**	**8.6**
Cost of capital (capital employed x WACC)	1,329	1,404
EVA® (adjusted EBIT – cost of capital)	**32**	**–203**

Prior-year figures restated.
[a] Annual averages.

The average **capital employed** increased by €0.7 billion to €14.0 billion. The main factors here were the right-of-use assets for leases recognized in accordance with IFRS 16 for the first time, and capital expenditures for our operating business.

The Evonik Group's ROCE declined in 2019 as a result of lower EBIT and higher average capital employed. ROCE declined in all of the chemical segments. In the Resource Efficiency and Performance Materials segments, however, ROCE was above average and well above the cost of capital.

ROCE by segment T11

in %	2018	2019
Nutrition & Care	11.2	8.0
Resource Efficiency	20.4	19.3
Performance Materials	29.4	17.4
Services	–4.6	–5.4
Evonik (including corporate, other operations)	**10.2**	**8.6**

Prior-year figures restated.

EVA® lower than in previous year

Economic value added **(EVA®)** is the difference between adjusted EBIT and the cost of capital, which is calculated by multiplying average capital employed by the average cost of capital (WACC). EVA® was –€203 million in 2019. The year-on-year decline of €235 million was a consequence of the lower operating result and higher capital employed.

2.5 Comparison of forecast and actual performance

Following the reclassification of the methacrylates business to discontinued operations in March 2019, we adjusted the forecast made at the start of the year and issued a new forecast for the continuing operations only in May 2019. At the start of November, we revised our forecast for sales, ROCE, and capital expenditures in the light of the weaker economic situation.

In 2019, adjusted EBITDA was €2,153 million, so we met our forecast despite the challenging global economic conditions. As announced in August 2019, the free cash flow refers to the free cash flow before one-time tax payments of €245 million in connection with the carve-out of the methacrylates business, because these relate to the divestment of the discontinued operations and not to the continuing operations. The free cash flow after adjustment for these tax payments increased significantly from €526 million to €717 million as forecast. The free cash flow after the tax payments was €472 million, which was below the prior-year level.

Group sales decreased by 1 percent to €13.1 billion, which was in line with the revised forecast. ROCE fell to 8.6 percent in 2019 and was thus perceptibly lower than the cost of capital and the prior-year figure. Here, the increase in capital employed was a negative factor. In response to the challenging economic situation, we reduced our capital expenditures to €842 million, so the reduction was slightly more than had been forecast.

In 2019, we once again achieved our targets for our non-financial indicators: accident frequency and incident frequency.

Comparison of forecast and actual performance T12

	Including the methacrylates business		Excluding the methacrylates business				
Forecast performance indicators	2018[a]	Forecast for 2019[a]	2018 continuing operations	Forecast for 2019 continuing operations	Revised forecast for 2019[b] continuing operations	2019	Forecast for 2020
Group sales	€15.0 billion	Slightly lower to stable	€13.3 billion	At least stable	Slightly lower	€13.1 billion	Stable
Adjusted EBITDA	€2.60 billion	Slightly lower to stable	€2.15 billion	At least stable		€2.15 billion	Between €2.0 billion and €2.3 billion
ROCE	12.1%	Above the cost of capital, slightly lower than in the prior year	10.2%	Above the cost of capital, about level with the prior year	Slightly below prior year and cost of capital	8.6%	At the prior-year level
Capital expenditures[c]	€1.05 billion	Around €1.0 billion	€969 million	Around €950 million	Around €900 million	€842 million	At the prior-year level
Free cash flow	€672 million	Significantly higher than in the prior year	€526 million	Significantly higher than in the prior year[d]		€717 million[d]	Slightly higher
Accident frequency	0.87	Below upper limit of 1.30	0.87	Below upper limit of 1.30		1.18	Maximum 1.30
Incident frequency	1.08	Improvement; below upper limit of 1.10	1.08	Improvement; below upper limit of 1.10		1.10	Maximum 1.10

[a] As reported in the financial report 2018. [b] In the financial statement on Q3 2019. [c] Capital expenditures for intangible assets, property, plant and equipment. [d] Before tax payments relating to the carve-out of the methacrylates business.

2.6 Segment performance

Nutrition & Care segment

Key data for the Nutrition & Care segment T13

in € million	2018	2019	Change in %
External sales	4,646	4,582	–1
Adjusted EBITDA	810	728	–10
Adjusted EBITDA margin in %	17.4	15.9	–
Adjusted EBIT	535	404	–24
Capital expenditures [a]	486	260	–47
Depreciation and amortization	263	311	18
Capital employed (annual average)	4,774	5,044	6
ROCE in %	11.2	8.0	–
No. of employees as of December 31	8,218	8,090	–2

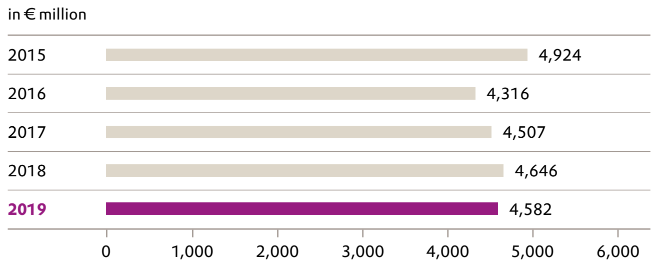
Prior-year figures restated. [a] Capital expenditures for intangible assets, property, plant and equipment.

Slightly higher volumes

In the Nutrition & Care segment, sales fell 1 percent to €4,582 million. Global demand was high. The decline was caused by lower selling prices, while volumes increased slightly. Currency effects were positive.

Essential amino acids for animal nutrition posted considerably lower sales. While volumes developed positively, there was a further drop in selling prices, especially for methionine, due to adequate availability of this product on the market. The measures to enhance efficiency and reduce costs initiated in 2018 are making good progress. The care solutions business generated sales on a par with the previous year. The specialties in the cosmetic solutions product line developed well. The restructuring at the start of 2019 to raise efficiency and leverage synergies is already proving successful. Sales of additives for polyurethane foam increased, with a particularly very good volume trend in products used, for example, in mattresses and insulating materials. In the healthcare business, a pleasing development was seen in exclusive synthesis and in pharmaceutical and food ingredients.

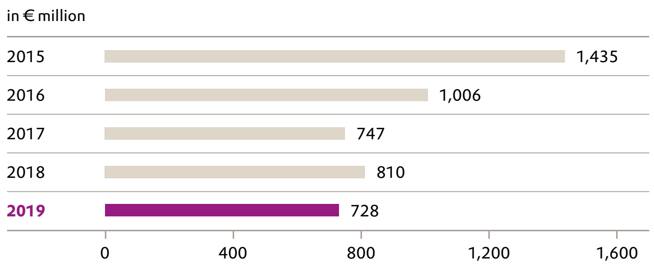
Development of sales in the Nutrition & Care segment C10



Adjusted EBITDA lower than in previous year

Adjusted EBITDA in the Nutrition & Care segment fell 10 percent to €728 million. This was due to lower selling prices, while higher volumes and successful cost-savings cushion the decline. The adjusted EBITDA margin was 15.9 percent, down from 17.4 percent in 2018.

Development of adjusted EBITDA in the Nutrition & Care segment C11



Capital expenditures below the high prior-year level

Capital expenditures in the Nutrition & Care segment amounted to €260 million. That was below the high prior-year level, which contained a high proportion of the investment in an additional world-scale production complex for methionine in Singapore. Capital expenditures were therefore below depreciation and amortization, which was €311 million. The average capital employed increased to €5,044 million, principally due to capital expenditures in the previous year. ROCE declined substantially to 8.0 percent as a result of lower earnings and higher capital employed.

Investment projects to drive growth

In view of the strong growth in the market for methionine, Nutrition & Care invested around half a billion euros in a further production complex in Singapore, which came on stream in the summer. This fully backwardly integrated production complex, including the production of all precursors and intermediates, is located directly next to, and integrated into, the facility that came into service in November 2014.

In November 2019, the Veramaris joint venture established by Evonik and Royal DSM, Heerlen (Netherlands) completed a plant to produce omega-3 fatty acids from natural sea algae. Together, the two partners invested around US$200 million in this plant at Evonik's site in Blair (Nebraska, USA), where it has access to decades of experience of industrial fermentation technology. The highly concentrated algal oil produced by Veramaris enables the animal feed industry to keep pace with rising demand for these essential omega-3 fatty acids. At the same time, the use of fish oil from stocks of wild fish can be reduced or replaced.

Both investments strengthen the Animal Nutrition growth engine.

To strengthen our Health & Care growth engine, we have acquired the patented Endexo® technology from Interface Biologics, a material science company in Toronto (Canada). Endexo® enhances the biocompatibility of medical devices such as catheters that come into contact with tissue, blood, or other biological fluids. This acquisition extends our capability as a development partner and solution provider for medical device companies worldwide.

Resource Efficiency segment

Key data for the Resource Efficiency segment T14

in € million	2018	2019	Change in %
External sales	5,708	5,685	–
Adjusted EBITDA	1,283	1,290	1
Adjusted EBITDA margin in %	22.5	22.7	–
Adjusted EBIT	983	964	–2
Capital expenditures[a]	287	373	30
Depreciation and amortization	287	324	13
Capital employed (annual average)	4,821	4,992	4
ROCE in %	20.4	19.3	–
No. of employees as of December 31	10,270	10,153	–1

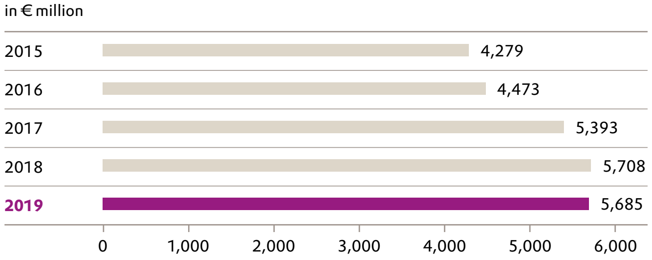
Prior-year figures restated. [a] Capital expenditures for intangible assets, property, plant and equipment.

Sales at the prior-year level

The Resource Efficiency segment held up well overall in the challenging economic environment. Sales were €5,685 million, which was around the prior-year level. A slight drop in volumes was almost entirely offset by higher selling prices and positive currency effects.

Business with coating additives, coating and adhesive resins, and oil additives was adversely affected by the global economic downturn, especially in the automotive and coatings sectors, and sales were considerably lower than in the previous year. Lower volumes were also reported by the silica business, particularly in industry-oriented areas. By contrast, the business with high-performance polymers generated higher sales, benefiting from solid demand and a positive trend, especially in 3D printing and membranes. Crosslinkers, which are mainly used for environment-friendly paint systems/coatings, high-performance composites, and specialty plastics, increased sales, principally as consequence of high demand from the wind power market, especially in China. Hydrogen peroxide products benefited from a good development in conventional applications and license revenues, and also posted higher sales.

Development of sales in the Resource Efficiency segment C12

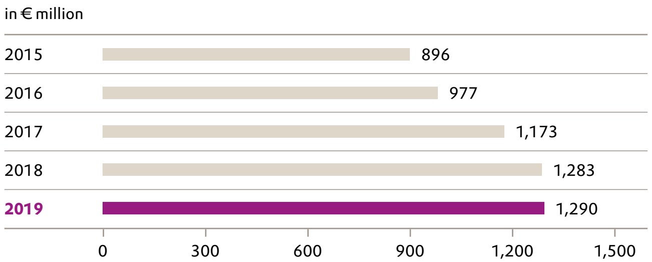


Prior-year figures restated.

Further rise in earnings

The Resource Efficiency segment increased adjusted EBITDA by 1 percent to €1,290 million. Alongside an improvement in prices, this was due to license revenues and strict cost discipline. The adjusted EBITDA margin rose from 22.5 percent to 22.7 percent.

Development of adjusted EBITDA in the Resource Efficiency segment C13



Prior-year figures restated.

Attractive return on capital employed

Capital expenditures increased 30 percent in the Resource Efficiency segment to €373 million and therefore exceeded depreciation and amortization. The average capital employed increased slightly to €4,992 million. ROCE was at a very good level of 19.3 percent.

Investment projects to expand market positions

In summer 2019, a new production facility for fumed silica came into service in Antwerp (Belgium). Investment was in the high double-digit million euro range. Typical applications for this specialty silica, which Evonik markets as AEROSIL®, are paints, coatings, modern adhesive systems, transparent silicones, and non-combustible high-performance insulating materials. In Zhenjiang (Jiangsu Province, China), Evonik Wynca (Zhenjiang) Silicon Material Co., Ltd., a joint venture with the Chinese company Wynca, started construction of a new production facility for AEROSIL®. This is scheduled to come into service in 2020 and will further extend our global production network for fumed silica, ensuring more stable supply to our customers in China. We are currently expanding production capacity for precipitated silica in Adapazari (Turkey). This is scheduled for completion in 2020. Silica is mainly used in high-quality tires with low rolling resistance. Other areas of application are the food, feed, and agriculture industries. Precipitated and fumed silicas belong to the Smart Materials growth engine.

In Marl (Germany), we have commenced construction work on a new production complex for the specialty polymer polyamide 12 (PA 12). We are investing more than €400 million in this complex, which will increase our total PA 12 capacity by more than 50 percent. Alongside the present PA 12 production line, we are building additional plants for the polymer and its precursors. Start-up is scheduled for early 2021. PA 12 high-performance polymer is used in strategic global growth markets such as 3D printing. This lightweight, durable polymer makes a key contribution to saving resources in automotive engineering as well. Thanks to its outstanding properties—high stability combined with flexibility, as well as high temperature resistance and low weight—this high-performance polymer is used as a substitute for steel in many demanding applications. This investment also strengthens the Smart Materials growth engine.

In response to rising demand for lightweight structural materials for specialty applications, we are extending production of the ROHACELL® brand of high-performance rigid foams at our site in Mobile (Alabama, USA). The capacity expansion is scheduled for completion in the fourth quarter of 2020. ROHACELL® is a rigid structural foam made of polymethacrylimide, which is used in construction and in the manufacture sandwich elements for aviation, automobiles, ships, sports equipment, electronics, and medical technology. This extremely light foam is resistant to elevated temperatures and high pressure, making it ideal as a core component in composites.

Performance Materials segment

Key data for the Performance Materials segment T15

in € million	2018	2019	Change in %
External sales	2,233	2,043	–9
Adjusted EBITDA	239	224	–6
Adjusted EBITDA margin in %	10.7	11.0	–
Adjusted EBIT	179	123	–31
Capital expenditures[a]	45	48	7
Depreciation and amortization	59	101	71
Capital employed (annual average)	609	707	16
ROCE in %	29.4	17.4	–
No. of employees as of December 31	1,539	1,622	5

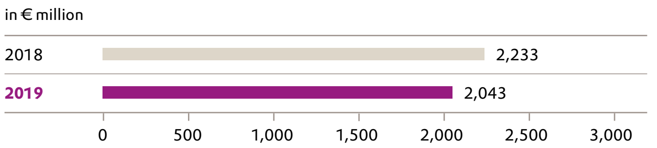
Prior-year figures restated. [a] Capital expenditures for intangible assets, property, plant and equipment.

Sales lower than in prior year

Sales fell 9 percent to €2,043 million in the Performance Materials segment due to a substantial drop in prices and a slight decline in volumes.

The development of performance intermediates was held back by lower prices for oil/naphtha, a slight drop in selling prices, plant shutdowns, and bottlenecks in the supply of raw materials. Sales decreased significantly. Within the Functional Solutions unit, alkoxides posted a very pleasing performance. However, sales were below the prior-year level, which still included sales generated by Evonik Jayhawk Fine Chemicals Corp., Galena (Kansas, USA), which was divested in November 2018.

Development of sales in the Performance Materials segment C14

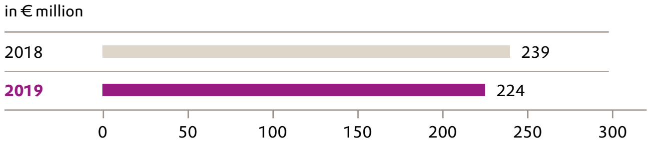


Prior-year figures restated. To ensure comparability, this chart shows only two years, because the figures for 2015–2017 still contain the methacrylates business.

Higher adjusted EBITDA margin

Adjusted EBITDA was down 6 percent year-on-year at €224 million. Both years were dominated by special items: In 2019, bottlenecks in the supply of raw materials and plant outages had a negative impact, while in 2018 the main impact was the low water level of the river Rhine. The adjusted EBITDA margin improved from 10.7 percent to 11.0 percent as earnings did not fall as fast as sales.

Development of adjusted EBITDA in the Performance Materials segment C15



Prior-year figures restated. To ensure comparability, this chart shows only two years, because the figures for 2015–2017 still contain the methacrylates business.

Year-on-year drop in return on capital employed

Investment in the Performance Materials segment aims to secure its leading market positions, raise efficiency, and broaden the technology base. Capital expenditures increased slightly to €48 million, which was well below depreciation and amortization. The average capital employed increased by 16 percent to €707 million. ROCE declined substantially, from 29.4 percent to 17.4 percent, as a result of lower earnings and higher capital employed.

Focused investment

Performance Materials plans to raise capacity for sodium methylate in Rosario (Argentina) by 50 percent to 90,000 metric tons p.a. Sodium methylate is an important catalyst for industrial production of biodiesel. The expansion is designed to meet the rising demand for biodiesel in South America, especially in Argentina and Brazil. The background is the planned increase in the addition of biodiesel to fuel in Brazil and the increasing competitiveness of biodiesel exports from Argentina. At the same time, the expansion strengthens our global market leadership.

Services segment

Key data for the Services segment T16

in € million	2018	2019	Change in %
External sales	664	763	15
Adjusted EBITDA	100	122	22
Adjusted EBITDA margin in %	15.1	16.0	–
Adjusted EBIT	–29	–42	–45
Capital expenditures[a]	139	150	8
Depreciation and amortization	120	160	33
Capital employed (annual average)	637	785	23
ROCE in %	–4.6	–5.4	–
No. of employees as of December 31	12,091	12,037	–

Prior-year figures restated. [a] Capital expenditures for intangible assets, property, plant and equipment.

The Services segment generates sales both internally, with the specialty chemical segments and the corporate center (2019: €1,831 million), and with external customers. External sales increased 15 percent to €763 million. This was partly due to the divestment of the methacrylates business, which now uses Evonik's site services as an external customer. Adjusted EBITDA rose 22 percent to €122 million. This was principally due to higher earnings from utilities, waste management, and technical service.

Capital expenditures in this segment increased by 8 percent to €150 million and was therefore below depreciation and amortization, which amounted to €160 million.

New natural gas power plant to avoid CO_2 emissions

A highly efficient state-of-the-art gas and steam turbine power plant is to be built at Marl Chemical Park in Germany by 2022. This will end Evonik's coal-fired generation of electricity and steam and cut CO_2 emissions by up to 1 million metric tons a year.

The contracts with our partner, Siemens, were signed at the end of August 2019. Siemens is responsible for planning and construction of the entire two-block power plant. This highly efficient and flexible co-generation plant for electricity and steam will have efficiency of over 90 percent. Investment will be in the triple-digit million euro range. The new plant safeguards cost-effective and future-oriented energy supply at Evonik's largest production site, Marl Chemical Park. In addition to power generation, the generation of steam is particularly important for production at the chemical park. Highly flexible load management means the plant 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.

2.7 Regional development

A global presence

We generated 83 percent of sales outside Germany in 2019.

Sales in Western Europe declined 3 percent year-on-year to €5,531 million. All three chemical segments reported lower sales. Western Europe accounted for 42 percent of Group sales.

Investment was once again concentrated on Western Europe. Capital expenditures were €547 million, which was above the previous year's level of 424 million. Capacity for fumed silica in Antwerp (Belgium) was increased in summer 2019. In Marl (Germany), we are building a new production complex for the specialty polymer polyamide 12. This is scheduled to start operating in early 2021.

In Eastern Europe, sales increased 3 percent to €814 million, with higher sales coming from the Resource Efficiency and Performance Materials segments. This region's share of Group sales was 6 percent.

In the Middle East & Africa region, sales dropped 9 percent to €355 million, which was 3 percent of Group sales.

Sales unchanged in the Americas

Sales in North America were at the prior-year level of €2,952 million. Lower sales from the Performance Materials segment were offset by higher sales from the growth segments. This region accounted for 23 percent of Group sales. Capital expenditures were €137 million, which was below the previous year's level (€199 million).

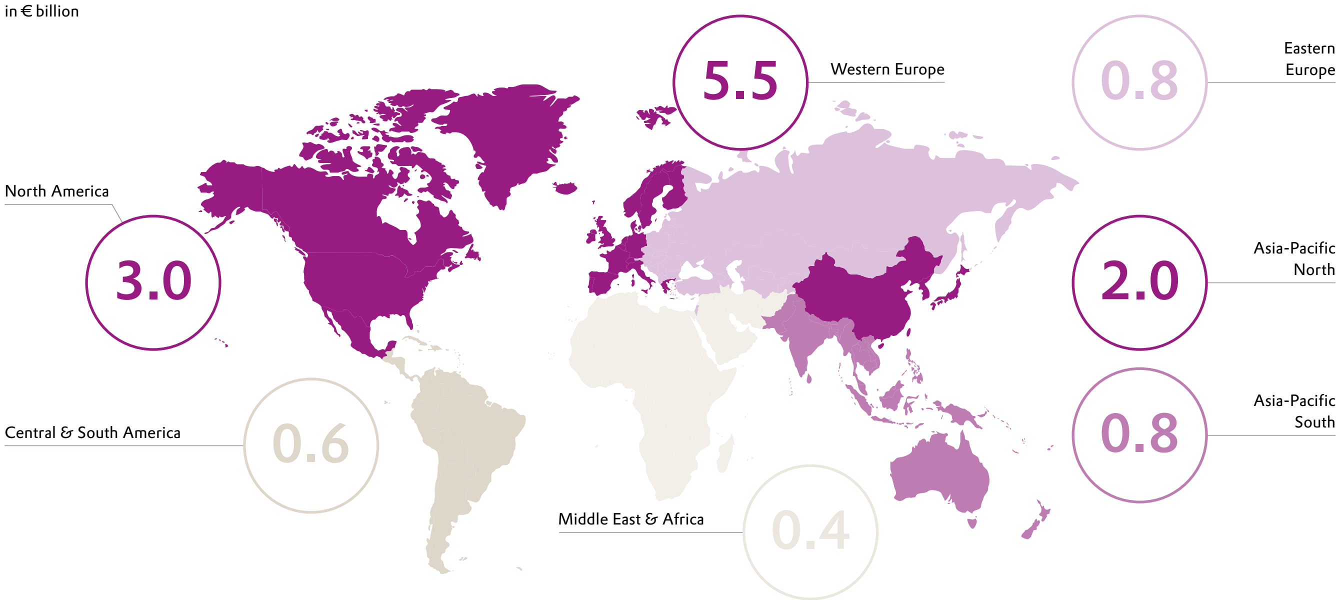
Sales declined 3 percent to €591 million in Central & South America. This region accounted for 5 percent of Group sales.

Higher sales in the Asia-Pacific region

Sales rose 4 percent to €2,042 million in the Asia-Pacific North region, with the Nutrition & Care and Resource Efficiency segments both contributing pleasing sales growth. This region accounted for 16 percent of Group sales. Capital expenditures totaled €66 million.

Sales in Asia-Pacific South were 3 percent lower at €823 million, which was 6 percent of Group sales. Capital expenditures were €70 million. The prior-year figure of €303 million mainly related to the construction of the world-scale production complex for methionine, which was taken into service in mid-2019.

Sales by region C16



2.8 Earnings position

Income before income taxes, continuing operations slightly higher than in prior year

In all, sales slipped 1 percent to €13.1 billion, with volumes and selling prices down slightly. The cost of sales increased, partly due to expenses for the start-up of new production capacities. The gross profit on sales fell 8 percent to €3.7 billion. The success of our ongoing SG&A 2020 cost-saving program made a significant contribution to the reduction in selling and general administrative expenses. Research and development expenses declined, partly as a result of more focused alignment of R&D activities. The increase in other operating income was principally attributable to income from the reversal of provisions following reassessment of the provisions for SG&A 2020. The reduction in other operating expenses was mainly due to lower restructuring expenses and lower project expenses in connection with the acquisition of business operations. Income before financial result and income taxes was 4 percent higher at €1,086 million, principally because of the lower net result of other operating income and expense.

Considerably higher net income

The financial result includes special items totaling €53 million, compared with –€3 million in the previous year. Income before income taxes, continuing operations, increased 7 percent to €954 million. Income taxes were around the same level as in the previous year. Income after taxes, discontinued operations, contains the methacrylates business and was considerably higher than in 2018 due to the divestment gain. Non-controlling interests in after-tax income comprised the pro rata profits and losses of fully consolidated subsidiaries that are attributable to shareholders outside the Evonik Group.

Net income improved by 126 percent to €2,106 million principally due to income from the divestment of the methacrylates business.

Income statement for the Evonik Group T17

in € million	2018	2019	Change in %
Sales	13,267	13,108	–1
Cost of sales	–9,271	–9,413	2
Gross profit on sales	**3,996**	**3,695**	**–8**
Selling expenses	–1,563	–1,511	–3
Research and development expenses	–437	–428	–2
General administrative expenses	–599	–568	–5
Other operating income	223	359	61
Other operating expense	–581	–466	–20
Result from investments recognized at equity	10	5	–50
Income before financial result and income taxes, continuing operations	**1,049**	**1,086**	**4**
Financial result	–155	–132	–15
Income before income taxes, continuing operations	**894**	**954**	**7**
Income taxes	–186	–180	–3
Income after taxes, continuing operations	**708**	**774**	**9**
Income after taxes, discontinued operations	246	1,353	450
Income after taxes	**954**	**2,127**	**123**
thereof income attributable to non-controlling interests	22	21	–5
Shareholders of Evonik Industries AG (net income)	**932**	**2,106**	**126**

Prior-year figures restated.

2.9 Financial condition

Central financial management

The principal objectives of financial management are safeguarding the financial independence of the Evonik Group and limiting financial risks. We therefore apply a central financing strategy. Borrowing and bond issuance are normally undertaken by Evonik Industries AG or its financing company, Evonik Finance B.V., Amsterdam (Netherlands). The liabilities of this company are fully guaranteed by Evonik Industries AG. To reduce external borrowing, surplus liquidity at Group companies is placed in a cash pool at Group level to cover financing requirements in other Group companies through intragroup loans. Currency derivatives are used at Group level to hedge intragroup loans. Evonik has a flexible range of corporate financing instruments to meet liquidity requirements for day-to-day business, investments, and the repayment of financial debt.

Solid investment grade rating confirmed

Both Moody's and Standard & Poor's (S&P) confirmed their credit ratings for Evonik Industries AG in 2019. Moody's rating is still Baa1 and S&P still rates Evonik BBB+, with a stable outlook in both cases. Maintaining a solid investment grade rating is a central element in our financing strategy. In this way we gain access to a broad investor base on appropriate financing terms and thus maintain our financial flexibility. A solid investment grade rating gives banks, investors, customers, and suppliers a reliable basis for a long-term business relationship with Evonik.

Attractive level of free cash flow

The cash flow from operating activities, continuing operations, decreased by €122 million to €1,352 million. The reduction was mainly due to one-time tax payments of €245 million in connection with the carve-out of the methacrylates business. Without this necessary preparation for the divestment, the cash flow would have risen by €123 million. The principal positive factors were a perceptible reduction in net working capital and the initial application of IFRS 16 (€142 million).

The situation with regard to the change in the free cash flow was similar: While it declined by €54 million to €472 million due to the one-time tax payments, the free cash flow before tax payments relating to the carve-out of the methacrylates business rose by €191 million to €717 million. A reduction of €68 million in cash outflows for investing activities contributed to the pleasing development of the internal financing capacity of our operating business.

The other investments resulted in a cash inflow of €635 million. The cash inflow from the divestment of the methacrylates business was reduced by investing part of the proceeds in current securities.

The cash outflow of €848 million for financing activities was principally due to the payment of the dividend of €536 million for 2018.

Cash flow statement (excerpt) T18

in € million	2018	2019
Cash flow from operating activities, continuing operations	1,474	1,352
Cash outflows for investments in intangible assets, property, plant and equipment	–948	–880
Free cash flow (after tax payments relating to the carve-out of the methacrylates business)	**526**	**472**
For information: free cash flow before tax payments relating to the carve-out of the methacrylates business	**526**	**717**
Cash flow from other investing activities, continuing operations	64	635
Cash flow from financing activities, continuing operations	–798	–848
Cash flow from discontinued operations	194	–86
Change in cash and cash equivalents	–14	173

Prior-year figures restated.

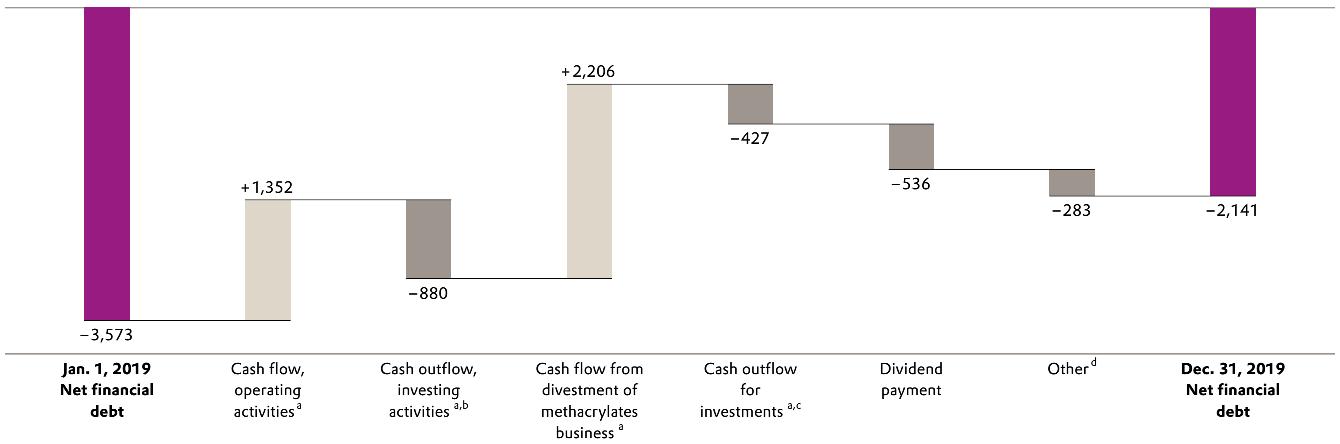
Net financial debt T19

in € million	Dec. 31, 2018	Jan. 1, 2019[a]	Dec. 31, 2019
Non-current financial liabilities[b]	−3,683	−4,228	−3,712
Current financial liabilities[b]	−230	−351	−806
Financial debt	**−3,913**	**−4,579**	**−4,518**
Cash and cash equivalents	988	988	1,165
Current securities	8	8	1,203
Other financial investments	10	10	9
Financial assets	**1,006**	**1,006**	**2,377**
Net financial debt as stated on the balance sheet	**−2,907**	**−3,573**	**−2,141**

[a] Restatement due to initial application of IFRS 16: recognition of lease liabilities amounting to €666 million.
[b] Excluding derivatives, excluding the refund liability for rebate and bonus agreements, and excluding liabilities from exchange-type transactions with competitors.

Change in net financial status C17

in € million



[a] Continuing operations. [b] Cash outflows for capital expenditures for intangible assets, property, plant and equipment. [c] Business operations and other investments.
[d] Including cash flow, discontinued operations.

Significant reduction in net financial debt

Net financial debt was reduced significantly to €2,141 million, a reduction of €1,432 million compared with January 1, 2019. This was principally due to the purchase price received for the methacrylates business and the improvement in the free cash flow before tax payments relating to the carve-out of this business. Countereffects included the tax payments in connection with the carve-out, payment of the dividend for 2018 (€536 million), and the acquisition of shares in Vivawest from the CTA[1] (Evonik Pensionstreuhand e.V.) due to a change in the strategy for pension assets.

Corporate bonds as a central financing instrument

At year-end 2019, the financial debt of €4,518 million comprised six bonds with a total carrying amount of €3,637 million, lease liabilities totaling €650 million, bank loans totaling €150 million, and other financial liabilities of €81 million. On the reporting date, €3.15 billion of the debt issuance program of up to €5 billion had been used to issue bonds.

Around 95 percent of the Evonik Group's non-derivative financial liabilities are denominated in euros (2018: 97 percent). Including currency derivatives concluded for financing purposes, around 72 percent of financial liabilities are denominated in euros, 13 percent in Singapore dollars (SGD), 12 percent in US dollars, and 3 percent in other currencies.

[1] Contractual trust arrangement.

Bonds T20

	Nominal value in € million	Rating (S&P/Moody's)	Maturity	Coupon in %	Issue price in %
Evonik Industries AG					
Fixed-interest bond 2013/2020 [a]	500	BBB+ / Baa1	Apr. 8, 2020	1.875	99.185
Fixed-interest bond 2015/2023 [a]	750	BBB+ / Baa1	Jan. 23, 2023	1.000	99.337
Hybrid bond 2017/2077	500	BBB– / Baa3	Jul. 7, 2077	2.125	99.383
Evonik Finance B.V.					
Fixed-interest bond 2016/2021 [a]	650	BBB+ / Baa1	Mar. 8, 2021	0.000	99.771
Fixed-interest bond 2016/2024 [a]	750	BBB+ / Baa1	Sep. 7, 2024	0.375	99.490
Fixed-interest bond 2016/2028 [a]	500	BBB+ / Baa1	Sep. 7, 2028	0.750	98.830

[a] Issued through the debt issuance program.

Liquidity position remains strong

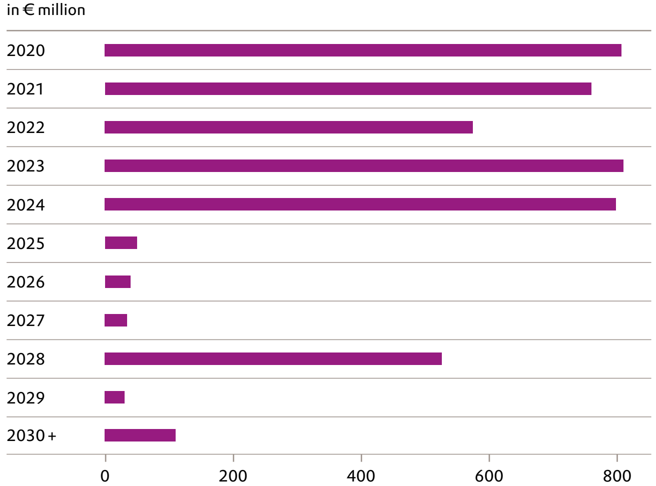
As of December 31, 2019, Evonik had cash and cash equivalents amounting to €1,165 million and current securities totaling €1,203 million. In addition, Evonik has a €1.75 billion revolving credit facility as a central source of liquidity. This credit facility was agreed in June 2017. Following the exercise of the second and final extension option in June 2019, it runs until June 2024. It was not utilized in 2019 and does not contain any covenants requiring Evonik to meet specific financial ratios.

In addition, there are various credit lines to meet local requirements, especially in the Asia-Pacific region. As of December 31, 2019, €408 million of the total amount had not been drawn.

Solid funding of pension obligations

Pension provisions account for around half of our total debt (sum of financial debt and pension provisions). They are non-current and depend on the discount rate. Compared with year-end 2018, pension provisions increased by €235 million to €3,967 million. The increase in the present value of pension obligations resulting from the lower discount rate was largely offset by the robust performance of plan assets and the divestment of pension provisions in connection with the sale of the methacrylates business. The funding of pension obligations[1] was 68 percent as of the reporting date, and thus still at a solid level in line with the industry norm.

Maturity profile of financial liabilities C18



As of December 31, 2019.
The hybrid bond is included in 2022 (when Evonik has its first right of redemption).

Considerably lower capital expenditures

Investment projects are aimed at utilizing potential for sustained profitable growth and value creation. In the specialty chemicals sector, Evonik is therefore expanding in business areas and markets where it already has—or intends to build—a strong competitive position. Every project is required to undergo detailed economic and strategic analyses. Evonik expects all projects to meet a minimum return requirement, which is the cost of capital. We take a flexible and disciplined approach to extending our leading market positions. All projects are regularly reviewed for changes in the market situation.

[1] Ratio of plan assets to pension obligations.

We reduced capital expenditures[1] by 13 percent to €842 million in 2019 in response to the weaker economic environment. There is a slight timing difference in outflows for property, plant and equipment as a result of payment terms. In the reporting period, outflows for capital expenditures totaled €880 million (2018: €948 million).

The highest proportion of capital expenditures went to the Resource Efficiency and Nutrition & Care growth segments (44 percent and 31 percent respectively). A further 18 percent was allocated to the Services segment and the Performance Materials segment received 6 percent. The regional focus of capital expenditures was Western Europe, which accounted for 65 percent of the total, followed by North America (16 percent), and Asia-Pacific South and Asia-Pacific North (8 percent each).

Major projects completed or virtually completed in 2019 T21

Segment	Location	Project
Nutrition & Care	Jurong Island (Singapore)	Construction of a production complex for methionine
	Blair (Nebraska, USA)	Establishment of a joint venture and construction of a production facility for algal oil
Resource Efficiency	Antwerp (Belgium)	Expansion of capacity for integrated silica/silane production
Performance Materials	Marl (Germany)	Expansion of capacity at the ITDA plant (isotridecanol)

For further information on current capital expenditure projects, see section 2.6 Segment performance p. 25 ff.

Financial investments amounted to €436 million and mainly comprised the transfer of shares in Vivawest from the CTA to Evonik due to a change in the strategy for pension assets.

2.10 Asset structure

Increase in total assets

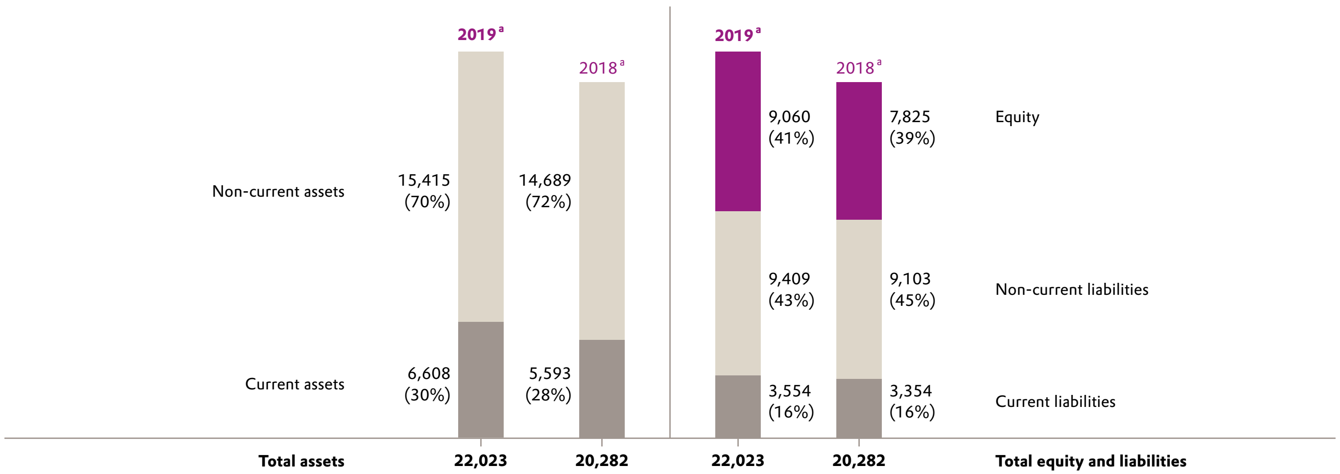
As of December 31, 2019, total assets were €1.7 billion higher at €22.0 billion. Non-current assets increased by €0.7 billion to €15.4 billion. The disposal of the non-current assets of the methacrylates business was more than offset by the recognition of right-of-use assets resulting from the initial application of IFRS 16, and the increase in financial assets. In all, non-current assets made up 70 percent of total assets (2018: 72 percent). They are financed by liabilities with the same maturity structure.

Current assets increased by €1.0 billion to €6.6 billion. The main reason for this was the receipt of the proceeds from the divestment of the methacrylates business, which led to a rise in other financial assets and cash and cash equivalents. At the same time, there was a reduction in inventories and trade accounts receivable, which was also due to the divestment of the methacrylates business. Current assets therefore increased slightly to 30 percent of total assets (2018: 28 percent).

Equity[2] rose by €1.2 billion, to €9.1 billion. The equity ratio increased from 39 percent to 41 percent. Non-current liabilities increased slightly to €9.4 billion. The main reason for this was the initial recognition of lease liabilities due to the first-time application of IFRS 16. Non-current liabilities decreased from 45 percent to 43 percent of total equity and liabilities.

Balance sheet structure of the Evonik Group C19

in € million

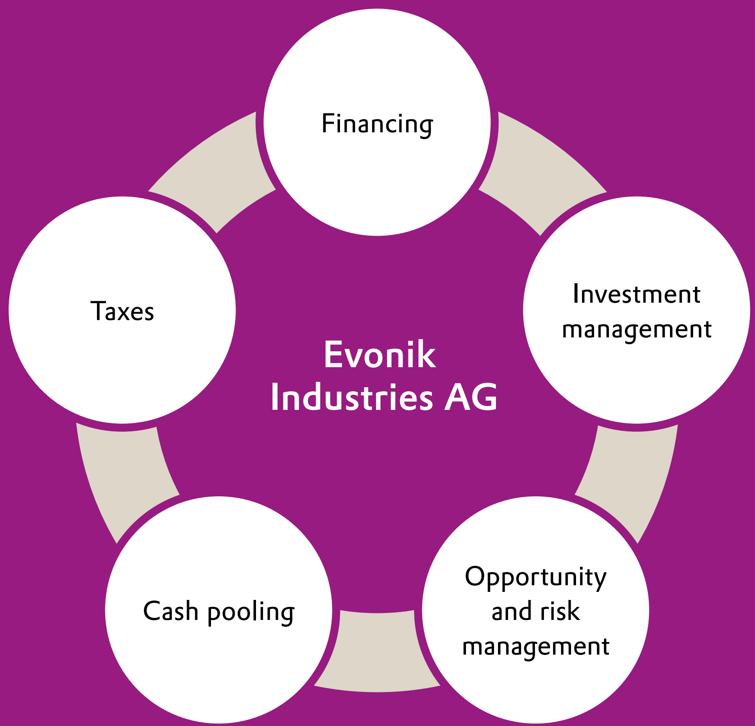


[a] As of December 31.

[1] Capital expenditures for intangible assets, property, plant and equipment.
[2] See disclosures pursuant to section 160 paragraph 1 no. 2 German Stock Corporation Act (AktG), note 6.9 p. 128 ff.

3. Performance of Evonik Industries AG

Evonik Industries AG provides the principal holding functions for the companies in the Evonik Group



"Evonik's dividend is stable, even in challenging economic conditions."

Maike Schuh
Head of Accounting & Financial Services

€1.15
dividend per share

4.2%
dividend yield

Evonik Industries AG, Essen (Germany), is the parent company of the Evonik Group. It holds direct and indirect stakes in all subsidiaries in the Evonik Group. The annual financial statements for Evonik Industries AG have been prepared in accordance with the accounting standards set out in the German Commercial Code (HGB) and the German Stock Corporation Act (AktG).

The earnings performance of Evonik Industries AG is essentially dependent on income from its subsidiaries, income and expenses relating to corporate financing, and portfolio management activities. Financial management is therefore based on an earnings indicator that contains all these effects: net income.

The 34 percent reduction in sales to €467 million was principally attributable to a change in invoicing processes for the procurement of raw materials. Evonik Industries AG now acts as a procurement intermediary, and the raw material purchases are made directly by the Group companies. Consequently, the cost of materials dropped 78 percent to €58 million. Personnel expense was €359 million, a decrease of 13 percent compared with the prior-year figure, which contained expenses for the establishment of provisions in connection with the SG&A program to reduce administrative and selling expenses. Other operating income increased to €611 million, mainly due to income of €104 million from the reversal of provisions and to currency translation gains. In the gross presentation, currency translation gains of €454 million (2018: €420 million) are shown in other operating income, while the corresponding currency translation losses of €442 million (2018: €419 million) are shown separately in other operating expense. The net effect was a gain of €12 million (2018: €1 million).

Income from investments rose 161 percent to €1,474 million. This increase was due to higher income from profit-and-loss transfer agreements, which was in turn mainly due to the divestment of the methacrylates business. The write-downs of financial assets and current securities totaling €6 million related to other securities. Write-ups of financial assets and current securities totaling €17 million related to shares in affiliated companies.

The net interest position improved considerably year on year from −€136 million to €28 million. This was mainly due to income in connection with the valuation of pension assets and income from the reversal of provisions for interest. In the previous year, by contrast, the valuation of pension assets resulted in interest expense. Net interest also contains interest income and expense from the group-wide cash pool, which is concentrated at Evonik Industries AG.

Income before income taxes increased to €1,227 million, principally as a result of high income from profit-and-loss transfer agreements and higher interest income. Income tax expense was €245 million, compared with €121 million in 2018.

The **net income** of Evonik Industries AG, calculated on the basis of the German Commercial Code, was €982 million, which was €1,045 million higher than in 2018.

After allocating €32 million to retained earnings, the distributable profit is €950,000,000. A proposal will be put to the annual shareholders' meeting that €535,900,000 of the net profit should be paid out, giving a **dividend** of €1.15 per share. Further, €414,100,000 should be carried forward to 2020.

Income statement for Evonik Industries AG T22

in € million	2018	2019
Sales	705	467
Other own work capitalized	2	1
Other operating income	484	611
Cost of materials	−263	−58
Personnel expense	−415	−359
Depreciation and amortization of intangible assets, property, plant and equipment	−24	−26
Other operating expense	−855	−866
Operating result	**−366**	**−230**
Income from investments	564	1,474
Write-downs of financial assets and current securities	−15	−6
Write-ups of financial assets and current securities	11	17
Net interest income/expense	−136	−28
Income before income taxes	**58**	**1,227**
Income taxes	−121	−245
Income after taxes	**−63**	**982**
Net income	**−63**	**982**
Profit carried forward from the previous year	234	–
Withdrawals from (+)/allocations to (−) retained earnings	365	−32
Net profit	**536**	**950**

The total assets of Evonik Industries AG increased from €13.6 billion in the previous year to €14.0 billion. Financial assets mainly comprise shares in subsidiaries. The receivables mainly comprise financial receivables of €3.1 billion (2018: €3.6 billion), principally in connection with loans and cash pooling activities. Securities comprise units totaling €1.2 billion in two specialized funds, which were acquired in 2019.

Equity increased by €0.4 billion to €6.4 billion, mainly as a consequence of the high net income. The equity ratio increased from 44.0 percent in 2018 to 45.7 percent. The receivables and liabilities reflect the group-wide financing activities of Evonik Industries AG in its role as the holding company for the Group. Payables include financial liabilities of €6.8 billion (2018: €6.6 billion). €4.9 billion (2018: €4.8 billion) of this amount are liabilities to affiliated companies, principally in connection with cash pooling activities. A further €1.8 billion (2018: €1.8 billion) relates to corporate bonds.

Balance sheet for Evonik Industries AG T23

in € million	Dec. 31, 2018	Dec. 31, 2019
Assets		
Intangible assets, property, plant and equipment	69	54
Financial assets	8,998	8,454
Non-current assets	**9,067**	**8,508**
Inventories	6	–
Receivables and other assets	3,884	3,477
Securities	–	1,197
Cash and cash equivalents	604	837
Current assets	**4,494**	**5,511**
Prepaid expenses and deferred charges	15	12
Total assets	**13,576**	**14,031**
Equity and liabilities		
Issued capital	466	466
Capital reserve	721	722
Retained earnings	4,246	4,278
Net profit	536	950
Equity	**5,969**	**6,416**
Provisions	777	742
Payables	6,830	6,873
Total equity and liabilities	**13,576**	**14,031**

Opportunities and risks

The most significant operating subsidiaries in Germany have profit-and-loss transfer agreements with Evonik Industries AG. In line with the central financing strategy of the Evonik Group, most internal and external financing transactions are handled by Evonik Industries AG. Consequently, Evonik Industries AG is essentially exposed to the same risks and opportunities as the Evonik Group. Further information can be found in the opportunity and risk report p. 53 ff.

Outlook[1] for 2020

We anticipate that there will be a significant drop in the earnings of Evonik Industries AG in 2020 compared with the high level reported for 2019. In particular, income from investments will be lower than the prior-year figure, which was dominated by the divestment of the methacrylates business. In addition, there will be further intragroup mergers of subsidiaries in 2020 as we optimize our legal structures. The resulting losses from intragroup mergers will also reduce income from investments. Further, we assume that income from the valuation of pension assets will be below the high level reported in 2019.

Report on relations with affiliated companies

A report on Evonik Industries AG's relations with affiliated companies has been prepared in accordance with section 312 of the German Stock Corporation Act (AktG). It concludes with the following declaration: "Our company received adequate remuneration or compensation for each of the transactions set out in this report on relations with affiliated companies under the circumstances known to us at the time when the transactions were undertaken. No actions were performed or omitted at the instigation of such companies."

[1] For details of the assumptions, see section 7. Report on expected developments p. 63 ff.

4. Research and development

Innovative capability and proximity to customers as the basis for profitable growth

Our vision	• Leading in innovation
Innovation strategy	• Concentrate on growth fields • Encourage transformative innovations • Open collaboration
Innovation culture	• Be prepared to take risks • Trust, openness, transparency • Share knowledge
Innovation goals	• Increase the value of the innovation pipeline • New products, applications, and processes should make a strong contribution to sales and profits

"Focusing on our innovation growth fields leads to transformative innovations with substantial growth potential."

Dr. Ulrich Küsthardt
Head of Corporate Innovation

3.3%
R&D ratio

47%
patent-driven sales

Our vision for Evonik: leading in innovation

The link between innovative power 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 in highly attractive markets with above-average growth rates, which we use to achieve our ambitious targets. Our vision is to be an innovation leader.

We work with customers and external partners across business boundaries and provide incentives for new discoveries so that good ideas can be turned into marketable innovations. Through strategic investment, we aim to commercialize the findings of these growth fields faster and more profitably.

Research and development (R&D) in our strategic innovation unit, Creavis, and in our growth 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

Through these innovation growth fields, we aim to achieve additional sales of more than €1 billion by 2025.

We made considerable progress in the Additive Manufacturing innovation growth field in 2019. Our goal here is to position Evonik as a solution provider for ready-to-use high-performance materials. Using the technology we acquired in January 2019 from Structured Polymers Inc., Austin (Texas, USA) for the production of specialty polymer powders, we have launched a novel copolyester elastomer powder. The new material is both tough and flexible and complements our range of products for powder-based 3D printing technologies.

Through our venture capital unit, we also invested in an Israeli software start-up that supports industrial companies in the introduction of 3D printing. The software from Castor Technologies Ltd., Kfar Hess (Israel) assesses the printability of a component, the ideal printing material, and calculates production cost and lead time. That helps producers decide whether and how to use 3D printing in their production processes. In the future, this investment will enable Evonik to offer services to customers so they can test the printability of their components.

Another strategic cooperation in the Additive Manufacturing growth field is the venture investment in the Chinese start-up Meditool (Shanghai) Enterprise Co., Shanghai (China), which manufactures implants for neuro and spine surgery. Meditool develops its own hardware and software systems, which can read and process images directly from commonly used magnetic resonance imaging (MRI) or computed tomography scan (CT) devices. A readily printable 3D model is generated by the software and sent to the printer. The implants are 3D printed with polyetherether ketone (PEEK), a high-performance polymer supplied by Evonik.

Successful innovation management

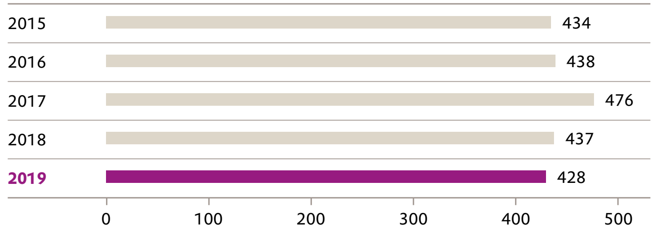
Evonik has an extensive **patent strategy** to protect new products and processes. The value and quality of our patent portfolio has increased steadily in recent years. In 2019, we submitted around 225 new patent applications. Patent-driven sales[1] accounted for around 47 percent of the company's total sales. In 2019, products and applications introduced in the past five years accounted for 13 percent of Evonik's consolidated sales. R&D expenses declined by 2 percent to €428 million in 2019 as a result of our continuous, target-oriented management.

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.

Our **innovation pipeline** comprises completely new business options as well as activities to secure and enhance the prospects of existing business operations. Alongside our product and process innovations, the focus includes innovative business models and system innovations. Our project portfolio is aligned to the differing strategies of the various business lines, and we focus on growth areas with high sustainability benefits.

R&D expenses C20

in € million



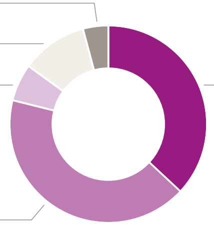
Prior-year figures restated. The figures for 2015 to 2017 contain the methacrylates business, which was divested in July 2019.

[1] Product sales are defined as patent-driven if there is at least one relevant patent in force worldwide.

Targeted research and development

Around 85 percent of our R&D is performed by our manufacturing **chemical segments.** That includes, first and foremost, research geared specifically to their core technologies and markets and to the development of new business. An above-average proportion of our R&D funding is allocated to our growth segments, Nutrition & Care and Resource Efficiency. The Performance Materials segment focuses on optimizing products and processes.

Breakdown of R&D expenses C21



Creavis concentrates on mid- and long-term projects that support Evonik's growth and sustainability strategy and provide access to new business options. In addition, it identifies future-oriented topics and acts as an internal incubator for Evonik. Using scenario methods, Evonik scientists have developed future visions for specialty chemicals. This is the world's biggest study of this type into the future of specialty chemicals, 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. Work on innovation projects of a cross-organizational nature is organized in project houses. Experts from the organizational units involved in the project house normally work together for three years on the project house's development topics.

Tissue Engineering, our twelfth project house, which was established at the R&D hub in Singapore in 2018, is working on new solutions to grow living cells. Its work supports the Healthcare Solutions innovation growth field. The aim is to produce materials for biological implants for medical applications. Research is currently being carried out into optimized approaches to skin models with better predictive power and scalability, plus excellent reproducibility 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 and Siemens have launched Rheticus II, 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 (CO_2), water, and electricity from renewable sources. In the Rheticus I 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).

Evonik also obtains access to innovative technologies and new business options through its **corporate venture capital** activities. In 2019, Evonik set up a second venture capital fund. It has allocated €150 million to this fund, more than doubling the total volume to €250 million. We invest specifically in specialized technology funds and start-ups of strategic relevance to Evonik. In this way, we gain insights into innovative developments at a very early stage. More than 30 investments have been made since 2012. In addition to investments to strengthen the Additive Manufacturing innovation growth field, Evonik invested, among other things, in Modern Meadow (New Jersey, USA). Modern Meadow's pioneering technology produces animal-free collagen, a protein normally found in animal hides, via a fermentation process using yeast cells. The biofabricated material produced by this animal-free method more closely resembles natural leather than synthetic equivalents because it contains collagen, the main structural component in cow hides.

A culture of innovation is a key factor in a company's **innovative capability**. Alongside commitment, passion, and stamina, that entails the strength to halt R&D projects if their prospects of success are too low, as well as a constructive attitude to mistakes. We therefore regard Evonik as an open, learning company.

R&D at Evonik T24

	2019
R&D expenses	€428 million
R&D ratio	3.3%
Sales with new products and applications (developed in the past five years)	approx. 13%
Patent-driven sales	47%
No. of new patent applications filed	approx. 225
Patents held and pending	approx. 24,000
Registered/pending trademarks	approx. 6,900
R&D employees	approx. 2,560
R&D locations	38

5. Sustainability

We are convinced that only companies that act responsibly can be successful in the long term. Sustainability has long been a growth driver in many of our businesses.

Key elements of the Sustainability Strategy 2020+

Reduce absolute greenhouse gas emissions by 50% (2008–2025)

Introduce a global water management system

Integrate carbon pricing into investment decisions

"Our goal is to translate sustainability into profitability to make life better for as many people as possible. Day by day. Today and for future generations."

Stefan Haver
Head of Corporate Responsibility

1.18
accident frequency

1.10
incident frequency

Responsible corporate management

Evonik's aim is to be a best-in-class specialty chemicals company. Our Sustainability Strategy 2020+ is an expression of this aspiration. More and more customers expect us to support them in the development of resource-saving applications and help them achieve their sustainability goals. That goes hand in hand with our responsibility for our employees, the environment, and society.

Extensive voluntary commitments and undertakings

Evonik is committed to observing internationally recognized standards, for example, the ten principles of the UN Global Compact, as well as its own more far-reaching guidelines and principles of conduct. We are also involved in many networks such as Chemie[3], the sustainability initiative of the German chemical industry, and the World Business Council for Sustainable Development (WBCSD). Together with our code of conduct, our global social policy, our environment, safety, health and quality (ESHQ) values and the executive board's policy statement on human rights provide a framework for responsible corporate management.

Implementing our Sustainability Strategy 2020+

In February 2019, the executive board adopted our new Sustainability Strategy 2020+, which we are now shaping and putting into practice. Key elements are integrating sustainability into strategic management processes, carbon pricing for all investments, ambitious targets for the reduction of CO_2 emissions, and the introduction of global water management.

Transparency and measurability are important

Extensive transparency and soundly based analytical methods are our response to the growing interest shown by key stakeholders in our sustainability activities. The objective of our sustainability analysis 2.0 is to make visible the business success of products and solutions that contribute to sustainable development. This externally validated methodology, which was developed in the previous year, was used for the first time in 2019.

Moreover, 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 highlights the value we create for society.

Intensive dialogue with stakeholders

Dialogue with our stakeholders is important to give us a better understanding of different perspectives and regularly review our own positions. Findings and impetus from our stakeholder dialogues facilitate the timely identification of upcoming trends and market developments. That enables us to customize our products and solutions to meet the needs of our customers and markets.

We use a variety of formats for dialogue with our stakeholders. In 2019, they included, for example, an exchange of experience on the fascination of innovation with selected representatives of science, business, and non-governmental organizations. The motto of the Evonik Perspectives stakeholder forum, which was attended by around 150 stakeholders, was "Making the future go round—The circular economy as an opportunity for Germany as a business center."

We also use feedback from these events to validate our materiality analysis and confirm and, where relevant, fine-tune the relevance of issues. These regular reviews are used to continuously improve and develop our stakeholder engagement. The three topics with the highest priority, according to all stakeholder groups, are sustainable products/solutions for our customers, climate change, and efficient handling of scarce resources/circular economy. We therefore intend to step up our focus on these topics in the future.

5.1 Employees

Employees are the foundations of our success

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.

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.

Global management

As part of our annual strategy process, we ensure continuous development of our human resources activities in line with our materiality analysis and human resources strategy. Our HR strategy comprises the areas attract, develop, perform, retain, and lead. We use a global system of HR performance indicators to measure our success.

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. Development of corporate executives is allocated directly to the chairman of the executive board.

Systematic 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.

Successful employer branding

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 indicator used to measure our attractiveness as an employer is early employee turnover[1].

In our fifth group-wide employee survey in November 2018, around 35,000 employees[2] 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 2019, we conducted more than 25 surveys on specific issues. The topics ranged from monitoring of 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.

New 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.

Long-term jobs

Our aim is to offer our employees an attractive contractual status to provide security for their long-term planning. Therefore, 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. Since the chemical industry requires a large number of highly qualified employees, fewer agency staff are used than in other sectors of manufacturing industry. Agency staff only accounted for a low proportion of Evonik's total workforce as of December 31, 2019.

[1] Termination of employment by new hires in the first year of employment.
[2] Including employees of the methacrylates business, which was divested in July 2019.

Employees by contractual status T25

	2018	2019
Employees	32,623	32,423
of which employees on permanent contracts	29,406	29,568
of which employees on limited-term contracts	1,828	1,594
of which apprentices/trainees[a]	1,389	1,261

Prior-year figures restated.
[a] Including a proportion of apprentices abroad and apprentices with an Evonik contract who are being trained for third parties.

Awards 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 ranked among the most popular employers in 2019 (Top Employer Institute).

Employee survey 2018

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 percent. Following a detailed analysis of the results, we have derived more than 2,000 measures and held numerous workshops around the world to communicate the results.

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.

Key data on employee retention T26

	2018	2019
Employee turnover in %	6.7	5.2
Early turnover rate in %	0.9	0.9
Average length of service in years	14.5	14.8

Prior-year figures restated.

Global remuneration policies

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.

Collective agreements on remuneration cover almost 100 percent of our employees in Germany and around 70 percent of our employees worldwide. Around 97 percent of our sites and regions have performance- or profit-oriented incentive systems.

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. Evonik offers voluntary social benefits to employees in all regions where it has a presence.

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.

Work-life balance

Evonik places value on an HR policy that is family-friendly and geared to different phases in people's lives. 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. 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 our nutrition concept, which aims to raise awareness of healthy eating. Worldwide, many of our sites also offer a variety of sports activities.

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.

Diversity enriches

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.

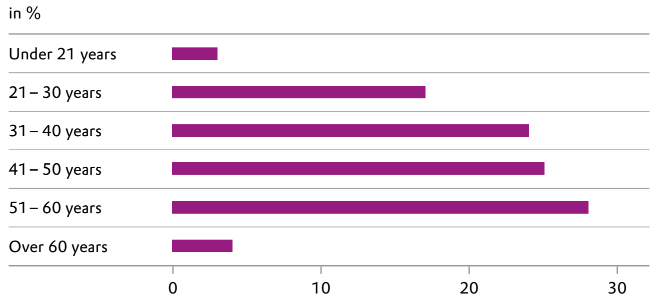
Our diversity council ensures that diversity is a success factor that is deeply embedded in our organization and drives it forward through cross-business criteria. The council includes members of the executive board, the heads of the segments and regions, and executives from various organizational units.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

Our 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 this are available at all sites.

Age structure

In 2019, the average age of Evonik employees was 42 years. 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.

Age structure in the Evonik Group C22



Higher percentage of women

Increasing the proportion of women in our company worldwide and at all levels is one of Evonik's declared objectives. At present, 26 percent of our employees are female.

The proportion of female managers was unchanged at 25 percent in 2019. When recruiting staff for management functions, we focus on academic disciplines of relevance to us, including their gender distribution.

Key data on diversity T27

	2018	2019
Women as a proportion of the total workforce in %	26	26
Female managers in %	24	25
Women in top management in %	11	13
Nationalities	102	101

Prior-year figures restated.

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, making it available to women at all management levels.

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. Around 43 percent of employees in management functions come from countries other than Germany. Group-wide, the proportion in middle management is around 27 percent.

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.

Learning strategy for continuing professional development

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.

Training ratio remains high

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.

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 reflected in exam results.

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.

In the reporting period, Evonik invested around €500 per employee in training and continuing professional development. That was a total of €16 million.

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.

Healthy employees are our goal

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.

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.

Based on occupational health and safety requirements in Germany, we have set out policies for our global workforce. The occupational safety committees at our sites in Germany meet at least four times a year. 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, as well as through an extensive occupational health and safety reporting system. Action is taken if there are indications that there is scope for improvement or deviations from the applicable guidelines. Where necessary, improvements are suggested or required.

Achieving our health protection goals is measured by our Occupational Health Performance Index, which comprises parameters from the areas of occupational medicine, health promotion, and emergency medical management. In 2016, we defined a long-term target of ≥ 5.0[1]. According to the reports submitted by our organizational units, we achieved this.

As part of its preventive health promotion activities, Evonik uses suitable measures to prevent occupational illnesses and work-related health impairments. In this context, Evonik regularly reports on occupational illnesses.

[1] The maximum that can be achieved is 6.0.

Corporate health promotion

Our well@work program focuses 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.

Headcount hardly changed

The Evonik Group had 32,423 employees at year-end 2019. That was 3,620 fewer than at year-end 2018, principally as a result of the divestment of the methacrylates business, which is reported as a discontinued operation. The headcount in the continuing operations dropped by 200, mainly due to the implementation of the program to optimize administrative functions and some smaller optimization efforts in our chemical segments.

Employees by segment T28

	Dec. 31, 2018	Dec. 31, 2019
Nutrition & Care	8,218	8,090
Resource Efficiency	10,270	10,153
Performance Materials	1,539	1,622
Services	12,091	12,037
Other operations	505	521
Continuing operations	**32,623**	**32,423**
Discontinued operations	3,420	–
Evonik	**36,043**	**32,423**

Prior-year figures restated.

Personnel expenses, including social security contribution and pension expense, declined by 4 percent to €3,156 million. Personnel expenses were therefore 24.1 percent of sales (2018: 24.7 percent).

5.2 Safety

Safety as a management task

Our Safety at Evonik safety culture initiative has been developed into a group-wide management approach for all aspects of occupational and transportation safety. It defines binding principles of action that give managers and employees reliable guidance on safety-compliant conduct.

To meet its management responsibility in occupational and plant safety, Evonik has globally valid policies and operating procedures that are firmly anchored in an integrated management system. Observance of these rules is monitored via a central audit system. Business-specific implementation is defined by the segments. Steering bodies at Group level ensure that mission-critical processes are standardized across the segments. Implementation of these requirements and any additional action required are tracked through group-wide targets based on key performance indicators. Accident frequency and severity are also included in the variable remuneration of the executive board.

Our crisis and incident management focuses 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 overriding aim is to avoid all accidents and incidents. We set annual limits for occupational safety and plant safety indicators.

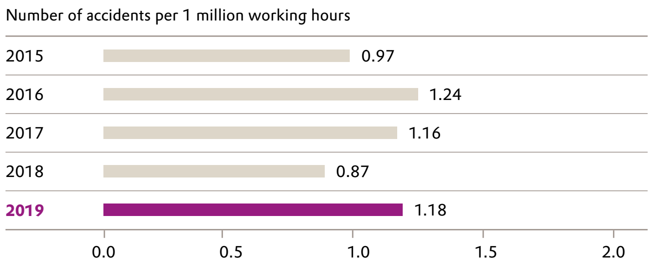
For 2020 these are unchanged:
- Accident frequency should not exceed 1.30.
- The incident frequency rate should not exceed 1.10.

Accident frequency indicator below the upper limit

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

Accident frequency[1] is the performance indicator for occupational safety at Evonik. In 2019, the accident frequency rate for Evonik employees[2] was within our defined maximum limit of 1.30. However, it was 1.18, which was above the previous year's very good level (0.87). In 2019, 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 C23



The figures up to 2018 contain the methacrylates business, which was divested in July 2019.

[1] Number of work-related accidents (excluding traffic accidents) resulting in absences of at least one full shift per 1 million working hours.
[2] Evonik employees including employees from staffing agencies.

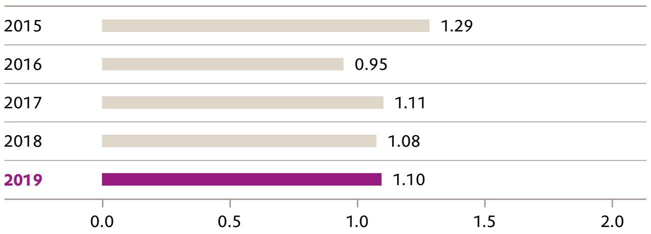
There were no fatal accidents at work involving our employees or contractors' employees at our sites in the reporting period. However, there was one fatal traffic accident involving an employee traveling to work in Belgium. The accident frequency rate for contractors' employees[1] was 3.03, slightly 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

Incident frequency indicator at a very good level

Safety is part of our DNA: It is the basic precondition for the operation and performance of our facilities. Incident frequency[2] is used to measure the safety of our plants. Incident frequency was 1.10, so we once again achieved our goal of remaining below or at most at the 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 C24

Number of incidents per 1 million working hours



The figures up to 2018 contain the methacrylates business, which was divested in July 2019.

Our goal is to constantly improve our safety performance. We have therefore introduced a new key performance indicator[3] (KPI) to measure energy and product leakages below the present thresholds. This new KPI also measures the number of incidents per 200,000 working hours in our production facilities, compared with per 1 million working hours in the past. In this way, we can make safety management even more efficient and more effective. We expect more detailed data collection and evaluation to deepen our understanding of the potential for improvement. At the same time, it means Evonik has adopted the recommendations of the International Council of Chemical Associations (ICCA).

5.3 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. As a specialty chemicals company, we are aware that our production may possibly impact the environment. We take many steps to minimize this.

Worldwide 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, 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 proportion of output covered by validation varies because of the addition of new units. However, it is always between 95 and 100 percent. Implementation of our strategy and management system is monitored via a central audit system. 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. Our global ESHQ (environment, safety, health, and quality) strategy is defined by the HR Executive Committee.

Climate change

According to our materiality analysis, climate change is one of the three most important sustainability issues. As well as producing products that are more sustainable and enhance efficiency for our customers, we are reducing our CO_2 emissions by modernizing and renewing our energy infrastructure. In 2019, we introduced carbon pricing as an additional investment criterion.

Responsibility at the highest level

Climate change is a matter of the utmost importance for the entire executive board. Direct 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. 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 HR Executive Committee, which defines the strategic approach to 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

[1] Calculation based on assumptions and estimates. The method of calculating working hours has been changed. This prevents direct comparison with the prior-year figure.
[2] Number of incidents involving the release of substances, fire, or explosion (process safety performance indicator defined by the European Chemical Industry Council, Cefic) per 1 million working hours.
[3] As defined by Cefic.

the status and progress of the various programs with the heads of the segments and corporate functions on a quarterly basis.

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[1] by 12 percent
- Reduce specific water intake[2] by 10 percent

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

Status of our environmental targets[a] T29

in %	2018	2019
Reduction in specific greenhouse gas emissions[b]	–17	–17
Reduction in specific water intake	–6	–5

[a] Compared with the reference year (2012).
[b] Includes both scope 1 and scope 2 emissions. Scope 2 emissions are calculated using the market-based method in accordance with the Greenhouse Gas Protocol.

The divestment of the methacrylates business in July 2019 had a major influence on the development of our environmental indicators in 2019. Overall, this affected 14 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. As a result, the specific data for 2019 are no longer comparable with the data for 2018 because the differences in the product portfolio, production volumes, and environmental impact are too significant. For example, 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.

New environmental targets for climate protection

Since we achieved our target for the reduction in specific greenhouse gas emissions ahead of schedule, the executive board adopted new environmental targets in February 2019. Our target of a 50 percent reduction in absolute scope 1 and 2 emissions[3] 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. 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, we intend to improve upstream scope 3 emissions by 3 percent a year.

The use of of alternative technologies and efficient production processes will help us achieve our targets. 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 build a gas and steam turbine power plant in Marl (Germany) to replace the last coal-fired power plant at this site from the end of 2022. This will reduce our CO_2 emissions by up to 1 million metric tons p.a. At the same time, the new plant's modern power and steam generation will be far better able to meet the constantly fluctuating demand at the chemical park in Marl (Germany). In addition to the chemical park in Marl, our other German sites will benefit from the new installations, because they will ensure economical in-house generation throughout Germany.

Lower greenhouse gas emissions

Scope 1 greenhouse gas emissions fell 13 percent to 4.92 million metric tons CO_2 equivalents in 2019, mainly as a result of the divestment of the methacrylates business. The sum of scope 1 and scope 2 (net, market-based) greenhouse gas emissions decreased by 17 percent to 5.49 million metric tons CO_2 equivalents for the same reason. 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. Scope 1 and 2 greenhouse gas emissions have been reduced by 42 percent compared with the reference base (2008).

The 24 facilities operated by Evonik that fall within the scope of the European Union's Emissions Trading System (EU ETS) emitted 3.3 million metric tons of CO_2 in 2019 (2018 including the methacrylates business: 3.9 million metric tons CO_2).

Carbon pricing factored into investment calculations

In February 2019, we introduced country-specific carbon pricing for all investments as a basis for effective management of our new CO_2 reduction target. This is unrelated to present or foreseeable

[1] Greenhouse gas emissions relative to production output.
[2] Excluding site-specific factors in the use of surface water or groundwater.
[3] Scope 1 comprises direct energy and process emissions, and scope 2 comprises emissions from purchased electricity and heat. Scope 3 contains indirect emissions such as emissions from the production of purchased raw materials.

regulatory requirements. It adds another relevant risk assessment indicator to the existing planning parameters for investments. The aim is to be able to reflect the expected development of carbon-intensive investments in a reliable and harmonized manner in all investment applications worldwide. We assume that, in ten years at the latest, relevant market prices or regulatory pricing systems of at least €50 per metric ton CO_2 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 for the next ten years, showing the rise to the assumed final price.

Information based on TCFD for the first time

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, in 2019, Evonik again issued detailed strategies, data, and development paths on climate change.[1] For the first time, we have presented key climate-related information in a TCFD index[2] using the TCFD structure, divided into the categories governance, strategy, risk management, and metrics and targets.

Water management

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

Efficient use of water

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.[3]

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.

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 and identified sites affected by water shortages. We have conducted detailed local interviews at the sites most affected and now intend to develop specific action plans.

In place of our previous group-wide target for a reduction in specific water intake, we are developing site-specific action plans. Taking into account projections for the climate 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.

5.4 Value chain[4]

We drive forward our sustainability activities along the value chain. 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.

Preventing bribery and corruption

Evonik is committed to fair competition for the benefit of customers, shareholders, and other stakeholders. All employees are required to act lawfully in the business environment. We respect the independence of officials. All forms of corruption, including "facilitation payments," are banned at Evonik. We deliberately set stricter standards than the law in some countries.

Our rules on preventing corruption are set out in our code of conduct, our master gifts and hospitality policy, and our policy for the use of external third parties for distribution and dealing with authorities (policy on external intermediaries).

Our code of conduct is binding for all Evonik employees worldwide, including the executive board and the governance bodies of all Evonik companies. They are all required to comply with the rules set forth in the code of conduct, to ensure they are familiar with its content, and to take part in the relevant training.[5]

[1] This information is available on our website **http://evonik.com/CDP-ClimateChange_2019**
[2] See TCFD index (outside the scope of the audit) **p. 180.**
[3] 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.
[4] This section was outside the scope of the audit.
[5] See the compliance section in the corporate governance report **p. 75 ff.**

Supply chain

Code of conduct for 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.

We have therefore issued a special code of conduct for suppliers, setting out binding requirements for these business partners. This 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. 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.

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 validation and evaluation of suppliers, and on the other, we specifically monitor certain raw materials. These include renewable raw materials and raw materials where there is a potential supply risk or reputational risk, for example, conflict minerals. We have implemented strategic procurement concepts for these "critical raw materials," whose availability is vital for our production processes. These processes are integrated into a management system, where they are mapped.

In the validation and evaluation of our suppliers, we work systematically both to extend strategic relationships with suppliers and to validate new suppliers. This covers economic and quality-related requirements as well as environmental, social, corporate governance, and human rights aspects.

Procurement[1] 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. Alongside economic requirements, our procurement strategy takes account of sustainability aspects such as health, quality, safety, social factors, and environmental protection.

Supplier assessment

Evonik also drives forward sustainability and transparency in the supply chain through the sector initiative Together for Sustainability (TfS), where we are one of the six founding members. 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 a member of the initiative, Evonik is also subject to TfS assessments. Our gold rating positioned us among the top-rated companies again in 2019.

We have set ourselves the following global goals for our strategic supplier management:

- 100 percent of all raw materials suppliers where annual procurement volume is >€100 thousand to be covered by TfS assessments by year-end 2025.
- Conduct at least 20 supplier sustainability audits p.a. under the shared audit principle of the TfS initiative.
- By 2020: Evaluate the sustainability performance of 90 percent of suppliers of critical raw materials[2].

In 2019, we conducted 26 sustainability audits and therefore met our target. In addition, the percentage of suppliers of critical raw materials evaluated was over 92 percent, so we are on track to meet the target for 2020.

Key data on the supply chain T30

	2018	2019
No. of sustainability audits (Evonik)	22	26
No. of sustainability assessments (Evonik)	130	117
No. of sustainability audits (TfS)	358	309
No. of sustainability assessments (TfS)	1,491	1,043

As a responsible company, Evonik meets its duty of care with regard to conflict minerals[3] in the supply chain and checks the origin of such substances delivered by its suppliers. Our screening in 2019 did not identify any use of conflict minerals.

Product stewardship

Through our products and solutions, we aim to make a measurable contribution to avoiding environmental impact and enhancing people's quality of life. This includes timely identification and evaluation of the potential health and environmental risks in our portfolio. We 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) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), product stewardship at Evonik includes voluntary commitments that go beyond these regulations.

[1] For information on our current procurement activities, see section 2.4 Business conditions and performance p. 20 ff.
[2] We define these as raw materials that essential for our production operations.
[3] These are mineral raw materials from the Democratic Republic of Congo and its neighboring countries that are often used to finance armed conflicts.

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, which includes the Global Product Strategy. The key elements of our product stewardship have been defined in a product policy. 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.

We use the Chemicals Management System developed by Evonik to evaluate our substances. This system supports us in global product evaluation, analogously to a life cycle analysis. As an extension of this, our Chemicals Management System^{PLUS} is used for products containing substances of very high concern. These are subject to a more detailed examination to bring about a further reduction in the negative impact on people and the environment.

Respecting 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.

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 (for example, 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.

Our human rights risk map helps us identify and assess potential human rights and labor law risks. In addition, we have refined our human rights training programs, which are used in 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.

The German government's national action plan on business and human rights (NAP) is an initiative to improve human rights 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.

Social commitment

We produce where our markets and customers are. Consequently, we have production facilities in 26 countries on six continents. Local residents around our sites play an especially important part in stakeholder management at Evonik. At all our sites they have an elementary interest in experiencing Evonik as a reliable partner and want timely information on the latest developments at Evonik. We maintain contact with them, for example, through invitations to visit our sites, personal discussions, and written communication. The most important issues for local residents include the safety of our production sites, questions on current business development and operational changes, our appeal as an employer, and our local activities.

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 the arts, and sports.

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. The Evonik Foundation's support centers primarily on Germany, with a special focus on the regions close to Evonik's sites.

6. Opportunity and risk report

Group-wide risk management aims to identify risks as early as possible, define measures to counter and minimize them, and to make optimal use of opportunities

"Our risk management plays a key role in achieving our targets, especially in a challenging macroeconomic environment."

Rüdiger Eberhard
Head of Corporate Controlling

Material risks
(expected value >€100 million)

- Overall economic development
- Changes in exchange rates
- Development of margins for C_4 chemicals
- Threat of cyberattacks

Material opportunities
(expected value >€100 million)

- Overall economic development
- Changes in exchange rates

6.1 Opportunity and risk management

Risk strategy

Evonik's group-wide internal opportunity and risk management (referred to generically as risk management in this section) forms a central element in the management of the company. Our risk management includes a risk detection system, which meets the requirements for publicly listed companies. The aims are to identify risks as early as possible and to define measures to counter and minimize them. To ensure optimal use is made of opportunities, these also need to be recognized and tracked from an early stage. We only enter into entrepreneurial risks when we are convinced that we can generate a sustained rise in the value of the company and, at the same time, permanently limit possible negative implications.

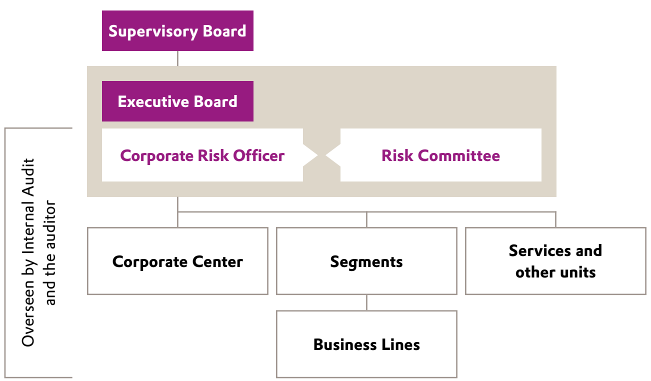
Structure and organization of risk management

At Group level, risk management is assigned to the chief financial officer and is organized on a decentralized basis in line with Evonik's organizational structure.

The segments, corporate divisions, and service units bear prime responsibility for risk management. That comprises early identification of risks and estimating their implications. Furthermore, suitable preventive and control measures have to be introduced and internal communication of risks must be ensured. Risk coordinators in the organizational units are responsible for agreeing on the relevant risk management activities. At all levels in the Group, systematic and timely risk reporting is a key element in strategic and operational planning, the preparation of investment decisions, projections, and other management and decision-making processes.

A central corporate risk officer coordinates and oversees the processes and systems. The corporate risk officer is the contact for all risk coordinators and is responsible for information, documentation, and coordination at Group level. Further responsibilities include ongoing development of the methodology used by the risk management system. The risk committee is chaired by the chief financial officer and composed of representatives of the corporate divisions. It validates the group-wide risk situation and verifies that it is adequately reflected in financial reporting. The supervisory board, especially the audit committee, oversees the risk management system.

Structure of risk management C25



In 2019, risk management again included all consolidated companies in the Evonik Group. At companies where we do not exert a controlling influence, we implement our risk management requirements primarily through our presence in management and supervisory bodies.

The internal audit function monitors risk management in our organizational units to make sure they comply with statutory and internal requirements and to ensure continuous improvement of risk management. The risk detection system is included in the annual audit in compliance with the requirements for listed companies. This audit showed that Evonik's risk detection system is suitable for timely identification of risks that could pose a threat to the company's survival.

The risk management system is based on the internationally recognized COSO Enterprise Management standard. It is implemented through a binding group-wide policy. Individual risks are systematically identified and managed with the aid of special risk management software. Their probability of occurrence and the possible damage (potential impact) are evaluated and documented, together with their expected value (product of probability of occurrence and potential impact). Analogously to current planning, the evaluation is based on a period of three years (mid-term planning). Opportunities and risks are defined as positive and negative deviations from the plan. The relevant indicators include adjusted EBITDA. In addition, longer-term opportunities and risks, including those relating to sustainability, are included.

The organizational units conduct an extensive annual risk inventory in connection with the mid-term planning process. They are required to provide details of the measures to be taken with regard to the risks identified, introduce them immediately, and track their timely implementation. Internal management (for example, reporting by the risk committee) takes a mid-term view. The opportunities and risks identified are classified as low, moderate or high (see opportunity and risk matrix C26). The evaluation is always based on a net view, in other words, taking into account risk limitation measures. Risk limitation measures can reduce, transfer, or avoid gross risks. Common measures include economic counteraction, insurance, and the establishment of provisions on the balance sheet.

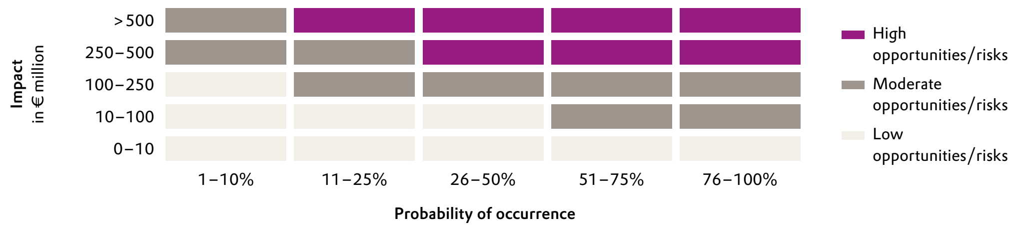
The risk inventory is supplemented by quarterly reviews of all opportunities and risks relating to the present year, both to spot changes in the opportunities and risks that have already been identified and to identify new risks and opportunities.

All high and moderate risks and opportunities with an expected value of over €100 million in the mid term are classified as material individual risks and opportunities. The expected value is used exclusively as a basis for prioritization and to focus reporting on key issues.

6.2 Overall assessment of opportunities and risks

Given the measures planned and implemented, as of the reporting date no risks have been identified that—either individually or in conjunction with other risks—could jeopardize the continued existence of Evonik as a whole, including Evonik Industries AG in its role as the holding company for the Group.

Opportunity/risk matrix C26



For 2019 we expected more risks than opportunities. During the year, the opportunities and risks were reduced considerably, mainly due to the divestment of the methacrylates business. Overall, more risks than opportunities materialized in our segments. Our reporting distinguishes between the categories markets and competition, legal and compliance, and process and organization. The main parameters influencing the risk categories in terms of both opportunities realized and risks that materialized resulted from the development of specific market and competitive situations. From the present standpoint, the risks for 2020 again outweigh the potential opportunities. Compared with 2019, both the opportunities and the risks for the Evonik Group have decreased, mainly because of the divestment of the methacrylates business.

Material individual risks and opportunities for the Evonik Group are changes in exchange rates and the overall economic development. Further material risks relate to margins for C_4 chemicals and the increasing threat of cyberattacks. Measures to reduce the risks include general economic mitigation measures and, especially with regard to changes in exchange rates, the use of hedging instruments. Sections 6.3 p. 56 ff., 6.4 p. 60 ff., and 6.5 p. 62 present the material individual risks and opportunities, along with further opportunities and risks in each category. Except where otherwise indicated, they apply for all segments.

6.3 Market and competition opportunities and risks

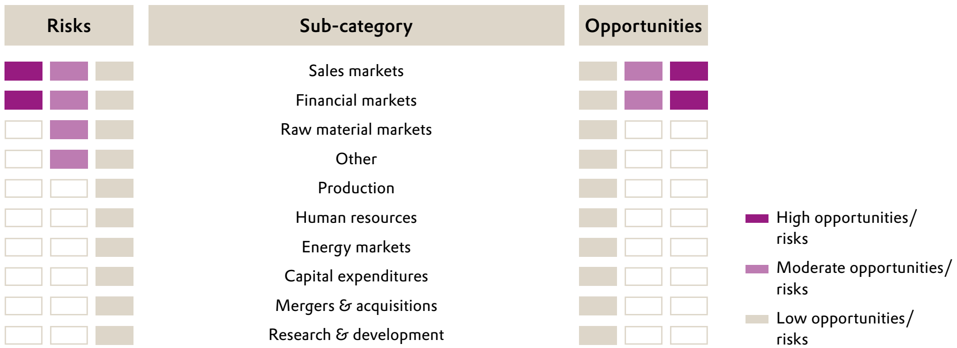
In accordance with our internal management, opportunities and risks in the market and competition category are allocated to risk quantification classes within sub-categories. Chart C27 shows the highest class to which an individual risk or opportunity is allocated in each sub-category. Individual opportunities and risks may also be allocated to the lower risk classes.

1. Sales markets

The global macroeconomic development entails both opportunities and risks for Evonik. The drivers of these opportunities and risks are, in particular, the continued development of trade disputes, the impact of Brexit, and the economic development of major economies. Developments in key sectors of the economy can affect demand in the market areas of relevance for Evonik. Global economic trends influence the development of Evonik's earnings and cash flows. We counter these economic risks by constantly monitoring the macroeconomic environment, optimizing cost structures and competitive positions in our established areas of business, setting up production facilities close to our markets, and extending businesses in our portfolio that have low cyclical exposure.

Alongside the general demand situation, intensive competition in the various market segments harbors both opportunities and risks. These may result from either demand in specific markets or the competitive situation in various industries. Changes in demand can have a considerable impact on our business volume and sales. There are associated opportunities and risks, among other things, for our amino business and our C_4 chemicals business. In our market segments, climate change could also result in both opportunities and risks for Evonik. There could be a significant hike in the rising demand from our customers for products that save resources, resulting in a correspondingly positive impact on our business. Additional regulations or weather-related incidents could put pressure on production costs and, at the same time, lead to rising demand for our resource-efficient products. To reduce the risks, we monitor the specific developments very carefully and work closely with our customers on the development of sustainable solutions.

Opportunity and risk classes within the market and competition category C27



Competitors in emerging markets and developing countries can increase competitive pressure through new capacities and aggressive pricing policies that can impair our selling prices and volume trends. To counter this, we are broadening our foreign production base and gaining access to new markets in high-growth regions such as Asia and South America. To reduce these risks, the operating units affected also use various methods of increasing customer loyalty and gaining new customers, enter into strategic research alliances with customers, and extend the services offered along the value chain.

We are constantly developing attractive and competitive new products and technologies to mitigate the risk that chemical products could be replaced by new, improved, or less expensive materials or technologies. Here, the opportunities and risks also relate to the sale of licenses. One potential risk factor for our amino acids business, for example in Asia, is the possible impact of substandard food quality and food safety. We utilize opportunities for profitable future growth by gaining access to new markets as part of our strategic development.

Customer concentration is basically low in our chemical segments. None of the end-markets that we supply accounts for more than 20 percent of sales. Nevertheless, some operational units, especially in the Nutrition & Care, Resource Efficiency, and Services segments have a certain dependence on key customers. In the operating business, this applies in particular to production facilities erected in the direct vicinity of major customers. The possible loss of a major customer could result in lower sales and in impairment losses on receivables and investments, as well as impacting our long-term raw material agreements or the financial structure of our affiliates.

2. Financial markets

As a rule, liquidity, credit default, currency, and interest rate risks, and the risks relating to pension obligations are managed centrally. All material financial risk positions are identified and evaluated in accordance with group-wide policies and principles. This forms the basis for selective hedging to limit risks. In the use of derivative and non-derivative financial instruments to minimize the risks, Evonik applies the principle of separation of front office, risk controlling, and back office functions and takes as its guide the banking-specific minimum requirements for risk management (MaRisk) and the requirements of the German legislation on corporate control and transparency (KonTraG). Financial derivatives[1] are only used in connection with corresponding hedged items.

Exchange rate volatility

Transaction-related exchange rate risks arise from the translation of operating monetary assets and liabilities on the balance sheet into the functional currency of the respective Group company. The resulting net risk is normally hedged in full using derivatives. Further, our transaction-related currency management takes account of forecast cash inflows and outflows, which are hedged on the basis of forecast transactions, with a target hedging rate of up to 75 percent. Material opportunities and risks may arise from the remaining unhedged items and from discrepancies between the actual future rates from the average rates used to hedge forecast transactions. Scenario analyses are performed to estimate and control such risks and opportunities. These focus on the main foreign currencies of relevance for the Evonik Group, the US dollar, Chinese renminbi yuan, and the Singapore dollar. In view of the rising importance of regions outside the euro zone, risks and opportunities relating to transactions in foreign currencies will increase in the long term. In addition, there are currency-related risks from the translation of separate financial statements. Increasing volatility of exchange rates can be seen, in particular, in emerging markets, for instance, in Argentina, which is a hyperinflationary economy. Economic risks also arise because exchange rates influence our competitiveness in global markets.

Changes in interest rates

Potential changes in capital market rates result in opportunities and risks. These comprise, on the one hand, changes in the fair value of fixed-interest financial instruments and, on the other, changes in interest payments on variable-rate financial instruments. To control these risks, when setting interest rate terms Evonik pays special attention to the structure of the fixed-floating rate mix[2] and uses interest rate swaps for further optimization where appropriate. Through the use of fixed-interest loans and interest rate hedging instruments, 83 percent of all financial liabilities were classified as fixed-interest as of the reporting date, and therefore had no material exposure to changes in interest rates.

Liquidity risks

To manage the Group's solvency, Evonik uses central liquidity risk management[3]. At its heart is a group-wide cash pool. In addition, Evonik's financial independence is secured through a broadly diversified financing structure, a €1.75 billion revolving credit facility as a central source of liquidity, and our solid investment grade rating. Overall, we believe that adequate financing instruments are available to ensure sufficient liquidity at all times.

Default risks

Default risks involve the risk of a loss if our debtors are fully or partially unable to meet their payment commitments. The credit risk of our customers and financial counterparties is therefore systematically examined when the contracts are concluded and monitored continuously afterwards. Limits are set for each contractual partner on the basis of internal or rating-based creditworthiness analyses.

Financial opportunities and risks in connection with pension obligations

Both opportunities and risks may arise from potential changes in the parameters used to evaluate our pension obligations[4]. Changes, especially in interest rates but also in mortality rates and rates of salary increases, can alter the present value of pension obligations, which directly alters equity and can result in changes in the expenses for pension plans.

Market opportunities and risks, and liquidity and default risks relating to financial instruments, also arise from the management of our pension plan assets. We counter these risks through an active risk management approach, combined with detailed risk controlling. Strategic management of the portfolios takes place via regular asset/liability studies. To minimize risk, we use derivative hedging strategies where appropriate. The broad diversification of asset classes, portfolio sizes, and asset managers avoids cluster risks, but there are unavoidable residual risks in the individual investments.

[1] Further details of the financial derivatives used, and their recognition and measurement can be found in note 9.4 p. 148 ff.
[2] Ratio of financial instruments with fixed and floating interest rates.
[3] A detailed overview of liquidity risks and their management can be found in note 9.4 p. 148 ff. Details of the financing of the Evonik Group and action to protect liquidity can be found in the section 2.9 Financial condition p. 32 ff.
[4] See note 6.10 p. 131 ff.

Impairment risk

The risk of asset impairment arises when the interest rate used in an impairment test rises, the forecast cash flows decline, or investment projects are halted. Specific risks may arise in connection with goodwill or individual assets.

3. Raw material markets

For our business operations, we require both high-volume commodities and smaller amounts of strategically relevant raw materials that have to meet highly demanding specifications. In both cases Evonik is confronted with opportunities and risks relating to the increasing volatility of the availability of raw materials and their prices.

The operating business is dependent on the price of strategic raw materials, especially petrochemical feedstocks obtained directly or indirectly from crude oil. The price of renewable raw materials is also highly volatile and is driven, for example, by weather-dependent harvest yields. Structural changes in exchange rates are another significant aspect affecting price risks. These risks are hedged by optimizing the global focus of procurement activities, for example, by accessing new markets and concluding market-oriented agreements. To further reduce the price risks with regard to products that have intensive raw material requirements, our aim is to pass both the risks and the opportunities of fluctuations in raw material prices along to other stages in the value chain where necessary, for example, through price escalation clauses.

The overriding aim of the procurement strategy is to secure the availability of raw materials on the best possible business terms. Short- and mid-term bottlenecks in the availability of precursors and intermediates are potential risks. As well as making preparations to use substitute suppliers in an emergency, we constantly observe the business performance of suppliers of selected key raw materials to anticipate bottlenecks and avoid risks.

Increasing volatility requires constant monitoring of the corresponding risks in the value chain.

The opportunities and risks arising from changes in the price of petrochemical feedstocks mainly affect the Performance Materials segment because of its high procurement volume. Risks relating to single sourcing and short-term restrictions on the availability of raw materials mainly affect the Nutrition & Care and Resource Efficiency segments.

Supply chain

Compliance with sustainability criteria in the supply chain is a central aspect of procurement. We expect our suppliers to share our principles of entrepreneurial responsibility. We therefore have our own code of conduct for suppliers, based on the principles of the UN Global Compact, the International Labour Standards issued by the International Labour Organization (ILO), and the Responsible Care® initiative. Globally, this approach to sustainability is also supported by the sector initiative Together for Sustainability, of which Evonik is a founding member, through the use of standardized assessments. Evonik's principal suppliers and the majority of critical suppliers have already taken part in these assessments, which are evaluated by an impartial sustainability rating company.

4. Other

A steady improvement in our cost position is necessary to make us more competitive. Our goal is to achieve a lasting reduction in selling and administrative expenses of €200 million by 2021 through our SG&A 2020 program. Besides the potential to raise strategic flexibility and strengthen the operating units as a result of SG&A 2020 and other restructuring projects, there are risks relating to their implementation. These include delays in implementation, the loss of key personnel, ineffectiveness of measures, and higher costs for the realization of measures. Stringent project management, including involving relevant stakeholders, is used to counter these risks.

5. Production

As a specialty chemicals company, Evonik is exposed to the risk of business interruptions, quality problems, and unexpected technical and IT malfunctions. Capacity constraints could hold back organic growth. We use complex production processes, some of them with interdependent production steps. Consequently, disruption and stoppages can adversely affect subsequent production steps and products. The outage of production facilities and interruptions in production workflows could have a significant negative influence on business and earnings performance and could also harm people and the environment. Group-wide policies on project and quality management, highly qualified employees, and regular maintenance of our plants effectively minimize these risks. Insofar as is economically viable, we take out insurance to cover damage to our plants and sites and production stoppages, so the financial consequences of potential production risks are largely insured. Nevertheless, there is a risk of unforeseeable individual incidents.

6. Human resources

As a global corporation, we respect the principles of the International Charter of Human Rights, the ten principles of the UN Global Compact, the OECD Guidelines for Multinational Enterprises, and the International Labour Standards of the International Labour Organization (ILO). Compliance with all employment laws is especially important to us.

Qualified specialists and managers are the basis for the achievement of our strategic and operational targets, and thus a key competitive factor. Both the loss of key personnel and difficulties in attracting and hiring skilled and talented staff could therefore constitute a risk in this context.

To ensure that we can recruit and retain qualified staff to meet our future requirements, we offer varied employment opportunities worldwide, systematic personnel development, and competitive remuneration. As a responsible employer, Evonik helps the majority of employees build financial security to cover adverse risk factors such as the risk of accident or disability, and to provide for retirement, either directly or through pension contributions to external institutions. The arrangements are based on the economic, legal, and tax situation in the various countries. In addition to this, we foster the personal wellbeing of employees through programs such as well@work, a range of consulting offers for employees caring for close relatives, and support in childcare. In this way, we retain and foster high-performers and talented employees, and position Evonik as an attractive employer for prospective staff. We maintain close links to universities and professional associations to help us recruit suitable youngsters. Both our employer branding and many internal activities are aligned to diversity. The aim is to make Evonik even more attractive to talented specialists and managers.[1]

Our strategic human resources planning identifies requirements for a five-year period, so timely steps can be taken to cover future personnel needs. We have thus largely limited potential human resources risks. Opportunities and risks for the development of personnel expenses could come, for example, from future collective agreements.

7. Energy markets

Evonik requires considerable amounts of energy from a wide variety of sources for its chemical facilities and infrastructure. The main sources are natural gas, electricity, and at present, still coal. At several major sites, our power and steam requirements are fully or partially met by resource-efficient co-generation plants. We constantly monitor trends on the national and international energy markets, enabling us to respond in a risk- and cost-conscious manner.

In countries where the sourcing of energy is not state-regulated, we procured and traded in energy and, where necessary, emission allowances (CO_2 allowances) within the framework of defined risk strategies. The aim is to balance the risks and opportunities of volatile energy markets. Depending on how the general conditions develop, our segments could be faced with additional costs.

For our facilities within the scope of the European emissions trading system, adverse effects will arise from the structure of the fourth trading period (2021 to 2030), especially a more stringent benchmark for the allocation of free CO_2 allowances. In addition, from 2021 Evonik will probably be affected by the proposed German Fuel Emissions Trading Act (BEHG) for the (non-ETS) traffic and heat sectors. The key factor in the economic impact will be the extent to which the politicians follow the announced intention of including measures to protect the competitiveness of industry. Further legislation climate protection legislation cannot be ruled out in other jurisdictions. In the broader regulatory context of the energy markets, the way in which the cost of renewables is allocated among captive energy generators in Germany is of particular significance for Evonik. In principle, we assume that our established captive generation and the decision to replace the coal-fired power plant at our site in Marl (Germany) by a highly efficient gas and steam turbine plant will continue to contribute to the competitiveness of our German sites in the future. Possible additional costs could arise from the increase in grid fees resulting from the shift in German energy policy, including further state-driven cost components and possible fundamental changes to the grid fee system. Overall, we are exposed to fluctuations in the market price and cost of various energy sources as a result of the specific demand/supply situation and political events. These entail both opportunities and risks.

8. Investments

Generating growth through investment entails risks as regards the proposed scope and timing of projects. These risks are addressed through established, structured processes. For instance, we take an extremely disciplined approach to implementing our investment program. Both projects that have not yet started and those that are already underway are constantly reviewed for changes in the market situation and postponed if necessary.

At the same time, we regard building new production facilities in regions with high growth momentum as an opportunity to generate further profitable growth.

9. Mergers and acquisitions

Active portfolio management has high priority for Evonik as part of our value-based management approach. We have set out clear procedures for preparing, analyzing, and undertaking acquisitions and divestments. In particular, these include clear rules on accountability and approval processes. An intensive examination of potential acquisition targets (due diligence) is undertaken

[1] See section 5.1 Employees p. 43 ff.

before they are acquired. This involves systematic identification of all material opportunities and risks and an appropriate valuation. Key aspects of this process are strategic focus, earnings power, and development potential on the one hand, and any legal, financial, and environmental risks on the other. New companies are rapidly integrated into the Evonik Group and thus into our risk management and controlling processes. Every transaction of this type entails a risk that integration of the business may not be successful or that integration costs may be unexpectedly high, thus jeopardizing realization of the planned quantitative and qualitative targets such as synergies.

Where businesses no longer fit our strategy or meet our profitability requirements despite optimization, we also examine external options. If a planned divestment is not achieved successfully, this could generate risks that impact the Evonik Group's earnings position.

10. Research and development

Opportunities for Evonik also come from market-oriented research and development (R&D), which we regard as an important driver of profitable growth. We have a well-stocked R&D pipeline with a balanced mixture of short-, mid-, and long-term R&D projects. On the one hand, we constantly strive to improve our processes in order to strengthen our cost leadership, and on the other, our projects open the door to new markets and new fields of technology. Our project portfolio is consistently aligned to our growth engines and the innovation growth fields, which have high sustainability benefits. Through our venture capital program, we take stakes in companies whose know-how can support us in joint developments. Aspects of digitalization are becoming more significant.

Opportunities and risks in R&D relate to the viability of planned product and process developments and the timing of their implementation. We mainly see additional potential arising from the introduction of new products that go beyond our present planning in our six innovation growth fields.

6.4 Legal/compliance opportunities and risks

The opportunities and risks in this category are far more difficult to quantify than market and competition risks, as they not only have financial implications but often also involve reputational risks for the company and/or criminal law consequences. Provisions are set up on our balance sheet to cover the financial impact. These are reflected in our system as reducing risk. In view of this complexity, legal/compliance opportunities and risks are not assigned to the opportunity/risk matrix illustrated above, nor are they allocated to the risk quantification classes.

1. Compliance, law, and the regulatory framework

Compliance means lawful business conduct. The principal compliance rules are set out in the Evonik Code of Conduct, which explicitly prohibits, for example, all forms of corruption, including "facilitation payments," and violation of antitrust regulations. Risks could result from failure to comply with the corresponding regulations. To minimize compliance risks, extensive training and sensitization of employees is undertaken at face-to-face training sessions and/or through e-learning programs. Our code of conduct is binding for all Evonik employees worldwide, including the executive board and the governance bodies of all Evonik companies. They are required to comply with the rules set forth in the code of conduct, to ensure they are familiar with its content, and to take part in the relevant training.[1]

Evonik monitors the observance of human rights along its value chain. To minimize the related risks, we require compliance with our code of conduct for suppliers, our global social policy, and the policy statement on human rights.

Evonik is exposed to legal risks, resulting, for example, from legal disputes such as claims for compensation, and from administrative proceedings and fines. In its operating business, the Evonik Group is exposed to liability risks, especially in connection with product liability, patent law, tax law, competition law, antitrust law, and environmental law. Changes in public law could also give rise to legal risks or materially alter such risk positions. As a chemical company with its own power plants, risks of particular relevance here are a possible change in the charges levied under the German Renewable Energies Act (EEG) and amendments to the European emissions trading regulations.

Further, Evonik may be liable for guarantee claims relating to divestments. Structured post-transaction management closely monitors any liability and guarantee risks resulting from divestments. We have developed a concept involving high quality and safety standards to ensure a controlled approach to such legal risks.

Insurance cover has been purchased for the financial consequences of any loss that may occur as a result of damage to property, product liability claims, and other risks. Where necessary, Evonik sets up provisions for legal risks.

At present, the relevant legal risks are the issues outlined below. As a matter of principle, we refrain from evaluating the opportunities and risks of potential legal proceedings or proceedings that have commenced, in order not to influence our position.

In connection with the divestment of the former carbon black activities, the purchaser has now asserted its purported right to indemnification from environmental guarantees relating, among other things, to alleged infringement of the US Clean Air Act

[1] See declaration on corporate governance p. 74 ff.

through arbitration proceedings filed on June 11, 2019. Evonik has rejected these claims in its defense and the arbitration court has now defined the structure of proceedings up to a hearing in spring 2021.

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.

With regard to employment law, there are risks relating, for example, to the recalculation of pension commitments entered into by Evonik and its legal predecessors.

Tax risks relate to differences in the valuation of business processes, capital expenditures, and restructuring by the financial authorities, tax reforms in some countries, and potential retroactive payments in the wake of tax audits.

2. Information security and the protection of intellectual property and know-how

Innovations play a significant part in Evonik's business success. Protecting know-how and intellectual property is therefore of central importance. With markets growing ever closer and the globalization of business, a competent approach to protecting our competitive edge is a key element in our investment activities. The company is also exposed to a risk that intellectual property cannot be adequately protected, even through patents, especially when building new production facilities in certain countries. Similarly, the transfer of know-how in joint ventures and other forms of cooperation also entails a risk of an outflow of expertise from Evonik. For example, in the event of the possible separation from a joint venture or other cooperation partner there is no guarantee that the business partner will not continue to use know-how or disclose it to third parties, thereby damaging Evonik's competitive position.

Measures to minimize and avoid such risks are coordinated by the Corporate Security, Law, and Intellectual Property Management units.

IT risks

Electronic information processing is a key element in Evonik's success. Therefore, sustained protection of information and the availability, confidentiality, and integrity of IT-assisted business processes are especially important. If these systems and information are compromised, there is a significant risk that this could have a detrimental effect on our business and production processes. To protect them and the associated knowledge from cybercrime (including industrial espionage and manipulation through electronic attacks) from both within and outside the Evonik Group and to minimize such risks, we have developed an IT security strategy and established organizational and technical measures. The secure use of information systems is described in binding group-wide policies and regulations and driven forward and monitored by an internal control system.

In view of the considerable and continuously rising threat, we regularly review our security measures, implement risk-based countermeasures as required, and adapt them wherever necessary. Training, including compulsory training in some cases, and constant information, for example, via the Evonik Group intranet and internal social networking platforms, keep employees aware of the need for IT security. Strictly confidential information that Evonik needs to protect is identified and corresponding protective measures are implemented. At the same time, managers' awareness of this issue is raised. The Evonik Cyber Defense Team (CDT) is networked externally at various levels (Germany: member of the German CERT network, Europe: member of TF-CSIRT*, globally: member of FIRST).

3. Environmental risks (environment, safety, health, quality)

Evonik is exposed to risks in the areas of occupational and plant safety. For example, workplace accidents and incidents in production facilities can cause injury to our employees or substance releases that impair the health of our employees and local residents. We counter these risks by living our understanding of safety as a holistic management task at all management levels. Our guiding principles for safety are binding for all managers and employees. In this way, Evonik makes it clear that safety is a central element in its corporate culture. We analyze accidents and incidents carefully so we can learn from them. Moreover, audits are conducted at the request of the executive board to check the controlled handling of such risks.

The aim of our product stewardship is timely identification and evaluation of possible health and environmental risks in our portfolio. We 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) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), product stewardship at Evonik includes voluntary commitments that go beyond these regulations.

The effects of climate change are already visible today, for example, in water stress[1] and acute weather-related events such as low water levels in the river Rhine and hurricanes. Alongside these direct negative effects of climate change, we are also exposed to risks resulting from stricter environmental regulations.

[1] Especially water shortages.

Furthermore, the group-wide environmental protection and quality management system, which is validated as conforming to international standards, undergoes constant development and improvement. As a responsible chemical company, Evonik ensures that such processes are operated in accordance with the principles of the global Responsible Care® initiative and the UN Global Compact.

Adequate provisions have been established to secure or remediate contaminated sites where necessary. Alongside the need to adjust environmental provisions identified through structured internal processes, for example as a result of changes in the regulatory framework, further unplanned additions to such provisions may be necessary.

6.5 Process/organization risks

1. General

This risk category covers the interface between risk management and the internal control system (ICS). In this category, risks generally result from specific process shortcomings. Alongside general weaknesses, these include, in particular, risks within the ICS and the accounting-related ICS. Classification is therefore based on the list of processes drawn up by Corporate Audit. Starting from key corporate processes, the existence of relevant control objectives and standard controls for the main risks identified is checked. In view of the types of risk in this category, a purely qualitative assessment is normally used.

The evaluation of specific risks resulting from weaknesses in processes within the organizational units showed very little scope to optimize existing processes because of the efficacy of the current controls. The corresponding scope for improvement has been identified. There are therefore no signs of systematic errors in the Evonik Group's ICS.

2. Internal control system for financial accounting

The main financial reporting risks are identified in the ICS through a quantitative and a qualitative analysis. Controls are defined for each risk area of the accounting process. Their efficacy is reviewed at regular intervals and improved where necessary. All elements of the control process are verified by the internal audit function on the basis of random samples.

To ensure the quality of financial statements, we have a group-wide policy, which defines uniform accounting and valuation principles for all German and foreign companies included in the consolidated financial statements for the Evonik Group. The majority of companies have delegated the preparation of their financial statements to Global Financial Services. Through systematic process orientation, standardization, and the utilization of economies of scale, this leverages sustained cost benefits and also improves the quality of accounting. Global Financial Services has developed a standardized control matrix for the internal control system for financial accounting. This is implemented in the three global shared service centers: in Offenbach (Germany) for Germany, Austria, and Finland; in Kuala Lumpur (Malaysia) for the Asia region and countries in the EMEA[1] region not served by the Offenbach center; and in San Jose (Costa Rica) for the Americas region. The aim is to ensure a uniform global standard for the internal control system for financial accounting. In principle, the annual financial statements of all fully consolidated companies and all joint operations are audited. In the few exceptions from this rule, an upfront risk assessment is performed with the auditor.

All data are consolidated by the Accounting division using the SAP SEM-BCS system. Group companies submit their financial statements via a web-based interface. A range of technical validations is performed at this stage. Computerized and manual process controls and checking by a second person are the key oversight functions performed in the financial reporting process. The preparation of the monthly consolidated income statement and publication of three quarterly reports allow us to gain experience with new accounting issues, and provide a sound basis for plausibilization of the year-end accounts. The executive board receives monthly reports, and quarterly reports are submitted to the audit committee of the supervisory board.

Aspects that may represent opportunities or risks for financial reporting in the future are identified and evaluated early through the risk management system. This ensures that risk management can be closely aligned to controlling and accounting processes.

[1] Europe, Middle East and Africa.

7. Report on expected developments

Outlook 2020

Sales and earnings

- Stable sales
- Adjusted EBITDA between €2.0 billion and €2.3 billion
- ROCE at last year's level

Financing and investment

- Capital expenditure at last year's low level
- Slight improvement in free cash flow

Occupational and plant safety

- Accident frequency maximum 1.30
- Incident frequency maximum 1.10

"Our efficiency programs and the growth trend in our specialties businesses are contributing to a sustained structural improvement in the earnings quality of our portfolio."

Ute Wolf
Chief Financial Officer

Basis for our forecast:

- Global growth of 2.5 percent (2019: 2.6 percent)
- Euro/US dollar exchange rate: US$1.12 (2019: US$1.12)
- Internal raw material cost index slightly lower than in the prior year

7.1 Economic background

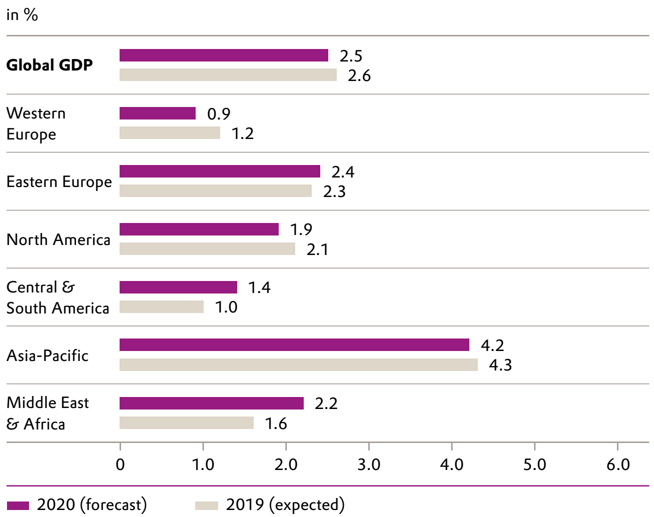
Global economy expected to stabilize at around the prior-year level

We expect **global economic conditions** to remain challenging in 2020. However, a further escalation of the trade dispute between the USA and China should be avoided in the wake of the partial agreement. In view of this year's presidential election, the US administration will presumably refrain from further protectionist measures, so global trade should stabilize somewhat. Economic development in 2020 should be supported by a continuation of the expansionary monetary policy throughout the world. Moreover, various economies are using state intervention to prevent a further economic downturn. Overall, we expect global growth in 2020 to be around last year's level at 2.5 percent.

We assume that the pace of growth in Western Europe will slow slightly year-on-year in 2020. Although a further escalation of the global trade war was avoided at the end of 2019, there are still a number of trade policy risks. These include the uncertainty with regard to the future economic relationship between the European Union and the UK. This uncertainty will continue in 2020 and is likely to hold back economic development. By contrast, the economy in Western Europe will be supported by the good employment situation and robust consumer spending against the backdrop of ongoing expansionary monetary policy.

In North America, we assume that the robust growth will continue, although the pace could moderate somewhat as a consequence of the global weakness. Growth will continue to be driven by buoyant consumer demand and a strong labor market. Monetary policy is expected to remain accommodating. A hike in the key interest rate during the year is unlikely in our view.

GDP forecast for 2020 C28



Growth in Central & South America should pick up in 2020. However, the lack of tailwind from the global economy and political uncertainty in some countries could prevent a clear brightening of the economic outlook in this region. Nevertheless, the basic conditions have improved, not least thanks to the more relaxed US monetary policy.

Growth will remain high in the Asia-Pacific region. Economic momentum in Japan will probably be slightly lower than in 2019 despite the expansionary monetary and fiscal policy. In view of the continued trade policy risks, we expect the Chinese government to take further action to support the economy and anticipate that economic growth will be slightly lower than in 2019.

The projection for the world economy is still hampered by uncertainty. Despite the partial agreement in the trade dispute between the USA and China, there is still a risk that a renewed flare-up could significantly dampen global economic activity. The risk that the dispute could spread directly to other regions remains a threat to global trade and the global economy in our view. Another risk factor for the global economy is escalation of the political conflicts in the Middle East, which could have negative implications for the price of oil. A sharper slowdown in the Chinese economy, partly as a result of the coronavirus (SARS-CoV-2), would cause a significant slowing of global growth. Furthermore, the continued uncertainty about the future economic relationship between the European Union and the UK is likely to dampen growth momentum. The global economic development could also deteriorate if central banks were to tighten monetary policy, although this is not expected at present. Another risk is that the downturn in industry could spread to other sectors of the economy and therefore impact consumption, which is still very robust at present.

We estimate that global inflation will remain fairly constant as a result of moderate global growth momentum and the expectation that raw material prices will be stable.

Although uncertainty remains high on the world's markets, we expect raw material prices to remain basically stable. Overall, we expect that in 2020 prices of Evonik-specific raw materials will be slightly lower than in 2019.

We assume that in 2020 the average euro exchange rate will be around the 2019 level, based on the current basic data for the euro zone and the USA.

7.2 Outlook

Basis for our outlook:

- Global growth of 2.5 percent (2019: 2.6 percent)
- Euro/US dollar exchange rate: US$1.12 (2019: US$1.12)
- Internal raw material cost index slightly below the prior year

Sales and earnings

The following outlook includes the contribution from the US company PeroxyChem (transaction closed on February 3, 2020).

Due to the anticipated and ongoing muted development of global growth momentum, as outlined in the section 7.1 economic background p. 64, we expect **sales** to be stable in 2020 (2019: €13.1 billion).

The specialty businesses in our portfolio should continue to grow. Together with the continued implementation of our efficiency measures, they should contribute to a sustained structural improvement in the earnings quality of the portfolio. On the other hand, the muted macroeconomic environment is expected to affect the remaining commodity businesses in our portfolio. Overall, we expect **adjusted EBITDA** to be between €2.0 billion and €2.3 billion (2019: €2.153 billion).

We assume a continuation of the volume growth and positive earnings trend for the specialties in the Nutrition & Care segment. For our essential amino acids for animal nutrition, we expect ongoing strong volume growth, with average annual prices around the previous year's level. In the Baby Care business, we expect lower earnings than in the previous year. Overall, earnings in the Nutrition & Care segment are expected to be slightly above the previous year's level.

In 2020, the Resource Efficiency segment will continue to be affected by the lower growth situation in some end-markets, such as the automotive and coatings sectors. Nevertheless, this segment will continue to benefit from its diversified market positions and the trend to resource-efficient solutions. Operationally, we expect business performance to be fairly stable. However, the high level of license income generated in 2019 will not recur in 2020. Contributions from the acquired PeroxyChem business will have a positive effect on segment sales and earnings. Overall, we expect earnings to be at least at the same level as in the previous year.

In the Performance Materials segment, product spreads are expected to weaken year-on-year due to the continued weakness of the market environment. By contrast, the negative impact from limited raw material supply and plant outages in 2019 should not recur. Overall, this segment is expected to generate stable to slightly lower earnings in 2020.

In 2020, the return on capital employed **(ROCE)** is expected to remain at last year's level (2019: 8.6 percent).

Financing and investments

In 2020, we expect **capital expenditures** to remain stable at the low prior-year level (2019: €842 million).

We are targeting another slight improvement in the **free cash flow** in 2020 (2019: €717 million[1]). Positive contributions will come from continued high capital expenditure discipline and strict working capital management, as well as from lower bonus payments for 2019. By contrast, we expect higher tax payments and cash outflows for the SG&A 2020 efficiency enhancement program.

Occupational and plant safety

Our aim is to avoid all accidents and incidents. We are working to achieve an improvement in our **accident frequency** indicator compared with 2019 (1.18) and expect that it will remain below the defined upper limit of 1.30 in 2020. We anticipate that we can achieve a slight improvement in our plant safety indicator, **incident frequency** (2019: 1.10) and that it will be below the upper limit of 1.10.

[1] Before one-off tax payments relating to the carve-out of the methacrylates business.

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.

CORPORATE GOVERNANCE

Report of the supervisory board

BERND TÖNJES
Chairman of the Supervisory Board

Ladies and Gentlemen,

In 2019, the supervisory board of Evonik Industries AG (Evonik) performed the obligations defined by law and the articles of incorporation correctly and with the utmost care and regularly and conscientiously supervised the work of the executive board. We supported the executive board by providing advice on the management and strategic development of the company.

Collaboration between the executive board and supervisory board

The executive board always gave us full and timely information on all material issues affecting Evonik and involved us in all fundamental decisions affecting the company. Key areas were business performance and the situation of the company, along with aspects of business policy, corporate planning, and Evonik's ongoing strategic development.

The supervisory board's oversight of the executive board centered in particular on ensuring the correct, orderly, expedient, and cost-effective management of group-wide business activities. The content and scope of reporting by the executive board complied with the law, the principles of good corporate governance, and the requirements set by the supervisory board.

Section 16 of the articles of incorporation of Evonik Industries AG and the rules of procedure of the supervisory board set out business activities and measures of fundamental importance on which the executive board is required to seek the approval of the supervisory board or, in some cases, individual committees. In the past fiscal year, the supervisory board took decisions on business activities and measures submitted by the executive board after examining them and discussing them with the executive board.

Meetings and work of the supervisory board

We examined all issues of importance to the company at five meetings, on March 4, May 28, June 4, September 19, and December 11, 2019.

The work of the supervisory board was again supported and prepared by its committees in 2019. The committees and their members in the year under review were as follows:

- Executive Committee: Bernd Tönjes (chairman), Edeltraud Glänzer (deputy chairwoman), Martin Albers, Dr. Volker Trautz.
- Audit Committee: Dr. Siegfried Luther (chairman and financial expert within the meaning of section 100 paragraph 5

German Stock Corporation Act/AktG and section 5.3.2 of the German Corporate Governance Code), Karin Erhard (deputy chairwoman), Jens Barnhusen (since June 4, 2019), Prof. Barbara Grunewald, Michael Hofmann (until April 30, 2019), Dr. Thomas Sauer, Angela Titzrath.

- Finance and Investment Committee: Michael Rüdiger (chairman), Edeltraud Glänzer (deputy chairwoman), Martin Albers, Prof. Aldo Belloni, Frank Löllgen, Anke Strüber-Hummelt, Bernd Tönjes, Ulrich Weber.
- Innovation and Research Committee: Prof. Barbara Albert (chairwoman), Frank Löllgen (deputy chairman), Jens Barnhusen (until May 31, 2019), Carmen Fuchs (until December 11, 2019), Hussin El Moussaoui (since December 12, 2019), Martina Reisch (since June 4, 2019), Bernd Tönjes, Dr. Volker Trautz.
- Nomination Committee: Bernd Tönjes (chairman), Dr. Volker Trautz, Ulrich Weber.
- Mediation Committee: Bernd Tönjes (chairman), Edeltraud Glänzer (deputy chairwoman), Martin Albers, Dr. Volker Trautz.

Subsection 2.3 p. 77 f. of the corporate governance report contains a detailed description of the tasks allocated to these committees.

The executive committee held six meetings in 2019. The audit committee held five meetings and the finance and investment committee held four meetings. The innovation and research committee met twice. The nomination committee did not meet in the reporting period and once again there was no need for the mediation committee to meet. The chairperson or deputy chairperson of each committee reported regularly at the meetings of the supervisory board on the issues discussed and the outcome of all committee meetings. The supervisory board therefore always received extensive information on all matters of significance in the Evonik Group.

At its meeting in March, the supervisory board focused on examining the annual financial statements, which had first been considered in detail by the audit committee, and on the divestment of the methacrylates business. Other topics were preparations for the annual shareholders' meeting, the corporate governance report, the non-financial report, the declaration on corporate governance, the bonus payments to the executive board members for the preceding fiscal year, and the executive board's objectives for fiscal 2019. The meeting on May 28, 2019 was dedicated to supplementary information directly before the annual shareholders' meeting. At its meetings in June and September, the supervisory board received and discussed the executive board's reports and the reports of the committees. At its meeting in December, the supervisory board adopted the budget for 2020, discussed the mid-term planning for the period to 2022, approved the concept for the efficiency review in 2020, discussed and acknowledged the audit committee's recommendation on selection of the auditor in connection with the tender process for the audit, and adopted the declaration of conformity in accordance with section 161 German Stock Corporation Act (AktG). In addition, at the meeting in December, the supervisory board adopted amendments to its rules of procedure ahead of the changes to the German Corporate Governance Code and modified the targets for the composition of the supervisory board.

The executive committee principally dealt with the following issues in the year under review: the divestment of the methacrylates business; the bonus payments to members of the executive board for 2018 and their targets for 2019; Evonik's business situation, current projects and the share price; the changes to the corporate structure planned for mid-2020, including ending the plant management model and abolishing the segment companies; measures in connection with the Act Implementing the Second Directive on Shareholders' Rights (ARUG II) and the new version of the German Corporate Governance Code; the state of the antitrust approval process for the acquisition of PeroxyChem; the macroeconomic environment in 2020, the budget for 2020, and the mid-term planning for 2020–2022.

The meeting of the audit committee in February focused on the annual financial statements of Evonik Industries AG and the consolidated financial statements of the Evonik Group. Among other things, the matters examined by the audit committee included opportunity and risk management, the compliance report for 2018, the proposal for the selection of the auditor for 2019, and the appointment of the auditor. The meeting in May concentrated on the quarterly financial statement as of March 31, 2019. At its meeting in July, the audit committee looked in detail, among other things, at the business performance in the first six months of 2019 and the interim financial statements as of June 30, 2019. In addition, it received a report on tax compliance. Throughout the reporting period, the audit committee followed the tender for the auditor for 2021 in detail at all regular meetings. In addition to an information event in April, it held a special meeting on this issue in September. The meeting in November focused on the business performance in the third quarter of 2019, the quarterly statement as of September 30, 2019, the focus of the audit of 2019, the effectiveness of the internal audit system, and acceptance and discussion of the annual reports by Environment, Safety, Health and Quality (ESHQ) and Group Security.

In the reporting period, the finance and investment committee concentrated principally on growth projects and on the status of integration of the acquisitions into the Evonik Group (for further information see "Investments, acquisitions, and divestments"). Further issues were the macroeconomic environment, the capital markets' view of Evonik, and the planned new corporate structure.

At its meeting in June, the innovation and research committee looked in detail at the allocation of the research and development budget and the Membranes innovation growth field. The main issues at the meeting of the innovation and research committee in December were measures to encourage and identify innovations and the opportunities and risks arising from the changes in the automotive industry.

In addition to the standard reporting required by law, the supervisory board and its committees also discussed and examined the following topics in detail:

Performance and situation of the Evonik Group
Evonik held up well overall in 2019 in a more challenging economic environment. Demand for its specialty chemicals products remained strong throughout the world despite the economic slowdown. In all, sales slipped 1 percent to €13,108 million, with only a slight reduction in volumes and selling prices. Adjusted EBITDA was around the prior-year level at €2,153 million, partly due to the cost-cutting measures that had been introduced. Net income improved by 126 percent to €2,106 million thanks to the income from the divestment of the methacrylates business.

Investments, acquisitions, and divestments
Our discussions centered on divestments as well as major growth projects, including investment controlling of ongoing projects. The divestment and growth projects considered in particular detail by the supervisory board and the finance and investment committee included the following:

- Replacement of the coal-fired power plant at the site in Marl (Germany) by a gas and steam turbine plant
- The joint venture with the Chinese company Wynca to build a new production facility for fumed silica in Zhenjiang (China)
- Purchase of the administration and research building in Allentown (USA)
- Acquisition of PeroxyChem from One Equity Partners
- Divestment of the methacrylates business to Advent International
- Lease for a warehouse to be constructed by Duisburger Hafen AG at the Essen Goldschmidt site in Germany

The finance and investment committee received post-completion information on each of the following projects, which had been completed in the recent past:

- Expansion of capacity for high-molecular polyester in Wittten (Germany)
- Construction of a new production plant for precipitated silica in Charleston and change in the use of capacity in Chester (both USA)

In addition, the finance and investment committee discussed the post-completion audits of the following projects:

- Acquisition of the specialty additives business from Air Products (USA)
- Expansion of VESTOSINT® capacity (line 4) in Marl (Germany)
- Acquisition of the silica business of J.M. Huber Corporation (USA)
- Expansion of production capacity for the SEPURAN® brand of hollow-fiber membrane modules in Schörfling (Austria)

Other issues addressed by the supervisory board and its committees
In addition to the issues and developments outlined above, the main topics addressed by the supervisory board and its committees in the reporting period were the following:

- Proposals for resolutions at the annual shareholders' meeting in May 2019
- Resolution on the declaration of conformity in compliance with section 161 of the German Stock Corporation Act (AktG) and the supervisory board's report to the annual shareholders' meeting
- Capital markets' view of Evonik
- New corporate structure and ending of the plant management model in mid-2020
- Resolution on the credit authorization framework for 2020–2022
- Resolution on the employee share program for 2020

Individual disclosure of the attendance at meetings of the supervisory board and its committees T31

Supervisory board member	Supervisory Board		Executive Committee		Finance and Investment Committee		Audit Committee		Nomination Committee		Mediation Committee		Innovation and Research Committee	
	Presence	in %	Presence	in %	Presence	in %	Presence	in %	Presence	in %	Presence	in %	Presence	in %
Bernd Tönjes (chairman)	5/5	100	6/6	100	4/4	100			0/0		0/0		2/2	100
Edeltraud Glänzer (deputy chairwoman)	4/5	80	5/6	83	4/4	100					0/0			
Martin Albers	5/5	100	6/6	100	4/4	100					0/0			
Prof. Barbara Albert	5/5	100											2/2	100
Jens Barnhusen	5/5	100					3/3	100					0/0	
Prof. Aldo Belloni	5/5	100			4/4	100								
Karin Erhard	5/5	100					5/5	100						
Carmen Fuchs (until December 11, 2019)	5/5	100											2/2	100
Prof. Barbara Grunewald	5/5	100					5/5	100						
Michael Hofmann (until April 30, 2019)	1/1	100					0/1	0						
Martin Kubessa	5/5	100												
Frank Löllgen	4/5	80			4/4	100							1/2	50
Dr. Siegfried Luther	5/5	100					5/5	100						
Hussin El Moussaoui (since December 11, 2019)	0/0												0/0	
Martina Reisch (since May 13, 2019)	4/4	100											2/2	100
Michael Rüdiger	5/5	100			4/4	100								
Dr. Thomas Sauer	5/5	100					5/5	100						
Peter Spuhler	4/5	80												
Anke Strüber-Hummelt	5/5	100			4/4	100								
Angela Titzrath	3/5	60					3/5	60						
Dr. Volker Trautz	5/5	100	6/6	100					0/0		0/0		2/2	100
Ulrich Weber	4/5	80			4/4	100			0/0					

Corporate governance

The supervisory board is committed to the principles of good corporate governance. This is based principally on recognition of the provisions of the German Corporate Governance Code both in the version of February 7, 2017, which was still applicable in the reporting period and in the version of May 9, 2019, which takes effect in the upcoming reporting period. This does not exclude the possibility of departing from its recommendations and suggestions in legitimate individual cases.

Since it is listed on the stock exchange, Evonik is subject to the obligation contained in section 161 of the German Stock Corporation Act (AktG) to submit a declaration of the extent to which it has complied with, or will comply with, the German Corporate Governance Code and which recommendations have not been and will not be met, together with the reasons for this (declaration of conformity). In December 2019, the executive board and supervisory board issued a declaration of conformity, which is published on the company's website and in the corporate governance report.

The supervisory board has set objectives for its composition, which are taken into account by the shareholders' meeting when electing members of the supervisory board. The present supervisory board satisfies all objectives for its composition, especially:

- The supervisory board comprises seven women and thirteen men. In accordance with its own targets and in compliance with statutory requirements, it therefore meets the minimum of 30 percent women and 30 percent men.
- At least six supervisory board members representing the shareholders should be independent of the company and its executive board and independent of a controlling shareholder. The supervisory board classifies all current members as independent.

Further details of the independence of the supervisory board members and the diversity requirements are presented in the declaration on corporate governance.

The company organizes annual training sessions for members of the supervisory board. In the reporting period, the supervisory board dedicated a whole day to aspects of capital market compliance and changes to the IFRS. Attendance was 70 percent. In addition, Hussin El Moussaoui attended this training session as a guest.

The members of the supervisory board will receive attendance fees and purely fixed remuneration for their work on the supervisory board in 2019 and any membership of committees (see subsection 2 of the remuneration report p. 91 ff.).

There were no consultancy, service, or similar contracts with any members of the company's supervisory board in 2019. Furthermore, there were no transactions between the company or a company in the Evonik Group, on the one hand, and supervisory board members and related parties, on the other.

Audit of the annual financial statements

PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (PwC), Frankfurt am Main (Germany) has audited the financial statements of Evonik Industries AG as of December 31, 2019 prepared in accordance with the German Commercial Code (HGB), the consolidated financial statements for the Evonik Group prepared using the International Financial Reporting Standards (IFRS), as permitted by section 315e paragraph 1 of the German Commercial Code (HGB), and the combined management report for Evonik Industries AG and the Evonik Group, and has endorsed them with an unqualified opinion pursuant to section 322 of the German Commercial Code (HGB). The supervisory board awarded the contract for the audit of the annual financial statements of Evonik Industries AG and the consolidated financial statements of the Evonik Group in line with the resolution taken by the shareholders' meeting on May 28, 2019. In accordance with section 317 paragraph 4 of the German Commercial Code (HGB), the annual audit includes an audit of the risk identification system. The audit established that the executive board has taken the steps required in compliance with section 91 paragraph 2 of the German Stock Corporation Act (AktG) to establish an appropriate risk identification system and ensure that this system is suitable for timely identification of developments that could represent a threat to the continued existence of the company.

The executive board submitted the above documents, together with the auditor's reports and the executive board's proposal for the distribution of the profit, to all members of the supervisory board to prepare for the meeting of the supervisory board on

March 3, 2020. At its meeting on February 26, 2020, the audit committee discussed the annual financial statements, the auditor's reports, and the proposal for the distribution of the profit in the presence of the auditor to prepare for the subsequent examination and discussion of these documents by the full meeting of the supervisory board. Further, the audit committee requested the auditor to report on its collaboration with the internal audit department and other units involved in risk management, and on the effectiveness of the risk identification system with respect to accounting. In this connection, the auditor established that the executive board had taken the steps required in compliance with section 91 paragraph 2 of the German Stock Corporation Act (AktG) to establish an appropriate risk identification system and ensure that this system is suitable for timely identification of developments that could represent a threat to the continued existence of the company.

The supervisory board conducted a thorough examination of the annual financial statements of Evonik Industries AG, the consolidated financial statements for the Evonik Group, the combined management report for fiscal 2019, and the executive board's proposal for the distribution of the profit and—on the basis of explanations of these documents by the executive board—discussed them at its meeting on March 3, 2020. The auditor was also present at this meeting and reported on the main findings of the audit. He also answered questions from the supervisory board about the type and extent of the audit and the audit findings. The discussion included the audit of the risk identification system. The supervisory board shares the audit committee's assessment of the effectiveness of this system.

In this way, the supervisory board ascertained that the audit had been conducted properly by the auditor and that both the audit and the audit reports comply with the statutory requirements. Following its thorough examination of the annual financial statements of Evonik Industries AG, the consolidated annual financial statements, and the combined management report (including the declaration on corporate governance), the supervisory board declares that, based on the outcome of its examination, it has no objections to raise to the annual financial statements of Evonik Industries AG, the consolidated annual financial statements, and the combined management report. In line with the recommendation made by the audit committee, the supervisory board has therefore accepted the audit findings. At its meeting on March 3, 2020, the supervisory board therefore endorsed the annual financial statements of Evonik Industries AG and the consolidated annual financial statements. The annual financial statements for 2019 are thus ratified. The supervisory board concurs with the executive board's assessment of the situation of the company and the Evonik Group as expressed in the combined management report. The supervisory board considered the executive board's proposal for the distribution of the profit, in particular with a view to the dividend policy, the impact on liquidity, and its regard for shareholders' interests. This also included an explanation by the executive board and a discussion with the auditor. The supervisory board then voted in favor of the proposal put forward by the executive board for the distribution of the profit.

Review of the separate combined non-financial report

Evonik has issued a separate combined non-financial report for fiscal 2019 (sections 289b paragraph 3 and 315b paragraph 3 HGB). The principal components of the report are employee and environmental matters, respect for human rights, preventing bribery and corruption, social matters, and the supply chain. The supervisory board examined this report at its meeting on March 3, 2020 on the basis of a preliminary review by the audit committee and has no objections to the report.

Examination of the report by the executive board on relations with affiliated companies

The executive board has prepared a report on relations with affiliated companies in 2019. This was examined by the auditor, who issued the following unqualified opinion in accordance with section 313 of the German Stock Corporation Act (AktG):

"In accordance with our professional audit and judgment, we confirm that

1. the factual disclosures made in this report are correct, and
2. the company's expenditures in connection with the legal transactions contained in the report were not unreasonably high."

The executive board submitted the report on relations with affiliated companies and the associated auditor's report to all members of the supervisory board to enable them to prepare for the supervisory board meeting on March 3, 2020.

The audit committee conducted a thorough examination of these documents at its meeting on February 26, 2020 to prepare for the examination and resolution by the full supervisory board. The members of the executive board provided detailed explanations of the report on relations with affiliated companies and answered questions on it. The auditor, who was present at this meeting, reported on the main findings of the audit of the report on relations with affiliated companies and answered questions raised by members of the audit committee. The members of the audit committee acknowledged the audit report and the audit opinion. The audit committee was able to convince itself of the orderly nature of the audit and audit report and, in particular, came to the conclusion that both the audit report and the audit conducted by the auditor comply with the statutory requirements. The audit committee recommended that the supervisory board should approve the results of the audit and, since it was of the opinion that there were no objections to the executive board's declaration on the report on relations with affiliated companies, should adopt a corresponding resolution.

The supervisory board discussed the report on relations with affiliated companies at its meeting on March 3, 2020. At this meeting too, the members of the executive board provided detailed explanations of the report on relations with affiliated companies and answered questions on it. Moreover, the auditor was present at this meeting of the supervisory board and reported on the main findings of the audit of the report on relations with affiliated companies and answered questions from members of the supervisory board. On this basis, the supervisory board ascertained that, under the circumstances known at the time they were undertaken, the company's expenditures in connection with the transactions outlined in the report on relations with affiliated companies were not unreasonably high and compensation had been received for any disadvantages. In particular, it obtained an explanation of the principles used to determine the relevant activities and the remuneration therefor, especially in the case of transactions of material significance. The audit committee had discussed the report on relations with affiliated companies and gave the supervisory board a detailed overview of the outcome of its deliberations. The supervisory board was able to convince itself of the orderly nature of the audit and audit report and came to the conclusion, in particular, that both the audit report and the audit itself meet the statutory requirements.

In particular, it examined the completeness and correctness of the report on relations with affiliated companies. No grounds for objection were identified.

The supervisory board thus has no objection to raise to the final declaration made by the executive board in its report on relations with affiliated companies and concurs with the auditor's findings.

Personnel issues relating to the supervisory board

Dr. Werner Müller, honorary chairman and former long-standing chairman of the supervisory board, passed away on July 15, 2019 at the age of 73. We will greatly miss him as a person and a great thinker. Evonik has lost an exceptionally creative personality and will always remember Dr. Werner Müller with great esteem.

There were two changes in the employee representatives on the supervisory board in 2019.

Michael Hofmann stepped down from the supervisory board at the end of April 30, 2019. Martina Reisch was appointed by Essen Local Court to replace Michael Hofmann as a member of the supervisory board with effect from May 13, 2019. The substitute for Michael Hofmann elected in accordance with the German Codetermination Act during the election of employee representatives in 2018 had previously declared that he was no longer available for appointment to the supervisory board. At the same time, Martina Reisch had also revoked her 2018 election as a substitute for Martin Albers.

Carmen Fuchs stepped down from the supervisory board effective December 11, 2019. Her place on the supervisory board has been taken by Hussin El Moussaoui, who was elected as a substitute member at the election of employee representatives in 2018.

As a consequence of the personnel changes on the supervisory board, there were also some changes in committee members.

The supervisory board elected Martina Reisch as a member of the innovation and research committee with effect from June 4, 2019, replacing Jens Barnhusen, who resigned from the committee on May 31, 2019. Jens Barnhusen took over from Michael Hofmann on the audit committee on June 4, 2019. Hussin El Moussaoui replaced Carmen Fuchs on the innovation and research committee effective December 12, 2019.

The supervisory board would like to thank Carmen Fuchs and Michael Hofmann for their committed work in the interests of the company and its employees.

Concluding remark

The supervisory board would also like to thank the executive board, works councils, executive staff councils, and all employees of Evonik Industries AG and its affiliated companies for their successful work over the past year.

The supervisory board adopted this report at its meeting on March 3, 2020, in accordance with section 171 paragraph 2 of the German Stock Corporation Act (AktG).

Essen, March 3, 2020

Bernd Tönjes

On behalf of the supervisory board
Bernd Tönjes, Chairman

Corporate governance report and declaration on corporate governance[1]

The following report on corporate governance and the principles of corporate management at Evonik is issued jointly by the executive board and supervisory board of Evonik Industries AG. It forms the corporate governance report in accordance with section 3.10 of the German Corporate Governance Code and the declaration on corporate governance in accordance with sections 289f and 315d of the German Commercial Code (HGB).

1. Principles of corporate governance and corporate structure

Corporate governance comprises all principles for the management and supervision of a company. As an expression of good and responsible corporate management, it is therefore a key element in Evonik's management philosophy. The principles of corporate governance relate mainly to collaboration within the executive board and supervisory board, between these two boards, and between the boards and the shareholders, especially at shareholders' meetings. They also relate to the company's relationship with other people and organizations with which it has business dealings.

Evonik is committed to the German Corporate Governance Code

Evonik Industries is a stock corporation established under German law. Its shares have been listed on the stock exchange since April 25, 2013.

Alongside compliance with the provisions of the relevant legislation, the basis for ensuring responsible management and supervision of Evonik with a view to a sustained increase in corporate value is our commitment to the German Corporate Governance Code in the version dated February 7, 2017. This code, which was adopted by the Government Commission on the German Corporate Governance Code, contains both key statutory provisions on the management and supervision of publicly listed German companies and recommendations and suggestions based on nationally and internationally recognized standards of responsible corporate governance.

The executive board and supervisory board of Evonik Industries AG are explicitly committed to responsible corporate governance and identify with the goals of the German Corporate Governance Code. According to the foreword, in the interest of good and proactive corporate governance, a company may deviate from the recommendations set out in the code if this is necessary to reflect company-specific requirements.

2. Information on corporate management and corporate governance

2.1 Declaration of conformity with the German Corporate Governance Code pursuant to section 161 of the German Stock Corporation Act (AktG)

Under section 161 of the German Stock Corporation Act (AktG), the executive board and supervisory board of Evonik Industries AG are required to annually submit a declaration that the company has been, and is, in compliance with the recommendations of the Government Commission on the German Corporate Governance Code, as published by the Federal Ministry of Justice in the official section of the Federal Gazette (Bundesanzeiger), and which recommendations have not been, or are not being, applied, together with the associated reasons. The declaration has to be made permanently available to the public on the company's website.

The executive board and supervisory board of Evonik Industries AG hereby submit the following declaration pursuant to section 161 of the German Stock Corporation Act:

[1] The declaration on corporate governance also forms an integral part of the combined management report for Evonik Industries AG (sections 289 ff. HGB) and the Evonik Group (sections 315 ff. HGB). In accordance with section 317 paragraph 2 sentence 6 of the German Commercial Code (HGB), the disclosures were not included in the audit.

Since submitting its last declaration of conformity in December 2018, the company has fully complied with all recommendations of the German Corporate Governance Code in the version dated February 7, 2017, as published in the Federal Gazette on April 24, 2017, and will continue to do so.

Further, nearly all suggestions contained in the aforementioned version of the German Corporate Governance Code were applied, with the following exceptions:

The suggestion set forth in section 2.3.3 of the German Corporate Governance Code (the company should make it possible to follow the general meeting using modern communication media) was not and will not be applied. Instead, for organizational reasons, only the speeches by the chairman of the supervisory board and the chairman of the executive board will be transmitted. This procedure correlates with widespread practice. It cannot be excluded that a more extensive transmission could infringe the personal rights of shareholders.

Further, section 2.3.2 sentence 2, second half-sentence of the German Corporate Governance Code (the representative appointed to exercise shareholders' voting rights in accordance with instructions should also be reachable during the general meeting) was not and will not be applied. Application of this suggestion would only be appropriate in the event of transmission of the general shareholders' meeting in full via modern communication media. Furthermore, the availability of the representatives nominated by the company via electronic media during the meeting as put forward by this suggestion involves technical uncertainties. These and the associated risks for the efficacy of resolutions are to be avoided.

Essen, December 2019

The Executive Board   The Supervisory Board

2.2 Relevant information on corporate management practices

Corporate governance

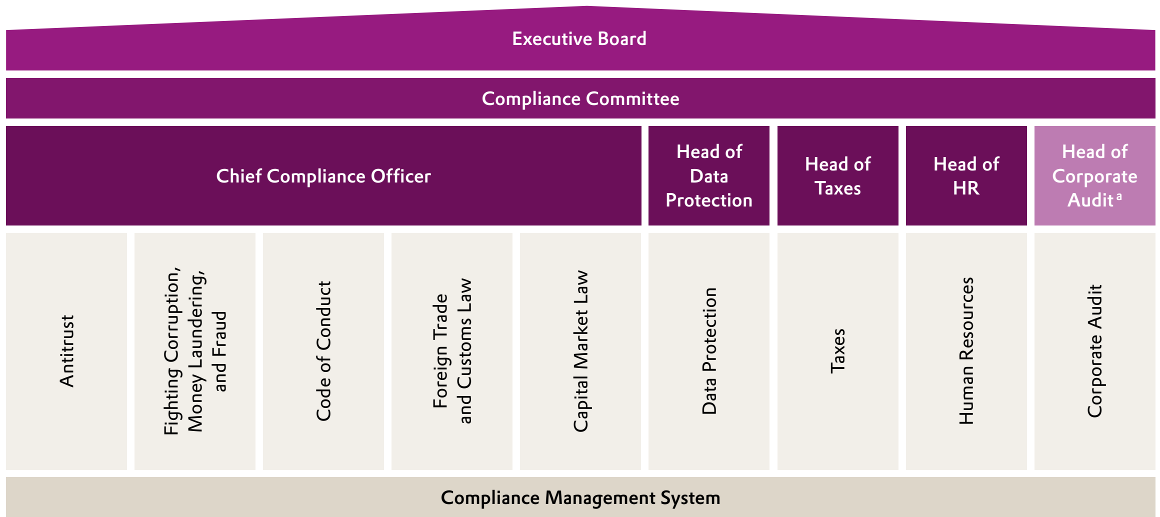
The company is explicitly committed to good corporate governance and complies with the recommendations and—with two exceptions—the suggestions set forth in the German Corporate Governance Code. See for details subsection 2.1 p.74f.

Compliance

Evonik understands compliance as all activities to ensure that the conduct of the company, its governance bodies, and its employees respect all applicable mandatory standards such as legal provisions, statutory requirements and prohibitions, in-house directives, and voluntary undertakings.

The most important external and internal principles and rules are set out in Evonik's group-wide code of conduct. This is binding for both the executive board and all Evonik employees, both internally in their treatment of one another and externally in contact with shareholders, business partners, representatives of authorities and government bodies, and the general public. It requires all employees to comply with the applicable laws, regulations, and other obligations. Evonik does not do business at any price. All employees worldwide receive regular training on the code of conduct and specific issues. Systematic action is taken to deal with any breach of the code of conduct.

House of Compliance C29



[a] Advisory function.

The compliance areas identified as being of specific relevance to our company are bundled in a House of Compliance. They include antitrust law, fighting corruption, money laundering, and fraud, as well as the code of conduct, foreign trade and customs law, capital market law, data protection, taxes, and human resources. Environment, safety, health, and quality, including compliance-related aspects, are managed and monitored in a separate corporate division.

The role of the House of Compliance is to define minimum group-wide standards for the compliance management systems for these areas and ensure that they are implemented. The process of forming a consensus, sharing experience, and coordinating joint 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 Corporate Audit. The compliance units are responsible for the appropriateness and efficacy of the compliance management system for the compliance topics allocated to them.

Further information on Evonik's compliance management system and the corresponding areas of focus and action taken in the year under review can be found in the sustainability report[1]. www.evonik.com/sustainability-report

Corporate responsibility

The executive board and supervisory board examine sustainability topics, especially aspects of the environment, safety, and society, several times a year. The new sustainability and climate strategy was adopted by the executive board in 2019 and presented to the supervisory board. Further, the development of accident frequency and severity is reflected in the executive board's variable pay as a performance-related component. Extensive information on corporate responsibility can be found in the sustainability section of the combined management report p. 42 ff. and the sustainability report. www.evonik.com/sustainability-report

Compliance Management System (CMS) C30

Transparency

Evonik regards timely and equal public disclosure of information as a key basis of good corporate governance. Evonik provides extensive information in German and English on its website. This includes our financial calendar, which provides a convenient overview of important dates. www.evonik.com/investor-relations

Evonik's business performance is outlined principally in our financial reports and in investor relations presentations. These are supplemented by information on Evonik's shares, the terms of bond issues, and an overview of our credit ratings.

Mandatory publications such as ad-hoc announcements, voting rights announcements, and information on directors' dealings are also published immediately on our investor relations site. www.evonik.com/investor-relations (Corporate Governance)

The offering also includes information on corporate strategy and on Evonik's corporate structure and organization. In addition, the investor relations site provides information on Evonik's approach to corporate responsibility, and how the management and supervision of the company (corporate governance) are aligned to responsible and sustained value creation. www.evonik.com/investor-relations (Sustainable Investment (SRI) and Corporate Governance)

[1] The sustainability report is not part of the audited combined management report.

2.3 Work of the executive board and supervisory board

The German Stock Corporation Act (AktG) forms the legal basis for the incorporation of Evonik Industries AG. Further details are set forth in the company's articles of incorporation and the provisions of the German Corporate Governance Code. See subsection 2.1 p. 74 f.

Executive board

The executive board of Evonik Industries AG is responsible for running the company in the company's interests with a view to sustained value creation, taking into account the interests of the shareholders, employees, and other stakeholders. It works together trustfully with the other corporate governance bodies for the good of the company.

The executive board defines and updates the company's business objectives, its basic strategic focus, business policy, and corporate structure. It ensures compliance with statutory provisions and internal directives and exerts its influence to ensure that they are observed by Group companies (compliance). It is also responsible for ensuring appropriate measures aligned to the company's risk situation (compliance management system), and appropriate risk management and risk controlling in the company. A whistleblower system has been set up so that employees and third parties have an opportunity to report, in a protected manner, suspected breaches of the law within the company.

When making appointments to management functions in the company, the executive board applies the principles of diversity. In this it strives, in particular, to ensure adequate representation of women.

The executive board has four members at present. One member is appointed to chair the executive board. With the approval of the supervisory board, the executive board has adopted rules of procedure and a plan allocating areas of responsibility. The chairman coordinates the work of the executive board, provides information for the supervisory board, and maintains regular contact with the chairman of the supervisory board. If the chairman is not available to perform these tasks, they are assumed by the deputy chairperson. The members of the executive board are jointly responsible for the overall management of the company. They work together constructively and keep each other informed of the main activities and developments in their areas of responsibility. The executive board endeavors to take decisions unanimously, but may also adopt resolutions by majority vote. If an equal number of votes is cast, the chairman has the casting vote.

Ensuring that the supervisory board receives sufficient information is the joint responsibility of the executive board and supervisory board. The executive board provides the supervisory board with the reports to be prepared in accordance with section 90 of the German Stock Corporation Act (AktG) and the rules of procedure of the supervisory board. It gives the supervisory board timely, regular, and full information on all matters that are relevant to the company and Group relating to strategy, planning, business development, risks, risk management, and compliance. It outlines deviations between the planned and actual business performance and targets and the reasons therefore.

Further, the executive board submits timely reports to the supervisory board on business matters and actions for which it is required by the articles of incorporation or the supervisory board's rules of procedure to obtain the approval of the supervisory board. In addition, the supervisory board can make further business activities and measures dependent on its consent on a case-by-case basis.

Members of the executive board are required to act in the interests of the company. They may not pursue personal interests in their decisions, nor may they utilize business opportunities available to the company for themselves.

The members of the executive board are subject to a comprehensive non-compete obligation during their term of office. They may only assume additional posts, especially seats on the supervisory boards of companies that are not affiliated companies of Evonik Industries AG, with the consent of the supervisory board. In such cases, the executive board member shall accept the post as a personal office and shall ensure strict confidentiality and strict separation from his/her activities as a member of the executive board. Every member of the executive board is required to disclose any conflict of interest to the chairman of the supervisory board without delay and to inform the other members of the executive board.

In fiscal 2019, there were no conflicts of interest relating to members of the executive board of Evonik Industries AG.

All transactions between the company or companies in the Evonik Group, on the one hand, and executive board members and related parties, on the other, must take place on terms that are customary in the sector. The report of the supervisory board p. 67 ff. contains details of the relevant transactions in the reporting period.

The composition of the executive board and membership of supervisory boards and similar governance bodies are outlined in the further information on corporate officers p. 83 ff.

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 executive board is required to obtain the approval of the supervisory board on decisions of fundamental importance, which are defined in a separate list. These include the following:

- Fundamental changes to the structure of the company and the Group
- Setting the annual budget for the Group
- Investments exceeding €100 million
- The assumption of loans and the issuance of bonds exceeding €300 million with a maturity of more than one year

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 Group, and the combined management report. It also examines the separate combined non-financial report. The supervisory board submits a written report on the outcome of the audit to the shareholders' meeting.

The supervisory board is subject to the German Codetermination Act (MitbestG). In accordance with these statutory provisions, the supervisory board comprises 20 members, ten representatives of the shareholders, and ten representatives of the workforce. The representatives of the shareholders are elected by the shareholders' meeting on the basis of nominations put forward by the supervisory board as prepared by the nomination committee. The representatives of the employees are elected by the workforce and comprise seven employee representatives and three representatives of the industrial union.

The composition of the supervisory board should ensure that its members collectively have the knowledge, skills, and professional expertise required to properly perform their duties. The members of the supervisory board may not undertake any duties as officers or advisors to the company's major competitors.

The supervisory board should not include more than two former members of the executive board. A former member of the executive board was elected to the supervisory board. In compliance with the statutory waiting period, his term of office on the executive board ended more than two years before the date of his election to the supervisory board. All members of the supervisory board shall ensure that they have sufficient time to perform their tasks as a member of the supervisory board. Members of the supervisory board who are also members of the executive board of a publicly listed stock corporation should not hold more than two seats on the supervisory boards of listed companies outside their group of companies or boards where comparable demands are made on them; members of the supervisory board who are not members of the executive board may not hold more than five seats on such supervisory or comparable boards. For this purpose, chairing a supervisory board counts as holding two seats.

Members of the supervisory board must act in the interests of the company and not pursue personal interests in their decisions, nor may they utilize business opportunities available to the company for themselves. Members must disclose conflicts of interest to the supervisory board. Any member of the supervisory board who discloses a conflict of interest is excluded from resolutions at the meetings of the supervisory board dealing with matters relating to the conflict of interest. In its report to the shareholders' meeting, the supervisory board discloses any conflicts of interest that have arisen and how they have been dealt with. Material conflicts of interest relating to a member of the supervisory board that are not by nature temporary should lead to termination of his/her term of office.

Consultancy, service, and similar contracts between a member of the supervisory board and the company must be approved by the supervisory board. There were no contracts of this type in 2019.

The supervisory board has adopted rules of procedure, which also govern the formation and tasks of the committees. At least two regular meetings of the supervisory board are held in each calendar half-year. In addition, meetings may be convened as required, and the supervisory board may adopt resolutions outside meetings. If an equal number of votes is cast when taking a decision, and a second vote does not alter this situation, the chairman of the supervisory board has the casting vote.

The supervisory board has set the following objectives for its composition, which are taken into account in the proposals put to the shareholders' meeting with regard to the regular election of members of the supervisory board and the subsequent election of a member of the supervisory board:

- At least two members should have sound knowledge and experience of regions which are of material importance for the Evonik Group's business, either through their background or through professional experience gained in an international context.
- At least two members should have special knowledge and experience of business administration and of finance/accounting or auditing.
- The members of the supervisory board as a whole should be familiar with the chemical sector.
- At least two members should have experience managing or supervising a major company.
- The supervisory board should comprise at least 30 percent women and at least 30 percent men.
- The members of the supervisory board should not hold consulting or governance positions with customers, suppliers, creditors, or other business partners that could lead to a conflict of interest. Deviations from this rule are permitted in legitimate individual cases.
- Members of the supervisory board should not normally be over 75 when they are elected.
- Members of the supervisory board should not normally hold office for more than three full terms within the meaning of section 102 paragraph 1 of the German Stock Corporation Act (AktG), i.e., normally 15 years. It is possible to deviate from this rule, in particular, in the case of a member of the supervisory board who directly or indirectly holds at least 25 percent of the company's shares or belongs to the governance body of a shareholder that directly or indirectly holds at least 25 percent of the company's shares.
- The collective knowledge and professional expertise of the members of the supervisory board should adequately reflect the skills profile.
- At least six supervisory board members representing the shareholders should be independent of the company and its executive board and independent of a controlling shareholder.

These targets were last revised in December 2019.

The supervisory board currently comprises seven women and 13 men. In accordance with its own targets and in compliance with statutory requirements, it therefore meets the minimum of 30 percent women and 30 percent men.

The independence of a supervisory board member representing the shareholders depends on whether the member is independent of the company and its executive board and independent of a controlling shareholder. The supervisory board classifies all current members as independent. In this context, it is satisfied, in particular, that the fact that Dr. Luther and Dr. Trautz have held seats for more than 12 years and Mr. Tönjes' position as chairman of the executive board of RAG-Stiftung do not constitute a conflict of interests with regard to the work of the supervisory board that would counteract their independence. Even taking into account the more far-reaching criteria set out in the European Commission's recommendation of February 15, 2005, there are no conflicts of interest and no doubts regarding the independence of the members of the supervisory board.[1]

The shareholders' representatives classified as independent members are: Bernd Tönjes, Prof. Barbara Albert, Prof. Aldo Belloni, Prof. Barbara Grunewald, Dr. Siegfried Luther, Michael Rüdiger, Peter Spuhler, Angela Titzrath, Dr. Volker Trautz, and Ulrich Weber.

The length of membership of the supervisory board is disclosed in the resumes of the members of the supervisory board.

The present supervisory board satisfies the objectives for its composition.

In accordance with the recommendation in the German Corporate Governance Code, as well as setting objectives for its composition, the supervisory board has drawn up a profile of the skills and expertise required for the entire supervisory board. Future proposals for the election of supervisory board members will be based on this profile. The objectives and profile together form the supervisory board's diversity concept pursuant to section 289f paragraph 2 no. 6 and section 315d of the German Commercial Code (HGB), which is outlined in subsection 2.4 p. 81.

The supervisory board considers that the following skills are appropriate for the proper performance of its duties and are reflected by its members:

- International experience
  This requires professional experience gained by spending an extended period working in a foreign country or another international context. At present, six members of the supervisory board meet this requirement.
- Knowledge of business administration
  The basis for such knowledge may be vocational training, a course of study, or professional activity in a relevant field. Nine members of the supervisory board have such expertise in business administration.
- Experience of human resources and social issues
  This requires professional experience of organizing, selecting, and hiring personnel. Based on this description, 14 members of the supervisory board have experience of human resources and social issues.
- Scientific knowledge (especially a knowledge of the chemical sector)
  Such knowledge may have been acquired through vocational training, a course of study, or professional activity in a scientific context. Eight members of the supervisory board meet this requirement.
- Experience of corporate management
  Experience of corporate management requires many years of professional experience in a company in managerial positions with personnel and management responsibility. Eight members of the supervisory board meet this requirement.

The supervisory board has the following committees:

The **executive committee** comprises the chairman of the supervisory board, his deputy, and two further members. It undertakes the regular business of the supervisory board and advises the executive board on fundamental issues relating to the ongoing strategic development of the company. Insofar as is permitted by law, it takes decisions in place of the full supervisory board on matters which cannot be deferred until the necessary resolution is passed by the full supervisory board without detrimental effects for the company. It also takes decisions on the use of authorized capital. It prepares meetings of the supervisory board and, in particular, personnel decisions and resolutions on the remuneration of the executive board, including the main contractual elements and the overall remuneration of individual members of the executive board. It is also responsible for concluding, amending, and terminating employment contracts with the members of the executive board, where this does not involve altering or setting remuneration, and represents the company in other transactions of a legal nature with present and former members of the executive board and certain related parties.

Members: Bernd Tönjes (chairman), Edeltraud Glänzer (deputy chairwoman), Martin Albers, Dr. Volker Trautz.

The **audit committee** has six members and is familiar as a whole with the chemical sector. Members of the audit committee have specialist knowledge and experience in the application of accounting standards and internal control systems. Moreover, the chairman is independent and is not a former member of the company's executive board. Acting on behalf of the supervisory board, the audit committee's principal tasks comprise supervising the accounting, the accounting process, the effectiveness of the internal control system, the risk management system, and the internal audit system, the auditing of the financial statements, especially the independence of the auditor, any additional services provided by the auditor by prior agreement and retrospective review, as well as compliance and the related decisions. It can make proposals and recommendations geared to ensuring the integrity of the financial reporting process. It prepares the supervisory board's proposal to the shareholders' meeting on the appointment of the auditor. If the audit engagement is put out to tender, the proposal must include at least two candidates.

[1] Section 13.2 in conjunction with annex 2 of the Commission Recommendation of February 15, 2005 on the role of non-executive directors/supervisory board members of publicly listed companies and committees of the board of directors/supervisory board (2005/162/EC).

Further, the audit committee takes decisions on the appointment of the auditor, the focal points of the audit, and the agreement on audit fees. It also authorizes the chairman of the supervisory board to issue the contract to the auditor. It assumes the specific duties regarding the statutory audit of public-interest entities assigned to the audit committee under applicable law, especially EU Regulation no. 537/2014. The audit committee prepares the decision of the supervisory board on approval of the annual financial statements of Evonik Industries AG and the consolidated financial statements for the Group. For this purpose, it is required to conduct a preliminary examination of the annual financial statements of Evonik Industries AG, the consolidated financial statements for the Group, the combined management report, and the executive board's proposal for the distribution of the profit. The audit committee also examines the auditor's report. Also, the audit committee prepares the decision of the supervisory board on the (Group's) combined non-financial report. For this purpose, it is required to undertake a preliminary examination of the report. The audit committee reviews the interim reports, especially the half-yearly report, discusses the audit review report with the auditor—if an auditor is engaged to conduct a review—and decides whether to raise any objections. Further, it examines issues relating to corporate governance and reports to the supervisory board at least once a year on the status, effectiveness, and scope to implement any improvements to corporate governance, and on new requirements and new developments in this field.

Members: Dr. Siegfried Luther (chairman), Karin Erhard (deputy chairwoman), Jens Barnhusen, Prof. Barbara Grunewald, Dr. Thomas Sauer, Angela Titzrath.

The **finance and investment committee** has eight members. Its work covers aspects of corporate finance and investment planning. For example, it takes decisions on behalf of the supervisory board on approving investment and real estate transactions with a value of more than €100 million. Further, the finance and investment committee takes decisions on behalf of the supervisory board involving approval for the establishment, acquisition, and divestment of businesses, and on capital measures at other Group companies with a value of between €100 million and €500 million. It also prepares decisions of the full supervisory board on such measures, where they exceed €500 million. Furthermore, it takes decisions on the assumption of guarantees and sureties for credits exceeding €50 million and on investments in companies of more than €100 million.

Members: Michael Rüdiger (chairman), Edeltraud Glänzer (deputy chairwoman), Martin Albers, Prof. Aldo Belloni, Frank Löllgen, Anke Strüber-Hummelt, Bernd Tönjes, Ulrich Weber.

The **innovation and research committee** has six members. It examines the company's innovation and research strategy, in particular by analyzing expected future developments both in the chemical sector and in the markets of relevance to the company. It discusses the resulting implications for the company's innovation and research programs with the executive board.

Members: Prof. Barbara Albert (chairwoman), Frank Löllgen (deputy chairman), Hussin El Moussaoui, Martina Reisch, Bernd Tönjes, Dr. Volker Trautz.

The **nomination committee** comprises three supervisory board members elected as representatives of the shareholders. The task of the nomination committee is to prepare a proposal for the supervisory board on the candidates to be nominated to the shareholders' meeting for election to the supervisory board.

Members: Bernd Tönjes (chairman), Dr. Volker Trautz, Ulrich Weber.

Finally, there is a **mediation committee** established in accordance with section 27 paragraph 3 of the German Codetermination Act. This mandatory committee is composed of the chairman of the supervisory board, his deputy, one shareholder representative, and one employee representative. This committee puts forward proposals to the supervisory board on the appointment of members of the executive board if the necessary two-thirds majority of the supervisory board members is not achieved in the first vote.

Members: Bernd Tönjes (chairman), Edeltraud Glänzer (deputy chairwoman), Martin Albers, Dr. Volker Trautz.

The mediation committee is only convened when necessary. All other committees meet regularly and may also hold additional meetings on specific issues in line with their responsibilities as set out in the rules of procedure for the supervisory board.

Further details of the work of the supervisory board and its committees in the past fiscal year can be found in the report of the supervisory board p. 67 ff. The report of the supervisory board also outlines the composition of the various committees and the meetings attended by members the supervisory board. The composition of the supervisory board and membership of supervisory boards and similar governance bodies are outlined in the further information on corporate officers p. 83 ff.

The supervisory board regularly examines the efficiency of its work. A self-assessment involving supervisory board members filling out an evaluation questionnaire is planned for 2020. The evaluation and any necessary action will take place during the year.

Directors' dealings

In accordance with the EU market abuse regulation (article 19 paragraph 1 MAR), which came into force on July 3, 2016, members of the executive board and supervisory board and persons closely associated with them (including spouses, partners who are equivalent to a spouse, and dependent children) are required to notify Evonik Industries AG and the Federal Financial Supervisory Authority (BaFin) of any transactions in shares or debt instruments of Evonik Industries AG, or derivatives, or other financial instruments linked thereto. This applies to transactions undertaken within a calendar year after a total value of €5,000 has been reached. The transactions notified are disclosed on the website of Evonik Industries AG. **www.evonik.com/investor-relations (Corporate Governance)**

2.4 Diversity at Evonik

Since Evonik Industries AG is a publicly listed company and is also subject to German codetermination legislation, the diversity requirements set forth in the German Stock Corporation Act (AktG) and the recommendations of the German Corporate Governance Code apply.

The statutory ratios of at least 30 percent women and at least 30 percent men apply for the composition of the supervisory board. The supervisory board meets this ratio: Alongside 13 men, it has seven female members, three of whom represent the shareholders, and four of whom represent the workforce.

For the proportion of women on the executive board, the supervisory board has set a target of at least 25 percent, with a deadline for achieving this of June 30, 2022. The executive board comprises one woman and three men, so it meets this target.

Further, for the period from January 1, 2017 through December 31, 2019, the executive board set a target of 20 percent female managers for both the first and the second management levels below the executive board. At year-end 2019, the proportion of female managers was 26.1 percent at the first management level and 24.1 percent at the second management level. The targets set were therefore exceeded. For the period from January 1, 2020 through December 31, 2020, the executive board has set a target of 27.3 female managers for the first management level below the executive board and 25.0 percent for the second management level.

Diversity concept

The previous diversity requirements set out in the German Stock Corporation Act (AktG) and the German Corporate Governance Code for publicly listed corporations that are also classified as large stock corporations have been extended by the revised version of section 289f paragraph 2 no. 6 of the German Commercial Code (HGB). The diversity concept, which has to be described pursuant to this provision, and which has to be followed in appointments to the supervisory board and the executive board, comprises the following elements at Evonik Industries AG:

The diversity concept for Evonik's supervisory board comprises both the supervisory board's objectives for its composition and the profile for the skills and expertise of the supervisory board as a whole. Further details can be found in subsection 2.3 **p. 77 ff.** Most of the requirements set out in the new rules for the supervisory board's diversity concept are already reflected in the supervisory board's objectives. These include rules on the age and gender of supervisory board members, and on professional experience and knowledge of business administration and the chemical sector. These objectives have been supplemented by a profile that sets out the required skills and expertise and documents the extent to which they are met. The diversity concept is implemented by ensuring that the proposals put to the shareholders' meeting for the election of supervisory board members reflect the objectives and the profile. The present composition of the supervisory board meets all requirements of the diversity concept.

The supervisory board, executive committee, and executive board together ensure long-term succession planning for appointments to the executive board. Structured talent management and targeted executive development form the basis for filling executive board positions from within the company where possible. The principles of succession planning are agreed with the executive committee, and the executive board and the chairman of the supervisory board regularly discuss potential candidates. The chairman of the supervisory board informs the executive committee or the full supervisory board of the status of succession planning as necessary. The basis for this includes the diversity concept for the executive board. Alongside the target of 25 percent female members outlined above, it sets a maximum age limit of 65 for members of the executive board. In addition to this age limit, when selecting suitable candidates for the executive board the supervisory board ensures a suitable mixture of ages to ensure long-term succession planning. Further, as a leading global specialty chemicals company, when making appointments to the executive board Evonik pays attention to ensuring that at least one member has knowledge of the area of human resources, one has knowledge of finance and accounting, and one has knowledge of the chemical sector. In addition, at least one member of the executive board should have international professional experience. The present composition of the executive board fully meets the requirements set by the diversity concept.

3. Shareholders and the shareholders' meeting

The shareholders exercise their rights at the shareholders meeting. The shareholders' meeting elects the auditor and the shareholder representatives on the supervisory board and resolves on the ratification of the actions of members of the executive board and supervisory board, the distribution of the profit, capital transactions, and amendments to the articles of incorporation. The shares are registered shares. Shareholders who are entered in the register of shareholders are eligible to attend the shareholders' meeting and exercise their voting rights, providing they register in good time to attend the meeting. The shareholders may exercise their voting rights at the shareholders' meeting in person, through a proxy of their choice, or through a proxy appointed by the company. Each share entitles the holder to one vote.

4. Information on accounting and auditing of the financial statements

Evonik Industries AG prepares its annual financial statements in accordance with the German Commercial Code (HGB) and the German Stock Corporation Act (AktG). The consolidated financial statements are prepared on the basis of the International Financial Reporting Standards (IFRS), as adopted for use in the EU. In addition, the applicable statutory provisions of section 315e paragraph 1 of the German Commercial Code (HGB) are taken into account.

As proposed by the supervisory board, the annual shareholders' meeting on May 28, 2019 elected PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (PwC), Frankfurt am Main, as auditor for the annual financial statements of Evonik Industries AG, the consolidated financial statements of the Evonik Group, and the combined management report for fiscal 2019. The supervisory board previously ascertained the independence of the auditor. The auditors that sign the audit of the annual financial statements of Evonik Industries AG and the consolidated financial statements of the Evonik Group are Mr. Eckhard Sprinkmeier (since fiscal 2017) and Ms. Antje Schlotter (financial statements of Evonik Industries AG since fiscal 2013; consolidated financial statements since fiscal 2014). In addition to the accounting, the audit covered the system to identify emerging risks and the accounting-related internal control system. Further, on the basis of the resolution adopted on May 28, 2019, PwC conducted a review of the interim financial statements for the first half of 2019.

5. Risk management and internal control system (ICS)

Risk management in the Evonik Group, including the ICS relating to the accounting process, is described in the opportunity and risk report in the combined management report p. 53 ff.

6. Remuneration

The principles of the remuneration system and the remuneration of the members of the executive board and the supervisory board are outlined in the remuneration report p. 86 ff.

Further information on corporate officers

Supervisory Board of Evonik Industries AG

Bernd Tönjes, Marl
Chairman of the Supervisory Board

Chairman of the Executive Board of RAG-Stiftung

a) • RAG Aktiengesellschaft (Chair)
• RAG Deutsche Steinkohle AG (Chair) (until April 26, 2019)
• RSBG SE (Chair) (since August 22, 2019)

b) • DEKRA e. V.

Edeltraud Glänzer, Hanover
Deputy Chairwoman of the Supervisory Board

Political Secretary for Special Matters of the German Mining, Chemical and Energy Industrial Union (IG BCE)

a) • B. Braun Melsungen AG
• Merck KGaA

Martin Albers, Dorsten
Chairman of the Group Works Council of Evonik Industries AG

Chairman of the Works Council of the jointly operated Essen campus

Prof. Barbara Albert, Darmstadt
Professor of Solid State Chemistry at the Eduard-Zintl Institute of Inorganic and Physical Chemistry of the Technical University of Darmstadt

a) • Schunk GmbH

Jens Barnhusen, Bottrop
Chairman of the Works Council for Evonik's Goldschmidtstrasse facilities

a) • Pensionskasse Degussa VVaG

Prof. Aldo Belloni, Eurasburg
Chairman of the Executive Board of Linde Aktiengesellschaft (until February 28, 2019)

b) • TÜV Süd e. V.

Karin Erhard, Hanover
Member of the Central Board of Executive Directors of the German Mining, Chemical and Energy Industrial Union (IG BCE)

Prof. Barbara Grunewald, Bonn
Professor and Chair for Civil Law and Commercial Law at the University of Cologne (until February 28, 2019)

Martin Kubessa, Velbert
Member of the Works Council for Evonik's Marl facilities

a) • Evonik Technology & Infrastructure GmbH (until February 28, 2019)

Frank Löllgen, Cologne
Regional Director North Rhine of the German Mining, Chemical and Energy Industrial Union (IG BCE)

a) • Bayer AG

Dr. Siegfried Luther, Gütersloh
Former Chief Financial Officer of Bertelsmann AG (now Bertelsmann SE & Co. KGaA)

a) • Schaeffler AG (until April 24, 2019)
• Sparkasse Gütersloh-Rietberg

Hussin El Moussaoui, Brachttal Schlierbach
(since December 11, 2019)

Deputy Chairman of the Group Works Council of Evonik Industries AG

Deputy Chairman of the Works Council of the jointly operated Hanau site

a) • Evonik Technology & Infrastructure GmbH

a) Membership of other statutory supervisory boards.
b) Membership of comparable German and foreign supervisory bodies of business enterprises pursuant to section 125 paragraph 1 sentence 5 of the German Stock Corporation Act (AktG).

Martina Reisch, Rheinfelden
(since May 13, 2019)

Chairwoman of the Works Council of the jointly operated Rheinfelden site

a) • Evonik Resource Efficiency GmbH

Michael Rüdiger, Utting am Ammersee
Chairman of the Executive Board of DekaBank Deutsche Girozentrale (until December 31, 2019)

a) • Deka Immobilien GmbH (until September 16, 2019)
• Deka Investment GmbH (Chair) (until December 31, 2019)
• Deka Vermögensmanagement GmbH (Chair) (formerly: Landesbank Berlin Investment GmbH) (until December 31, 2019)

Dr. Thomas Sauer, Bad Homburg
Chairman of the Executive Staff Council of the Evonik Group

Peter Spuhler, Weiningen (Switzerland)
Chairman of the Board of Directors of Stadler Rail AG, Bussnang (Switzerland) and of PCS Holding AG, Frauenfeld (Switzerland)

a) • Robert Bosch GmbH, Stuttgart (since April 1, 2019)

b) • Aebi Schmidt Holding AG, Frauenfeld (Switzerland) (Chair)
• AngelStar S.r.l., Mola di Bari (Italy)
• Allreal Holding AG, Zug (Switzerland)
• Autoneum Holding AG, Winterthur (Switzerland)
• Chesa Sül Spelm AG, Frauenfeld (Switzerland)
• DSH Holding AG, Warth-Weiningen (Switzerland)
• Estonia Train Finance AG, Frauenfeld (Switzerland) (Chair)
• European Loc Pool AG, Frauenfeld (Switzerland)
• Nordic Train Finance AG, Frauenfeld (Switzerland) (Chair)
• Rana Aps AG, Warth-Weiningen (Switzerland) (Chair)
• Rana Aps Iberica S.L., Warth-Weiningen (Switzerland) (Chair)
• Rieter Holding AG, Winterthur (Switzerland)
• Stadler CIS AG, Bussnang (Switzerland) (Chair)
• Stadler Minsk CJSC, Minsk (Belarus) (Chair)
• Stadler Pankow GmbH, Berlin (Chair)
• Stadler Trains Magyarország Kft., Budapest (Hungary)
• Stadler US Inc., Westfield (USA)
• Wohnpark Promenade AG, Frauenfeld (Switzerland)
• ZLE Betriebs AG, Zurich (Switzerland)

until June 27, 2019:
• Gleisag Gleis- und Tiefbau AG, Goldach (Switzerland) (Chair)
• Walo Bertschinger AG, Zurich (Switzerland)

Anke Strüber-Hummelt, Marl
Deputy Chairwoman of the Group Works Council of Evonik Industries AG

Chairwoman of the Group Works Council for Evonik's Marl facilities

Angela Titzrath, Hamburg
Chairwoman of the Executive Board of Hamburger Hafen und Logistik Aktiengesellschaft

a) • Talanx AG

Dr. Volker Trautz, Munich
Former Chairman of the Executive Board of LyondellBasell Industries

a) • Citigroup Global Markets Deutschland AG

b) • CERONA Companhia de Energia Renovável, São Paulo (Brazil)

Ulrich Weber, Krefeld
Former member of the Executive Board, Human Resources & Law, of Deutsche Bahn AG

a) • HDI Global SE
• ias Aktiengesellschaft

b) • ias Stiftung

The following members left the supervisory board in 2019:

Carmen Fuchs, Alzenau
(until December 11, 2019)

Member of the Group Works Council of Evonik Industries AG

Chairwoman of the Works Council of the jointly operated Hanau site (until October 31, 2019)

Michael Hofmann, Griesheim
(until April 30, 2019)

Member of the Works Councils for the Darmstadt/Weiterstadt/Wörth facilities

a) Membership of other statutory supervisory boards.
b) Membership of comparable German and foreign supervisory bodies of business enterprises pursuant to section 125 paragraph 1 sentence 5 of the German Stock Corporation Act (AktG).

Executive Board of Evonik Industries AG

Christian Kullmann, Hamminkeln
Chairman of the Executive Board

a) • Borussia Dortmund GmbH & Co. KGaA

Dr. Harald Schwager, Speyer
Deputy Chairman of the Executive Board

a) • Evonik Nutrition & Care GmbH (Chair)
• Evonik Resource Efficiency GmbH (Chair)
• Evonik Performance Materials GmbH (Chair)

b) • KSB Management SE

Thomas Wessel, Recklinghausen
Chief Human Resources Officer and Industrial Relations Director

a) • Evonik Nutrition & Care GmbH
• Evonik Resource Efficiency GmbH
• Evonik Performance Materials GmbH
• Evonik Technology & Infrastructure GmbH (Chair)
• Pensionskasse Degussa VVaG (Chair)
• Vivawest GmbH
• Vivawest Wohnen GmbH

b) • Gesellschaft zur Sicherung von Bergmannswohnungen mbH

Ute Wolf, Düsseldorf
Chief Financial Officer

a) • DWS Group GmbH & Co. KGaA
• Evonik Nutrition & Care GmbH
• Evonik Resource Efficiency GmbH
• Evonik Performance Materials GmbH
• Klöckner & Co. SE
• Pensionskasse Degussa VVaG

b) • Borussia Dortmund Geschäftsführungs-GmbH

a) Membership of other statutory supervisory boards.
b) Membership of comparable German and foreign supervisory bodies of business enterprises pursuant to section 125 paragraph 1 sentence 5 of the German Stock Corporation Act (AktG).

Remuneration report[1]

The remuneration report outlines the principles of the remuneration system for the members of the executive board and the supervisory board, together with the structure and level of their individual remuneration. This report complies with the German Commercial Code (HGB), including the principles set out in German Accounting Standard No. 17 (DRS 17), the International Financial Reporting Standards (IFRS), and the requirements of the German Corporate Governance Code.

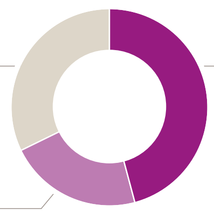
1. Remuneration system for the executive board

Principles and objectives

The remuneration system for the executive board is designed to ensure that members receive appropriate remuneration for their tasks and responsibilities, and to take direct account of the performance of each member of the executive board and of the company. The structure of the remuneration system for the members of the executive board of Evonik Industries AG is geared to sustained value creation and performance-oriented management of the company. It comprises a fixed monthly base salary, which takes account of the tasks and services performed by the respective member, a variable short-term component comprising an annual bonus, which is dependent on the attainment of the company's annual performance targets, and a long-term component linked directly to the increase in the value of the company as an incentive for sustained commitment to the company. The targets for the short- and long-term variable remuneration components are derived from the corporate strategy of Evonik Industries AG. In addition, the customary fringe benefits are granted. Overall, the remuneration supports the long-term development of the company.

The next chart shows the breakdown of the remuneration components in 2019. The benefits in kind and other fringe benefits and company pension provision (IFRS service cost) are included in the fixed annual base salary.

Structure of remuneration of members of the executive board C31



Performance-unrelated components

Fixed annual base salary

The fixed **annual base salary** is a cash payment for the fiscal year. It takes account of the scope of responsibility of each executive board member and is paid out in twelve equal installments.

Benefits in kind and other fringe benefits

As benefits in kind and other fringe benefits, members of the executive board receive a company car with a driver, the installation of telecommunications equipment, and an entitlement to an annual medical check-up. Executive board members may receive a rent subsidy if performance of their duties requires them to rent a second apartment. Benefits in kind are presented in this remuneration report at the values defined in the tax regulations.

Further, members of the executive board may receive additional remuneration for offices they hold in the interests of the company. Apart from fees for the attendance of meetings, insofar as such fees are paid to executive board members, they are deducted from their annual bonus or paid over to the company. In this remuneration report, remuneration for offices held in the interests of the company is included in other fringe benefits.

Performance-related components

Short-term variable remuneration

The performance-related annual bonus is dependent on the attainment of business targets measured by performance indicators (bonus factor) and the attainment of individual objectives (performance factor). The bonus factor and performance factor are multiplied. The level of the bonus factor depends on the achievement of the agreed business targets and may be between 0 and 200 percent. The adjusted EBITDA margin, adjusted EBITDA, and free cash flow are defined as business targets. All parameters are measured against the long-term strategic objectives for the company, based on the actual results in the calendar year. The development of plant safety and accident frequency, and the severity of accidents in the fiscal year are also taken into account.

The performance factor rewards the attainment of the qualitative targets and can vary between 80 percent and 120 percent. The reference indicators are aligned to the performance objectives for the executive board and normally have a multi-year context within the target-setting framework, taking into consideration targets in areas such as strategy/portfolio, the efficiency of cost structures, and corporate culture.

[1] This report is part of the audited combined management report.

If the qualitative and business objectives are achieved in full, the contractually agreed target bonus is paid. If the company's income falls short of the planned level, the bonus factor may—in the extreme case—be zero, regardless of personal attainment. In other words, it is conceivable that a bonus might not be paid for a specific year. The bonus is capped at 200 percent of the target bonus.

The business and qualitative targets set for executive board members for the bonus and performance factors are agreed in writing at the start of each fiscal year between the supervisory board, and each member of the executive board and the level of attainment is determined by the supervisory board after the end of the year.

Long-term variable remuneration (LTI plans)

The members of the executive board receive long-term variable remuneration in the form of long-term incentive (LTI) plans. The general reference base for long-term remuneration is a sustained rise in the value of the company.

Performance is measured by the absolute performance of Evonik's share price and its performance relative to the MSCI World Chemicals Index[SM].

Based on the contractually agreed target amount, which is defined in euros, a number of virtual shares is calculated using the share price at the start of the performance period. This is based on the price in the last 60 trading days before the start of performance period. The performance period starts on January 1 of the grant year and runs for four years. At the end of the performance period, the starting price of Evonik shares is viewed against the average share price at the end of the performance period, plus any dividends per share actually paid in this period. This is compared with the performance of the benchmark index (total shareholder return). Eligible participants are informed of the outcome after the end of the performance period. They can then opt to accept the payment calculated or to extend the performance period on a one-off basis for a further year. In this case, a renewed calculation is performed at the end of the extended performance period.

From 2019, the intrinsic value of the LTI is measured at the end of each year in the four-year performance period by comparing the starting price of Evonik shares with the average price of the shares plus the dividends per share actually paid during the performance period. This is then compared with the performance of the benchmark index (total shareholder return). There is no longer an option to extend the performance period.

The relative performance may be between 70 and 130 percentage points. If the relative performance is below 70 percentage points, the relative performance factor is deemed to be zero. If the relative performance is above 130 percentage points, the relative performance is set at 130 percent.

The payment is calculated by multiplying the relative performance by the number of virtual shares allocated and the average price of Evonik shares at the end of the performance period. From 2019, the overall performance, and thus the amount to be paid at the end of the performance period, is calculated as an average of the performance in each year.

The upper limit for these payments is set at 300 percent of the individual target amount.

The fair values of the LTI tranches 2014 through 2019 as of the date of the legally binding commitment are shown in the next table:

LTI tranches[a] T32

	2014		2015		2016		2017		2018		**2019**	
	No. of virtual shares	in €'000	No. of virtual shares	in €'000	No. of virtual shares	in €'000	No. of virtual shares	in €'000	No. of virtual shares	in €'000	No. of virtual shares	in €'000
Christian Kullmann	13,562	307	28,506	893	28,803	616	41,787	1,033	39,949	1,018	64,504	1,429
Dr. Harald Schwager	–	–	–	–	–	–	12,090	299	31,959	814	46,912	1,039
Thomas Wessel	27,125	614	28,506	893	23,637	505	27,203	672	23,969	611	35,184	779
Ute Wolf	27,125	614	28,506	893	23,637	505	27,203	672	23,969	611	35,184	779
Total	**67,812**	**1,535**	**85,518**	**2,679**	**76,077**	**1,626**	**108,283**	**2,676**	**119,846**	**3,054**	**181,784**	**4,026**

[a] The date of the legally binding commitment corresponds to the grant date.

In 2019, the total expense for all LTI tranches for the executive board was €2,044 thousand. The breakdown of the expense was as follows: €716 thousand for Mr. Kullmann, €556 thousand for Dr. Schwager, €386 thousand for Mr. Wessel, and €386 thousand for Ms. Wolf.

Company pension plan

A defined contribution system has been introduced as the standard pension plan. This is a capital-based system funded by provisions. The company credits a fixed annual amount to the pension account of each executive board member. This is 15 percent of their target remuneration, i.e., the fixed annual base salary and target bonus (variable short-term remuneration assuming 100 percent target attainment). The guaranteed annual return is 5 percent. The pension benefit comprises the amount that has accrued on the account, i.e., contributions credited to the account plus accumulated interest. In the event of death or disability, the amount that would be available on the account on the member's 55th birthday, including projected contributions and interest, is calculated. Payment normally comprises a lifelong pension. Alternatively, executive board members may opt for the disbursement of part of the capital (maximum 50 percent) in six to ten installments. Where executive board members accrued pension entitlements prior to their appointment to the executive board, these are either integrated into the system as an initial contribution or continue to be managed separately. If a member's contract as a member of the executive board ends before benefits are payable, no further contributions are credited to the account. However, it continues to earn interest at the common market interest rate based on the average return earned by major German life insurers (at least 2.25 percent p.a.) until benefits are claimed.

Members of the executive board are entitled to pension benefits after they leave the company if they leave on or after reaching the individually agreed retirement age or if they leave as a result of permanent incapacity to work. In addition, Mr. Kullmann and Mr. Wessel can claim pension benefits from the date of premature termination or non-extension of their executive board contracts, providing they do not give due cause for such termination. This claim also relates to pension entitlements they accrued prior to their appointment to the executive board.

An arrangement that differs from the pension system has been agreed with Dr. Harald Schwager. He has been given a commitment that he will receive a lifelong pension of €40 thousand p.a. for each full year of service, and a pro rata amount for each partial year of service.

In 2019, the service cost for members of the executive board totaled €2,066 thousand (2018: €1,860 thousand) based on the German Commercial Code (HGB) and €2,540 thousand (2018: €2,431 thousand) based on IFRS.

The difference in service cost for pension commitments is attributable to differences in the valuation methods used to calculate the settlement amount in accordance with the German Commercial Code and the present value of pension obligations calculated in accordance with IFRS.

The present value of pension obligations for members of the executive board was €17,844 thousand (2018: €13,662 thousand) based on the German Commercial Code (HGB) and €23,998 thousand (2018: €17,671) based on IFRS.

Provisions for pension obligations to former members of the executive board and their surviving dependents as of the reporting date were €65,314 thousand (2018: €61,985 thousand) based on the German Commercial Code (HGB) and €86,502 thousand (2018: €79,549 thousand) based on IFRS.

Service cost and present value of pension obligations T33

	HGB				IFRS			
	Service cost		Settlement amount of pension obligations as of December 31		Service cost		Present value of the defined benefit obligation as of December 31	
in €'000	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**
Christian Kullmann	568	682	5,410	7,009	785	814	7,213	9,794
Dr. Harald Schwager	651	727	951	1,852	824	878	1,175	2,363
Thomas Wessel	339	321	4,964	5,928	428	442	6,217	7,658
Ute Wolf	302	336	2,337	3,055	394	406	3,066	4,183
Total	**1,860**	**2,066**	**13,662**	**17,844**	**2,431**	**2,540**	**17,671**	**23,998**

Determination of maximum remuneration

The maximum remuneration of members of the executive board is defined as follows and is based on the maximum possible performance-related and performance-unrelated remuneration components, including service cost for the company pension plan:

Chairman of the executive board:	€9,700 thousand
Deputy chairman:	€7,200 thousand
Chief human resources officer:	€5,200 thousand
Chief financial officer:	€5,200 thousand

Explanation of the how remuneration is determined

The remuneration is reviewed regularly by the supervisory board, where appropriate on the basis of remuneration reports from independent consultants. These reviews examine the structure and level of remuneration of the executive board, particularly in comparison with the external market, and also in relation to remuneration elsewhere in the company. The external comparison uses peer groups comprising, on the one hand, comparable companies in the chemicals sector, and on the one hand, and companies listed on the MDAX/DAX indices. The assessment of the appropriateness of the remuneration compared with remuneration elsewhere in the company starts by determining the average remuneration at the first management level below the executive board and the remuneration of the workforce as a whole. This is then compared with the peer group described above and includes the development of remuneration over time. The supervisory board defines the senior management level and relevant workforce, and how the remuneration is assessed in relation to these groups. If this reveals a need to adjust the remuneration system, or the level or structure of remuneration, the executive committee of the supervisory board submits a corresponding proposal to the full supervisory board for a decision. If the supervisory board involves an external remuneration expert, it makes sure the expert is independent. The last external review of the appropriateness of the remuneration system was in 2017. On the basis of this review, it was decided to raise the target for short-term variable remuneration with effect from January 1, 2019 by €200 thousand for the chairman of the executive board, Mr. Kullmann, and by €50 thousand each for Mr. Wessel and Ms. Wolf. At the same time, it was decided to increase the LTI target for all members of the executive board, with an increase of €400 thousand for the chairman, €200 thousand for the deputy chairman, and €150 thousand for all other members.

Cap on termination benefits in the event of premature termination of term of office

In conformance with the German Corporate Governance Code, the employment contracts with all members of the executive board provide for a cap on termination benefits. If a member's term of office is prematurely terminated, payments may not exceed two years' remuneration, including variable remuneration components. In no case is remuneration payable for periods beyond the remaining term of the contract. The contracts specify that no termination benefits are payable if an executive board member's contract is terminated for reasons for which he or she is responsible. The cap on termination benefits is based on total remuneration, including fringe benefits in the previous fiscal year and, where appropriate, the anticipated total remuneration for the current fiscal year.

Post-contractual non-compete agreements

Post-contractual non-compete agreements have not been concluded with members of the executive board.

Claw-back clause

In case a member of the executive board commits a serious breach of his or her statutory duties or internal rules of conduct, future contracts with members of the executive board will introduce a contractual clause providing for the reimbursement or offsetting, in full or in part, of any variable remuneration components paid to the member of the executive board for the performance period in question (claw-back clause).

Remuneration of the executive board T34

	Performance-unrelated remuneration				Performance-related remuneration					
	Fixed remuneration		Benefits in kind and other fringe benefits		Annual bonus		LTI[a]		Total remuneration in accordance with DRS 17	
in €'000	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**
Christian Kullmann	1,400	1,400	67	59	1,607	1,521	1,018	1,429	4,092	4,409
Dr. Harald Schwager	1,130	1,130	99	222	1,169	805	814	1,039	3,212	3,196
Thomas Wessel	800	800	232	227	698	597	611	779	2,341	2,403
Ute Wolf	800	800	112	113	801	687	611	779	2,324	2,379
Total	**4,130**	**4,130**	**510**	**621**	**4,275**	**3,610**	**3,054**	**4,026**	**11,969**	**12,387**

[a] Fair value as of the legally binding commitment or grant date.

Remuneration of the executive board in fiscal 2019

The total remuneration paid to the members of the executive board for their work in 2019, including remuneration for the performance of other offices, was €12,387 thousand (2018: €11,969 thousand). The figure for 2019 includes bonus payments of €594 thousand for the previous year, for which no provision was established in 2018.

Table T34 p.89 shows the breakdown of remuneration for each executive board member in 2019, based on the principles outlined.

In 2019, no member of the executive board received benefits or corresponding promises from third parties in connection with his or her service on the executive board. Further, as of December 31, 2019 there were no loans or advances to members of the executive board.

Finally, third-party financial loss insurance cover is provided for each member of the executive board to cover their statutory liability arising from their work on the executive board. In the event of a claim, this provides for a deductible of 10 percent of the damage, up to one-and-a-half times the individual member's fixed annual remuneration.

Remuneration report in accordance with the German Corporate Governance Code

The German Corporate Governance Code recommends that listed companies should also disclose the remuneration of the executive board on the basis of a defined table showing the granting and allocation of benefits. See tables T35 and T36.

Benefits granted T35

	Christian Kullmann Chairman of the Executive Board				Dr. Harald Schwager Deputy Chairman of the Executive Board			
in €'000	2018	2019	2019 (min.)	2019 (max.)	2018	2019	2019 (min.)	2019 (max.)
Fixed remuneration	1,400	1,400	1,400	1,400	1,130	1,130	1,130	1,130
Fringe benefits	67	59	59	59	99	222	222	222
Total	**1,467**	**1,459**	**1,459**	**1,459**	**1,229**	**1,352**	**1,352**	**1,352**
One-year variable remuneration	1,000	1,200	–	2,400	750	750	–	1,500
Multi-year variable remuneration	1,018	1,429	–	4,950	814	1,039	–	3,600
LTI 2018 through 2021	*1,018*	–	–	–	*814*	–	–	–
LTI 2019 through 2022	–	*1,429*	–	*4,950*	–	*1,039*	–	*3,600*
Total	**3,485**	**4,088**	**1,459**	**8,809**	**2,793**	**3,141**	**1,352**	**6,452**
Pension expense (service cost)	785	814	814	814	824	878	878	878
Total remuneration	**4,270**	**4,902**	**2,273**	**9,623**	**3,617**	**4,019**	**2,230**	**7,330**

	Thomas Wessel Chief Human Resources Officer				Ute Wolf Chief Financial Officer			
in €'000	2018	2019	2019 (min.)	2019 (max.)	2018	2019	2019 (min.)	2019 (max.)
Fixed remuneration	800	800	800	800	800	800	800	800
Fringe benefits	232	227	227	227	112	113	113	113
Total	**1,032**	**1,027**	**1,027**	**1,027**	**912**	**913**	**913**	**913**
One-year variable remuneration	550	600	–	1,200	550	600	–	1,200
Multi-year variable remuneration	611	779	–	2,700	611	779	–	2,700
LTI 2014 through 2017	*611*	–	–	–	*611*	–	–	–
LTI 2015 through 2018	–	*779*	–	*2,700*	–	*779*	–	*2,700*
Total	**2,193**	**2,406**	**1,027**	**4,927**	**2,073**	**2,292**	**913**	**4,813**
Pension expense (service cost)	428	442	442	442	394	406	406	406
Total remuneration	**2,621**	**2,848**	**1,469**	**5,369**	**2,467**	**2,698**	**1,319**	**5,219**

Allocation T36

in €'000	Christian Kullmann, Chairman of the Executive Board 2018	2019	Dr. Harald Schwager, Deputy Chairman of the Executive Board 2018	2019	Thomas Wessel, Chief Human Resources Officer 2018	2019	Ute Wolf, Chief Financial Officer 2018	2019
Fixed remuneration	1,400	1,400	1,130	1,130	800	800	800	800
Fringe benefits	67	59	99	222	232	227	112	113
Total	**1,467**	**1,459**	**1,229**	**1,352**	**1,032**	**1,027**	**912**	**913**
One-year variable remuneration [a, b, c]	1,851	1,320	1,340	645	845	480	935	570
Multi-year variable remuneration	306	620	–	–	611	620	611	620
LTI 2014 through 2017	*306*	–	–	–	*611*	–	*611*	–
LTI 2015 through 2018	–	*620*	–	–	–	*620*	–	*620*
Total	**2,157**	**1,940**	**1,340**	**645**	**1,456**	**1,100**	**1,546**	**1,190**
Pension expense (service cost)	785	814	824	878	428	442	394	406
Total remuneration	**4,409**	**4,213**	**3,393**	**2,875**	**2,916**	**2,569**	**2,852**	**2,509**

[a] In some cases, fees for other offices held are offset against the one-year variable remuneration contained in fringe benefits; 2018: Kullmann €58 thousand, Wessel €180 thousand, Wolf €90 thousand; 2019: Schwager €180 thousand, Wessel €180 thousand, Wolf €90 thousand.

[b] The one-year variable remuneration for 2018 corresponds to the actual payments made in 2019 for 2018 (a correction has been made for any discrepancies between the actual payments and the estimates made in the remuneration report in 2018).

[c] The one-year variable remuneration for 2019 has not yet been finalized; estimate based on assumptions made for provisions.

Former executive board members

Total remuneration of former members of the executive board and their surviving dependents was €2,849 thousand in 2019 (2018: €1,872 thousand).

2. Remuneration system for the supervisory board

The remuneration of the supervisory board is governed by section 15 of the articles of incorporation of Evonik Industries AG.

The remuneration system takes account of the responsibilities and scope of activities of the members of the supervisory board. Given its duty to oversee the executive board in its management of the business, the supervisory board makes a contribution to promoting the business strategy and to the long-term development of the company. In addition to reimbursement of their expenses and value-added tax payable on their remuneration and expenses, the members of the Supervisory Board receive a fixed annual payment. Their remuneration does not include a variable component. In view of the special nature of the remuneration of the supervisory board, which is granted for activities that differ fundamentally from the work of employees and of the Evonik Group, it is not possible to conduct a comparison with the remuneration of the workforce.

Different levels of fixed annual remuneration are paid to the chairman (€250 thousand), his deputy (€175 thousand), and other members of the supervisory board (€100 thousand).

The chairman of the executive committee receives additional remuneration of €60 thousand, the deputy chairwoman €45 thousand, and the other members €35 thousand each. The chairman of the audit committee receives additional remuneration of €90 thousand, the deputy chairwoman €60 thousand, and the other members €50 thousand each. The chairman of the finance and investment committee receives additional remuneration of €60 thousand, the deputy chairman €45 thousand, and the other members €35 thousand each. The chairwoman of the innovation and research committee receives additional remuneration of €30 thousand, the deputy chairman €20 thousand, and the other members €15 thousand each. The chairmen of the nomination committee and the mediation committee receive additional remuneration of €20 thousand each, the deputy chairpersons receive €10 thousand each, and the other members €10 thousand each. Entitlement to the additional remuneration for work on the mediation committee only applies if the committee is actually convened during the fiscal year.

Remuneration of the supervisory board T37

in €'000	Fixed remuneration		Remuneration for membership of a committee		Attendance fees		Total	
	2018	2019	2018	2019	2018	2019	2018	2019
Martin Albers	100	100	58	70	12	9	170	179
Prof. Barbara Albert	100	100	30	30	7	6	137	136
Jens Barnhusen (from May 23, 2018)	67	100	10	35	6	9	83	144
Prof. Aldo Belloni	100	100	35	35	7	9	142	144
Hussin El Moussaoui (from December 11, 2019)	–	8	–	1	–	–	–	9
Karin Erhard	100	100	60	60	9	10	169	170
Carmen Fuchs (until December 11, 2019)	100	100	15	15	7	6	122	121
Edeltraud Glänzer	175	175	87	90	13	8	275	273
Prof. Barbara Grunewald	100	100	50	50	10	10	160	160
Ralf Hermann (until May 23, 2018)	42	–	33	–	4	–	79	–
Prof. Wolfgang A. Herrmann (until May 23, 2018)	42	–	–	–	2	–	44	–
Michael Hofmann (from May 23, 2018 until April 30, 2019)	67	33	33	17	7	1	107	51
Martin Kubessa (from May 23, 2018)	67	100	–	–	5	5	72	105
Frank Löllgen	100	100	55	55	9	9	164	164
Dr. Siegfried Luther	100	100	90	90	10	10	200	200
Dr. Werner Müller (until May 23, 2018)	104	–	54	–	3	–	161	–
Norbert Pohlmann (until March 31, 2018)	25	–	13	–	2	–	40	–
Martina Reisch (from May 13, 2019)	–	67	–	9	–	5	–	81
Dr. Wilfried Robers (until May 23, 2018)	42	–	21	–	4	–	67	–
Michael Rüdiger	100	100	60	60	9	9	169	169
Dr. Thomas Sauer (from May 23, 2018)	67	100	33	50	7	10	107	160
Peter Spuhler (from May 23, 2018)	67	100	–	–	3	4	70	104
Anke Strüber-Hummelt	100	100	30	35	9	9	139	144
Ulrich Terbrack (until May 23, 2018)	42	–	–	–	2	–	44	–
Angela Titzrath	100	100	50	50	8	6	158	156
Bernd Tönjes (from May 23, 2018)	167	250	87	130	11	12	265	392
Dr. Volker Trautz	100	100	60	60	10	8	170	168
Ulrich Weber	100	100	45	45	10	8	155	153
Total	**2,274**	**2,233**	**1,009**	**987**	**186**	**163**	**3,469**	**3,383**

Further, members of the supervisory board receive a fee of €1 thousand for each meeting of the supervisory board and its committees that they attend. If several meetings are held on the same day, this fee is only paid once.

Members who only serve on the supervisory board for part of a fiscal year receive remuneration on a pro rata basis. This also applies for increases in the remuneration of the chairman of the supervisory board and his deputy and any increased remuneration paid for membership in or chairing of a committee.

The remuneration and attendance fees paid to the supervisory board in 2018 and 2019 are presented on a cost basis. For members who joined or left the supervisory board during 2018 and 2019, the amounts are calculated on a pro rata basis.

As of December 31, 2019, there were no loans or advances to members of the supervisory board. In 2019 the members of the supervisory board did not receive any remuneration for services provided personally, especially consulting and referral services.

Finally, third-party financial loss insurance cover is provided for each member of the supervisory board to cover their statutory liability arising from their work on the supervisory board. In the event of a claim, this provides for a deductible of 10 percent of the damage, up to one-and-a-half times the individual member’s fixed annual remuneration.

Information pursuant to section 289a paragraph 1 and section 315a paragraph 1 of the German Commercial Code (HGB) and explanatory report by the executive board pursuant to section 176 paragraph 1 of the German Stock Corporation Act (AktG)[1]

Structure of issued capital

The capital stock of Evonik Industries AG is €466,000,000 and is divided into 466,000,000 no-par registered shares. Each share entitles the holder to one vote.

Under section 5 paragraph 2 of the articles of incorporation, shareholders do not have any claim to the issue of certificates for their shares unless the issue of a certificate is required by the rules of a stock exchange on which the share has been admitted for trading.

There are no different share classes, nor any shares with special rights.

Restrictions on voting rights or the transfer of shares

In connection with Evonik's employee share programs, there are restrictions on the ability of participating employees to dispose of their shares for a certain time period. In particular, they are required to hold their shares in each case until the end of the next-but-one calendar year after the year of allocation.

The executive board is not aware of any other restrictions on voting rights or the transfer of shares.

Direct and indirect shareholdings that exceed 10 percent of the voting rights

Under the German Securities Trading Act (WpHG), every shareholder whose voting rights in the company reach, exceed, or drop below a certain level, whether through the purchase or sale of shares or in any other way, must notify the company and the Federal Financial Supervisory Authority (BaFin). Under section 33 paragraph 1 of the German Securities Trading Act, the relevant thresholds are 3, 5, 10, 15, 20, 25, 30, 50, and 75 percent of the voting rights. Changes in voting rights between these thresholds are not subject to notification under the German Securities Trading Act, so the following data may differ from more recent overviews of the shareholder structure. In compliance with section 160 paragraph 1 no. 8 of the German Stock Corporation Act (AktG), the notes to the financial statements of Evonik Industries AG contain an overview of all voting rights notifications submitted to the company pursuant to section 33 of the German Securities Trading Act.

Under section 289a paragraph 1 sentence 1 no. 3 and section 315a paragraph 1 sentence 1 no. 3 of the German Commercial Code (HGB), all direct and indirect shareholdings exceeding 10 percent of the voting rights must be declared.

As of December 31, 2019, the executive board had only received notification of one direct shareholding exceeding 10 percent of the voting rights—from RAG-Stiftung, Essen (Germany).

The executive board is not aware of any further direct or indirect holdings in the company's capital stock that exceed 10 percent of the voting rights.

Method of exercising oversight through voting rights in the event of employee shareholdings

Employees can become shareholders in the company through employee share programs. Instead of exercising their rights of oversight themselves, employees who hold shares in the company's capital may transfer these rights to an employee shareholder association, which acts in their interests. 89,073 voting rights had been transferred to the employee shareholder association as of the reporting date.

Appointment and dismissal of executive board members, amendments to the articles of incorporation

The appointment and dismissal of members of the executive board of Evonik Industries AG is governed by section 84 of the German Stock Corporation Act (AktG) and section 31 of the German Codetermination Act (MitbestG), in conjunction with section 6 of the company's articles of incorporation. Section 6 of the articles of incorporation states that the executive board comprises at least two members. Further, the supervisory board is responsible for determining the number of members.

Changes to the articles of incorporation are normally resolved by the annual shareholders' meeting. Section 20 paragraph 2 of the articles of incorporation states that, unless mandatory provisions require otherwise, resolutions shall be adopted by a simple majority of the votes cast and—unless, besides a majority of the votes, a majority of the capital is required by law—by a simple majority of the capital stock represented.

Under section 11 paragraph 7 of the articles of incorporation, the supervisory board is authorized to resolve on amendments to the articles of incorporation, provided they are only editorial. A simple majority vote is sufficient.

[1] This report is part of the audited combined management report.

Authorization of the executive board, especially to issue and repurchase shares

Pursuant to a resolution of the shareholders' meeting of May 18, 2016, the executive board is authorized until May 17, 2021, subject to the approval of the supervisory board, to purchase up to 10 percent of the company's capital stock. Together with other shares in the company, which the company has already acquired or still owns, or which are attributable to it pursuant to sections 71d and 71e of the German Stock Corporation Act (AktG), the shares acquired under this authorization may not, at any time, exceed 10 percent of the capital stock. Shares in the company may not be purchased for trading purposes.

Subject to the principle of equal treatment (section 53a AktG), the purchase may take place via the stock exchange or via a public offer to all shareholders for the purchase or exchange of shares. In the latter case, notwithstanding the exclusion of tender rights permitted in specific circumstances, the principle of equal treatment (section 53a AktG) must also be taken into account.

The resolution adopted by the annual shareholders' meeting on March 11, 2013 authorizing the executive board to buy back shares in the company was rescinded.

The annual shareholders' meeting on May 23, 2018 adopted an amendment to section 4 paragraph 6 of the articles of incorporation authorizing the executive board until May 22, 2023, subject to the approval of the supervisory board, to increase the company's capital stock by up to €116,500,000 (authorized capital 2018).

This authorization may be exercised through one or more issuances.

The new shares may be issued against cash and/or contributions in kind. The executive board is authorized, subject to the approval of the supervisory board, to exclude shareholders' statutory subscription rights when issuing new shares in the following cases:

- capital increases against contributions in kind
- if the capital increase is against cash and the proportionate share of the capital stock attributable to the new shares does not exceed 10 percent of the capital stock, and the issue price of the new shares is not significantly below the stock market price of shares already listed on the stock exchange
- to exclude fractional amounts arising from the subscription ratio
- insofar as is necessary to grant holders and/or creditors of warrants or conversion rights or obligors of warrant and/or conversion obligations subscription rights to new shares to the extent that they would be entitled to them after exercise of their warrants and/or conversion rights or fulfillment of their warrant or conversion obligations
- to grant shares to employees (employee stock), provided that the new shares for which subscription rights are excluded do not in aggregate account for a proportionate share of the capital stock in excess of 1 percent
- for the execution of a scrip dividend

The proportionate amount of the capital stock attributable to the shares for which subscription rights are excluded, together with the proportionate amount of the capital stock attributable to treasury stock or to conversion and/or warrant rights or obligations arising from debt instruments that are sold or issued after May 23, 2018 under exclusion of subscription rights, may not exceed 20 percent of the capital stock. If the sale or issue takes place in application—analogously or mutatis mutandis—of section 186 paragraph 3 sentence 4 of the German Stock Corporation Act (AktG), this shall also be deemed to constitute exclusion of subscription rights.

The executive board is authorized, subject to the approval of the supervisory board, to define further details of capital increases out of the authorized capital 2018. The authorized capital has not yet been utilized.

In connection with the authorization of May 23, 2018 to issue convertible and/or warrant bonds with a nominal value of up to €1.25 billion up to May 22, 2023, the capital stock is conditionally increased by a further €37,280,000 (conditional capital 2018). The conditional capital increase will only be conducted insofar as holders or creditors of warrant or conversion rights or obligors of warrant or conversion obligations arising from warrant bonds and/or convertible bonds issued or guaranteed on the basis of the authorization resolved at the annual shareholders' meeting of May 23, 2018, exercise their warrants or conversion rights or, insofar as they have an obligation to exercise the warrants or conversion obligations, meet the obligation to exercise the warrant or conversion obligations, and other forms of settlement are not used.

The new shares are entitled to a dividend from the start of the fiscal year in which they are issued.

Significant agreements concluded by the company that are contingent upon a change of control resulting from a takeover bid

Evonik Industries AG is a contracting party in the following agreements that are contingent upon a change of control resulting from a takeover bid:

- In 2017, the company agreed a €1.75 billion syndicated credit facility with its core banks; this had not been drawn as of December 31, 2019. In the event of a change of control resulting from a takeover bid, these banks could withdraw the credit facility. On the terms agreed, this applies if a new major shareholder (apart from RAG-Stiftung and its subsidiaries) acquires direct or indirect voting rights of more than 50 percent in Evonik Industries AG—including through a voting rights agreement with one or more other shareholders (pursuant to section 30 paragraph 2 of the German Securities Acquisition and Takeover Act/WpÜG).
- The company has a debt issuance program to place bonds with a total volume of up to €5 billion. By December 31, 2019 five bonds with a total nominal value of €3.15 billion had been issued under this program. The issue conditions contain a change-of-control clause. In the event of a change of control resulting from a takeover bid and a deterioration in the credit rating of Evonik Industries AG to non-investment grade within

90 days as a result of such change of control, the bondholders have the right to demand redemption of the bond at nominal value plus accrued interest. A change of control is deemed to have occurred if a person (apart from RAG-Stiftung or a (direct or indirect) subsidiary of RAG-Stiftung) or persons acting in a concerted manner directly or indirectly acquire(s) more than 50 percent of the voting rights in Evonik Industries AG.

- The company issued a €500 million hybrid bond in 2017. If there is a change of control and if, within a defined change-of-control period, the rating agencies withdraw all ratings previously assigned to the company or downgrade them to non-investment grade, Evonik Industries AG has the right to redeem the bond within a defined period. If the bond is not redeemed, the interest rate applicable for interest payments on the bond will be increased by 5 percentage points p.a.

Agreements on payment of compensation by the company to members of the executive board or other employees in the event of a change of control

Change-of-control clauses are only agreed with members of the executive board in connection with long-term remuneration. A change of control is defined as cases when another company obtains control of Evonik Industries AG as defined in the German Securities Acquisition and Takeover Act (WpÜG), or there is a material change in the company's shareholders as a result of a merger or comparable reorganization or business combination. In such cases, the long-term remuneration due to the eligible employees is calculated immediately on a pro rata basis, i.e., based on the period between the grant date and the change of control relative to the total four-year performance period, and paid into their salary account with their next regular salary payment.

CONSOLIDATED FINANCIAL STATEMENTS

Income statement

T38

in € million	Notes	2018	2019
Sales	5.1	13,267	13,108
Cost of sales	5.2	–9,271	–9,413
Gross profit on sales		**3,996**	**3,695**
Selling expenses	5.2	–1,563	–1,511
Research and development expenses	5.2	–437	–428
General administrative expenses	5.2	–599	–568
Other operating income	5.3	223	359
Other operating expense	5.3	–581	–466
Result from investments recognized at equity	5.4	10	5
Income before financial result and income taxes, continuing operations		**1,049**	**1,086**
Interest income		49	104
Interest expense		–200	–221
Other financial income/expense		–4	–15
Financial result	5.5	**–155**	**–132**
Income before income taxes, continuing operations		**894**	**954**
Income taxes	5.6	–186	–180
Income after taxes, continuing operations		**708**	**774**
Income after taxes, discontinued operations		246	1,353
Income after taxes	5.7	**954**	**2,127**
thereof attributable to			
Non-controlling interests		22	21
Shareholders of Evonik Industries AG (net income)		932	2,106
Earnings per share in € (basic and diluted)	5.8	**2.00**	**4.52**
thereof attributable to			
Continuing operations		1.47	1.62
Discontinued operations		0.53	2.90

Prior-year figures restated.

Statement of comprehensive income

T39

in € million	2018	2019
Income after taxes	**954**	**2,127**
Other comprehensive income from hedging instruments: designated risk components	–126	13
Other comprehensive income from hedging instruments: cost of hedging	–17	2
Other comprehensive income from currency translation	160	104
Other comprehensive income from investments recognized at equity (after income taxes)	2	–
Deferred taxes	44	–5
Other comprehensive income that can be reclassified	**63**	**114**
Other comprehensive income from the remeasurement of the net defined benefit liability for defined benefit pension plans	–300	–823
Other comprehensive income from equity instruments	29	25
Deferred taxes from the remeasurement of the net defined benefit liability for defined benefit pension plans	106	357
Other comprehensive income that cannot be reclassified	**–165**	**–441**
Other comprehensive income after taxes	**–102**	**–327**
Total comprehensive income	**852**	**1,800**
thereof attributable to		
Non-controlling interests	22	21
Shareholders of Evonik Industries AG	830	1,779

Prior-year figures restated.

Balance sheet

T40

in € million	Notes	Dec. 31, 2018	Dec. 31, 2019
Intangible assets	6.1, 6.5	6,134	5,858
Property, plant and equipment	6.2, 6.5	6,785	6,435
Right-of-use assets	6.3	–	640
Investments recognized at equity	6.4, 6.5	46	45
Other financial assets	6.6	233	625
Deferred taxes	6.14	1,419	1,718
Other income tax assets	6.14	16	12
Other assets	6.8	56	82
Non-current assets		**14,689**	**15,415**
Inventories	6.7	2,304	1,884
Trade accounts receivable	6.6	1,686	1,569
Other financial assets	6.6	140	1,278
Other income tax assets	6.14	180	325
Other assets	6.8	295	387
Cash and cash equivalents	6.6, 7.3	988	1,165
Current assets		**5,593**	**6,608**
Total assets		**20,282**	**22,023**

in € million	Notes	Dec. 31, 2018	Dec. 31, 2019
Issued capital		466	466
Capital reserve		1,167	1,167
Retained earnings including distributable profit		6,237	7,341
Other equity components		–141	–4
Equity attributable to shareholders of Evonik Industries AG		**7,729**	**8,970**
Equity attributable to non-controlling interests		96	90
Equity	6.9	**7,825**	**9,060**
Provisions for pensions and other post-employment benefits	6.10	3,732	3,967
Other provisions	6.11	855	779
Other financial liabilities	6.12	3,689	3,713
Deferred taxes	6.14	557	537
Other income tax liabilities	6.14	223	320
Other payables	6.13	47	93
Non-current liabilities		**9,103**	**9,409**
Other provisions	6.11	1,047	778
Trade accounts payable	6.12	1,493	1,324
Other financial liabilities	6.12	395	918
Other income tax liabilities	6.14	64	59
Other payables	6.13	355	475
Current liabilities		**3,354**	**3,554**
Total equity and liabilities		**20,282**	**22,023**

Statement of changes in equity

Note 6.9

T41

in € million	Issued capital	Capital reserve	Treasury shares	Retained earnings/distributable profit	Other equity components	**Equity attributable to shareholders of Evonik Industries AG**	Equity attributable to non-controlling interests	**Total equity**
As of December 31, 2017	**466**	**1,167**	**–**	**6,012**	**–214**	**7,431**	**88**	**7,519**
Changes pursuant to IAS 8[a]	–	–	–	23	–16	7	–	7
As of January 1, 2018	**466**	**1,167**	**–**	**6,035**	**–230**	**7,438**	**88**	**7,526**
Capital increases/decreases	–	–	–	–	–	–	2	2
Dividend distribution	–	–	–	– 536	–	–536	–16	–552
Purchase of treasury shares	–	–	–17	–	–	–17	–	–17
Share-based payment	–	4	–	–	–	4	–	4
Sale of treasury shares	–	–4	17	–	–	13	–	13
Income after taxes	–	–	–	932	–	932	22	954
Other comprehensive income after taxes	–	–	–	–194	92	–102	–	–102
Total comprehensive income	–	–	–	738	92	830	22	852
Other changes	–	–	–	–	–3	–3	–	–3
As of December 31, 2018	**466**	**1,167**	**–**	**6,237**	**–141**	**7,729**	**96**	**7,825**
Changes pursuant to IAS 8	–	–	–	–	–	–	–	–
As of January 1, 2019	**466**	**1,167**	**–**	**6,237**	**–141**	**7,729**	**96**	**7,825**
Capital increases/decreases	–	–	–	–	–	–	4	4
Dividend distribution	–	–	–	–536	–	–536	–16	–552
Purchase of treasury shares	–	–	–17	–	–	–17	–	–17
Share-based payment	–	4	–	–	–	4	–	4
Sale of treasury shares	–	–4	17	–	–	13	–	13
Income after taxes	–	–	–	2,106	–	2,106	21	2,127
Other comprehensive income after taxes	–	–	–	–466	139	–327	–	–327
Total comprehensive income	–	–	–	1,640	139	1,779	21	1,800
Other changes	–	–	–	–	–2	–2	–15	–17
As of December 31, 2019	**466**	**1,167**	**–**	**7,341**	**–4**	**8,970**	**90**	**9,060**

[a] Due to initial application of IFRS 9.

Cash flow statement

Note 7

T42

in € million	2018	2019
Income before financial result and income taxes, continuing operations	1,049	1,086
Depreciation, amortization, impairment losses/reversal of impairment losses on non-current assets	787	984
Result from investments recognized at equity	–10	–5
Gains/losses on the disposal of non-current assets	3	–13
Change in inventories	–242	129
Change in trade accounts receivable	75	41
Change in trade accounts payable	15	–62
Change in provisions for pensions and other post-employment benefits	–229	–60
Change in other provisions	158	–294
Change in miscellaneous assets/liabilities	26	–15
Cash inflows from dividends	12	15
Tax payments relating to the carve-out of the methacrylates business	–	–245
Cash inflows/outflows for other income taxes	–170	–209
Cash flow from operating activities, continuing operations	**1,474**	**1,352**
Cash flow from operating activities, discontinued operations [a]	286	–31
Cash flow from operating activities	**1,760**	**1,321**
Cash outflows for investments in intangible assets, property, plant and equipment	–948	–880
Cash outflows to obtain control of businesses	–21	–25
Cash outflows for investments in other shareholdings	–18	–402
Cash inflows from divestments of intangible assets, property, plant and equipment	16	25
Cash inflows from the divestment of the methacrylates business	–	2,206
Cash inflows/outflows relating to the loss of control over businesses	68	1
Cash inflows/outflows from divestment of other shareholdings	–	1
Cash inflows/outflows relating to securities, deposits, and loans	–24	–1,223
Cash inflows from interest	43	52
Cash flow from investing activities, continuing operations	**–884**	**–245**
Cash flow from investing activities, discontinued operation [a]	–89	–47
Cash flow from investing activities	**–973**	**–292**
Cash inflows/outflows relating to capital contributions	2	4
Cash outflows for dividends to shareholders of Evonik Industries AG	–536	–536
Cash outflows for dividends to non-controlling interests	–16	–12
Cash outflows for the purchase of treasury shares	–17	–17
Cash inflows from the sale of treasury shares	13	13
Cash inflows from the addition of financial liabilities	61	110
Cash outflows for repayment of financial liabilities	–192	–295
Cash inflows/outflows in connection with financial transactions	8	–1
Cash outflows for interest	–121	–114
Cash flow from financing activities, continuing operations	**–798**	**–848**
Cash flow from financing activities, discontinued operations [a]	–3	–8
Cash flow from financing activities	**–801**	**–856**
Change in cash and cash equivalents	**–14**	**173**
Cash and cash equivalents as of January 1	**1,004**	**988**
Change in cash and cash equivalents	–14	173
Changes in exchange rates and other changes in cash and cash equivalents	–2	4
Cash and cash equivalents as of December 31	**988**	**1,165**
Cash and cash equivalents as on the balance sheet as of December 31	**988**	**1,165**

Prior-year figures restated.

[a] Cash flows from discontinued operations relate entirely to the methacrylates business.

Notes to the consolidated financial statements

1. Segment report

Segment report by operating segments Note 8.1

T43

	Nutrition & Care		Resource Efficiency		Performance Materials		Services		Other operations		Corporate, consolidation		**Total Group (continuing operations)**	
in € million	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**
External sales	4,646	4,582	5,708	5,685	2,233	2,043	664	763	15	34	1	1	13,267	13,108
Internal sales	34	28	44	46	127	94	2,059	1,831	27	39	−2,291	−2,038	–	–
Total sales	4,680	4,610	5,752	5,731	2,360	2,137	2,723	2,594	42	73	−2,290	−2,037	13,267	13,108
Result from investments recognized at equity	1	−12	3	9	–	–	6	8	–	–	–	–	10	5
Adjusted EBITDA	810	728	1,283	1,290	239	224	100	122	−86	−39	−196	−172	2,150	2,153
Adjusted EBITDA margin in %	17.4	15.9	22.5	22.7	10.7	11.0	15.1	16.0	–	–	–	–	16.2	16.4
Adjusted EBIT	535	404	983	964	179	123	−29	−42	−102	−62	−205	−186	1,361	1,201
Capital employed (annual average)	4,774	5,044	4,821	4,992	609	707	637	785	−42	−36	2,500	2,543	13,299	14,035
ROCE in %	11.2	8.0	20.4	19.3	29.4	17.4	−4.6	−5.4	–	–	–	–	10.2	8.6
Depreciation and amortization [a]	−263	−311	−287	−324	−59	−101	−120	−160	−14	−23	−10	−13	−753	−932
Capital expenditures [b]	486	260	287	373	45	48	139	150	11	10	1	1	969	842
Financial investments	12	43	–	9	–	–	14	15	–	369	–	–	26	436
No. of employees as of December 31	8,218	8,090	10,270	10,153	1,539	1,622	12,091	12,037	217	232	288	289	32,623	32,423

Prior-year figures restated.
For details of the segmentation of impairments and reversals of impairments pursuant to IAS 36, see note 6.5 **p. 124.**
[a] For intangible assets, property, plant and equipment, and right-of-use assets.
[b] For intangible assets, property, plant and equipment.

Segment report by regions Note 8.2

T44

	Western Europe		Eastern Europe		North America		Central & South America		Asia-Pacific North		Asia-Pacific South		Middle East & Africa		Total Group (continuing operations)	
in € million	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
External sales[a]	5,719	5,531	787	814	2,944	2,952	609	591	1,971	2,042	848	823	389	355	13,267	13,108
Goodwill as of December 31[b]	2,273	2,283	50	50	1,894	1,932	31	32	152	153	98	101	19	19	4,517	4,570
Other intangible assets, property, plant and equipment as of December 31[b]	3,862	4,416	27	41	1,870	1,961	155	148	615	632	1,101	1,158	6	7	7,636	8,363
Capital expenditures	424	547	7	15	199	137	6	6	29	66	303	70	1	1	969	842
No. of employees as of December 31	21,836	21,828	527	496	4,312	4,287	672	656	3,277	3,211	1,840	1,793	159	152	32,623	32,423

Prior-year figures restated.
[a] External sales Western Europe: thereof Germany €2,290 million (2018: €2,301 million).
[b] Non-current assets according to IFRS 8.33 b.

2. General information

Evonik Industries AG is an international specialty chemicals company headquartered in Germany. Its registered office is at Rellinghauser Strasse 1–11, 45128 Essen (Germany), and the company is registered in the commercial register at Essen District Court under HRB no. 19474.

As a subsidiary of RAG-Stiftung, Essen (Germany), Evonik Industries AG and its subsidiaries are included in the annual consolidated financial statements of RAG-Stiftung, which prepares consolidated financial statements for the largest and smallest groups of companies to which Evonik and its subsidiaries belong. The consolidated financial statements of RAG-Stiftung are published in the German Federal Gazette (Bundesanzeiger).

The present consolidated financial statements of Evonik Industries AG and its subsidiaries (referred to jointly as Evonik or the Group) were prepared by the executive board of Evonik Industries AG at its meeting on February 19, 2020, discussed at the meeting of the audit committee on February 26, 2020, and presented to the supervisory board for approval at its meeting on March 3, 2020. The consolidated financial statements are also published in the German Federal Gazette.

3. Basis of preparation of the financial statements

3.1 Compliance with IFRS

As permitted by section 315e paragraph 1 of the German Commercial Code (HGB), the present consolidated financial statements have been prepared on the basis of the International Financial Reporting Standards (IFRS), as adopted by the European Union (EU), and comply with these standards.

3.2 Presentation and methods

The consolidated financial statements cover the period from January 1 to December 31, 2019 and are presented in euros. All amounts are stated in millions of euros (€ million) except where otherwise indicated. In some cases, rounding may mean that the figures in this report do not add up exactly to the totals stated and percentages do not correlate exactly to the figures presented.

The accounting policies are outlined in the respective notes.

Both the accounting policies and the items presented in the consolidated financial statements are in principle consistent from one period to the next. Deviations from this principle resulting from changes in accounting standards are outlined in note 3.4 p. 104 f. Other changes to the prior-year figures are outlined either in note 3.5 p. 105 f. or in the relevant notes.

3.3 Assumptions and estimation uncertainties

The preparation of consolidated financial statements involves assumptions and estimates about the future. The subsequent circumstances may differ from these estimates. Adjustments to estimates are recognized in income as soon as better information is available. The estimates and assumptions that constitute a considerable risk that the carrying amounts of assets and liabilities may have to be adjusted within the next fiscal year are discussed in the corresponding notes.

3.4 Accounting standards to be applied for the first time

A number of revised and newly issued standards and interpretations had to be applied for the first time in fiscal 2019. Only the accounting standards of significance for Evonik are outlined below.

First-time application of IFRS 16
Evonik applied IFRS 16 Leases for the first time as of January 1, 2019. The modified retrospective method was used for initial application, so the prior-year figures have not been restated.

IFRS 16 specifies that, in principle, lessees must recognize all leases on the balance sheet at present value in the form of a right-of-use asset and a lease liability. The right-of-use asset is normally depreciated over the term of the lease and the lease liability is increased to reflect interest on the lease using the effective interest method and reduced to reflect lease payments. Consequently, lease expense is no longer recognized in the income statement. The right-of-use asset is subject to an impairment test pursuant to IAS 36 Impairment of Assets.

As of the date of initial application of IFRS 16, right-of-use assets totaling €662 million and a lease liability totaling €666 million were recognized. The following practical expedients were used. Leases formerly classified as operating leases in accordance with IAS 17 Leases were not reassessed to confirm that they also meet the definition of a lease in IFRS 16. When determining the term of the lease, extension and termination options were reassessed. Initial direct costs were not included in the measurement of the right-of-use asset. Where the incremental borrowing rate was applied, uniform discount rates were used, taking into account the lease term, the contract currency, and the economic circumstances of the lease. In addition, Evonik uses further practical expedients:

- IFRS 16 is not applied to intangible assets (IFRS 16.4).
- Short-term leases and leases for low-value assets are not recognized on the balance sheet in accordance with IFRS 16; instead, lease expense is still recognized in the income statement (IFRS 16.5).
- For the following classes of assets, lease and non-lease components are combined (IFRS 16.15): power plants, ships, storage tanks.

The reconciliation from the off-balance-sheet lease obligation pursuant to IAS 17 as of December 31, 2018 and the lease liability recognized on the balance sheet pursuant to IFRS 16 as of January 1, 2019 is as follows:

Reconciliation of lease liabilities T45

in € million	Jan. 1, 2019
Lessee's lease obligation from operating leases as of December 31, 2018	747
Reassessment of lease terms and payments	–9
Application of the practical expedient to capitalize non-lease components	13
Other	2
Nominal value of lease liability as of January 1, 2019	**753**
Discounting	–87
Additional lease liability due to initial application of IFRS 16 as of January 1, 2019	**666**
Weighted average incremental borrowing rate due to initial application of IFRS 16 as of January 1, 2019 in %	2.4

As of the date of initial application and the reporting date, Evonik recognized the following right-of-use assets in a separate item on the balance sheet:

Right-of-use assets T46

in € million	Jan. 1, 2019	Dec. 31, 2019
Land, land rights, and buildings	176	216
Plant and machinery	338	313
Other plant, office furniture, and equipment	148	111
	662	**640**

The right-of-use assets for plant and machinery mainly relate to power plants and storage tanks. The right-of-use assets for other plant, office furniture, and equipment mainly relate to rail wagons and transport containers, ships, and motor vehicles.

The lease liabilities are recognized in other financial liabilities.

3.5 Further restatement of prior-year figures

Changes to the presentation of the cash flow statement

To improve comparability within the sector, the structure of the cash flow statement has been altered with effect from January 1, 2019. The prior-year figures have been restated accordingly.

Cash outflows for interest are presented in the cash flow from financing activities, and cash inflows from interest are included in the cash flow from investing activities. In previous years, both were presented in the cash flow from operating activities. For 2018, the cash outflows for interest were €121 million and the cash inflows from interest were €43 million.

The cash outflows for payments to the contractual trust arrangement (CTA) are now shown in the cash flow from operating activities. In previous years, they were presented in the cash flow from investing activities. Cash outflows of €26 million were reclassified for 2018 and €23 million were reclassified in 2019.

Restatement in the segment report

Administrative functions have been reorganized as part of the global efficiency enhancement program. In the segment report, functions previously included in "Corporate" have been shifted to the Services segment. Retrospective restatement reduced the adjusted EBITDA and adjusted EBIT of the Services segment by €31 million in 2018.

The methacrylates business was divested effective July 31, 2019 (see note 4.2 p. 109). This business was reclassified as a discontinued operation when the sale agreement was signed in March 2019. Since then, the executive board of Evonik Industries AG has only evaluated the earnings power and decided on the allocation of resources at the level of the continuing operations; separate management of the methacrylates business was no longer undertaken in the period until its divestment Consequently, only the continuing operations are presented in the segment report. The key figures have been restated retrospectively. Alongside the Evonik Group as a whole, this affects the Performance Materials, Resource Efficiency, and Services segments.

In connection with the divestment of the methacrylates business, the business with application monomers was integrated into the Resource Efficiency segment (previously it was allocated to the Performance Materials segment). The change of segment also involved some consolidation effects. The following table shows the impact of this retrospective adjustment on the key figures as a result of this reclassification.

Retrospective reclassification of the application monomers business—fiscal 2018 T47

in € million	Resource Efficiency	Performance Materials	Corporate, consolidation
External sales	161	–161	–
Internal sales	–6	–	6
Total sales	155	–161	6
Adjusted EBITDA	25	–26	1
Adjusted EBIT	22	–23	1
Capital employed (annual average)	67	–62	–5
Depreciation and amortization	3	–3	–
Capital expenditures	3	–3	–

3.6 Accounting standards that are not yet mandatory

The International Accounting Standards Board (IASB) has issued further accounting standards (IFRS, IAS) and interpretations (IFRIC, SIC), which did not become mandatory in fiscal 2019 or have not yet been officially adopted by the European Union (amendments to IFRS 3 Business Combinations, IAS 1 and IAS 8 Definition of Material, IAS 1 Presentation of Financial Statements: Classification of Liabilities as Current or Non-Current, and to IFRS 9, IFRS 39 and IFRS 7 Interest Rate Benchmark Reform). The new provisions are not expected to have a material impact on current or future reporting periods or on foreseeable future transactions but are monitored continuously.

3.7 Consolidation methods and scope of consolidation

Scope of consolidation

Alongside Evonik Industries AG, all material German and foreign subsidiaries directly or indirectly controlled by Evonik Industries AG and two specialized funds for the investment of liquidity are fully consolidated in the consolidated financial statements of Evonik Industries AG. Evonik Industries AG controls a company or a fund if it is exposed to, or has rights to, variable returns from its involvement with the company or fund and has the ability to affect those returns through its power over the company or fund.

Evonik has power over the two specialized funds, LBBW AM-EVO, Essen (Germany) and Union Treasury 1, Essen (Germany) because Evonik has contractually agreed unconditional rights of dismissal. Consequently, the fund managers are deemed to be agents whose power over the fund is attributable to Evonik.

Joint operations are included in the consolidated financial statements on a pro rata basis. A joint operation is an arrangement where the parties that have joint control have rights to the assets, and obligations for the liabilities, relating to the arrangement.

Joint ventures and associates are generally recognized at equity. A joint venture is a joint arrangement where the Evonik Group has joint control, together with other parties, and has rights to the net assets of the arrangement. Associates are companies where the Evonik Group has a significant influence but does not have control or joint control of financial and operating policies.

ARG mbH & Co. KG, Oberhausen (Germany) is included in the consolidated financial statements as an associate even though both the voting rights and the shareholding are below 20 percent, because Evonik has a material influence through contractual agreements.

Companies whose influence on the assets, financial position, and earnings of the Evonik Group, both individually and in aggregate, is negligible are carried at fair value in accordance with IFRS 9 Financial Instruments and are allocated to the category “at fair value through other comprehensive income without subsequent reclassification.”

Changes in the scope of consolidation are outlined in note 4.1 p. 108 f.

Consolidation methods

The **financial statements of the consolidated German and foreign subsidiaries** are prepared using uniform accounting policies.

Capital is consolidated at the **time of acquisition** by offsetting the carrying amount of the business acquired against the pro rata revalued equity of the subsidiary. Ancillary acquisition costs are not included in the carrying amount of the subsidiary; instead, they are recognized as expense in the income statement. The assets and liabilities (net assets) of the subsidiary are included at their fair values. If shares in the subsidiary are held before acquiring control, they must be revalued and any resultant change in value must be recognized in the income statement in other operating income or other operating expense. Gains or losses recognized in other comprehensive income must be derecognized in the same way as if the acquirer had divested the shares previously held. Any remaining excess of the acquisition cost over the fair value of the net assets is recognized as goodwill. Negative differences are included in income following a renewed examination of the fair value of the net assets.

Changes in shareholdings in a previously consolidated subsidiary that do not result in a loss of control are recognized directly in equity as a transaction between owners. In this case, the shares attributable to the owners of the parent company and to the other shareholders are adjusted to reflect the changes in their respective stakes in the subsidiary. Any difference between this adjustment and the fair value of the consideration paid or received is recognized directly in equity and allocated to the shares attributable to the owners of the parent company. Directly related transaction costs are also recognized as a transaction between owners that has no impact on income, with the exception of costs for the issuance of debt or equity instruments, which are still measured in accordance with the criteria for recognizing financial instruments. Cash inflows and outflows relating to these transactions are presented in the cash flow from financing activities.

A subsidiary must be deconsolidated as of the **date on which control is lost.** The net assets of the subsidiary and the non-controlling interests are derecognized. The gain or loss on the divestments must be calculated from the Group viewpoint. It is derived from the difference between the proceeds of the divestment (selling price less costs to sell) and the parent company's share in the divested net assets of the subsidiary (including the remaining hidden reserves and liabilities, and any goodwill shown on the balance sheet). The shares in the former subsidiary still held by Evonik are revalued at fair value as of the date on which control is lost. All resulting gains and losses are recognized in the income statement as other operating income or other operating expense. In addition, amounts shown in equity under other equity components are also reclassified to the income statement, except where another accounting standard requires direct transfer to retained earnings.

Intragroup income and expenses, profits, losses, receivables, and liabilities between consolidated subsidiaries are fully eliminated. In the case of joint operations, elimination is pro rata. Write-downs on shares in such companies recognized in the separate financial statements are reversed.

Joint operations are recognized in the consolidated financial statements at the proportionate amount of their assets, liabilities, income, and expenses in accordance with Evonik's rights and obligations.

The consolidation principles used for subsidiaries also apply for **companies accounted for using the equity method.** In this case, any goodwill is recognized in the carrying amount of the investment. The financial statements of the companies recognized at equity are prepared using uniform accounting policies.

3.8 Currency translation

The financial statements of Evonik Industries AG and its subsidiaries are generally prepared in their functional currency.

In the separate financial statements prepared by these companies, business transactions in foreign currencies are translated at the exchange rate on the date of initial recognition. Any gains or losses resulting from the valuation of monetary assets and liabilities in foreign currencies are recognized in other operating income, other operating expense, or other financial result at the closing rate on the reporting date.

In the consolidated financial statements, the assets and liabilities of all foreign subsidiaries are translated from their functional currency into euros at closing rates on the reporting date. Goodwill and hidden assets and liabilities from the acquisition of a foreign subsidiary are translated at the closing rate as assets and liabilities of the foreign subsidiary. Income and expense items are translated at average exchange rates for the year, which are derived from the mean of the exchange rates at month-end over the past 13 months. Translation differences compared to the prior year and translation differences between the income statement and balance sheet are recognized in other comprehensive income from currency translation in the statement of comprehensive income. They are only reclassified to the income statement when the foreign subsidiary is divested.

The equity of foreign companies recognized using the equity method is translated in the same way.

Exchange rates T48

	Average annual rates		Closing rates	
1 € corresponds to	2018	**2019**	Dec. 31, 2018	**Dec. 31, 2019**
Brazilian real (BRL)	4.30	4.42	4.44	4.52
British pound (GBP)	0.89	0.88	0.89	0.85
Chinese renminbi yuan (CNY)	7.81	7.74	7.88	7.82
Japanese yen (JPY)	130.39	122.26	125.85	121.94
Singapore dollar (SGD)	1.59	1.53	1.56	1.51
US dollar (USD)	1.18	1.12	1.15	1.12

Argentina has been classified as a hyperinflationary economy since July 1, 2018, so the concept of historical cost of acquisition and production pursuant to IAS 29 Financial Reporting in Hyperinflationary Economies is therefore applied to two Argentinean subsidiaries. The profit or loss on the net monetary items is recognized in the financial result. In 2019, it was €1 million (2018: €1 million). In 2019, for the first time, foreign currency translation and measurement is based on the consumer price index published by the National Institute of Statistics and Censuses of the Argentine Republic (INDEC), which was 273.22 as of November 30, 2019, because this index is updated monthly, unlike the consumer price index of the International Monetary Fund, which was used in the previous year (October 1, 2018: 328.352).

4. Changes in the Evonik Group

4.1 Scope of consolidation

Changes in the scope of consolidation T49

No. of companies	Germany	Other countries	**Total**
Evonik Industries AG and consolidated subsidiaries			
As of December 31, 2018	**42**	**112**	**154**
Acquisitions	–	1	1
Other companies consolidated for the first time	2	3	5
Divestments	–3	–9	–12
Intragroup mergers	–6	–2	–8
Other companies deconsolidated	–	–1	–1
As of December 31, 2019	**35**	**104**	**139**
Joint operations			
As of December 31, 2018	**1**	**2**	**3**
As of December 31, 2019	**1**	**2**	**3**
Investments recognized at equity			
As of December 31, 2018	**4**	**10**	**14**
Divestments	–	–1	–1
As of December 31, 2019	**4**	**9**	**13**
	40	**115**	**155**

Further information on the principal acquisitions and divestments in 2019 can be found in note 4.2 p. 109 f.

The following list contains material subsidiaries selected on the basis of quantitative and qualitative criteria. An overview of all companies included in the consolidated financial statements and full details of the shareholdings in accordance with section 313 paragraph 2 of the German Commercial Code (HGB) can be found in the list of shareholdings.[1]

[1] The complete list of shareholdings is published with the consolidated annual financial statements in the Federal Gazette and can be viewed on Evonik's website. www.evonik.com/list-of-shareholdings

Material consolidated subsidiaries T50

Name of company	Registered office	Shareholding in %
Germany		
Evonik Functional Solutions GmbH	Essen (Germany)	100.00
Evonik Nutrition & Care GmbH	Essen (Germany)	100.00
Evonik Operations GmbH	Essen (Germany)	100.00
Evonik Real Estate GmbH & Co. KG	Marl (Germany)	100.00
Evonik Resource Efficiency GmbH	Essen (Germany)	100.00
Evonik Technology & Infrastructure GmbH	Essen (Germany)	100.00
LBBW AM-EVO [a]	Essen (Germany)	0.00
Union Treasury 1 [a]	Essen (Germany)	0.00
Other countries		
Evonik Antwerpen NV	Antwerp (Belgium)	100.00
Evonik Brasil Ltda.	São Paulo (Brazil)	100.00
Evonik Canada Inc.	Calgary (Canada)	100.00
Evonik Corporation	Parsippany (New Jersey, USA)	100.00
Evonik Degussa (China) Co., Ltd.	Beijing (China)	100.00
Evonik Finance B.V.	Amsterdam (Netherlands)	100.00
Evonik India Pvt. Ltd.	Mumbai (India)	100.00
Evonik International Holding B.V.	Amsterdam (Netherlands)	100.00
Evonik Japan Co., Ltd.	Tokyo (Japan)	100.00
Evonik Korea Ltd.	Seoul (South Korea)	100.00
Evonik Methionine SEA Pte. Ltd.	Singapore (Singapore)	100.00
Evonik Oil Additives USA, Inc.	Horsham (Pennsylvania, USA)	100.00
Evonik Oxeno Antwerpen NV	Antwerp (Belgium)	100.00
Evonik Specialty Chemicals (Shanghai) Co., Ltd.	Shanghai (China)	100.00
Evonik Speciality Organics Ltd.	Milton Keynes (UK)	100.00
Evonik Taiwan Ltd.	Taipei (Taiwan)	100.00
Evonik Ticaret Ltd. Sirketi	Tuzla/Istanbul (Turkey)	100.00
Evonik UK Holdings Ltd.	Milton Keynes (UK)	100.00
Nippon Aerosil Co., Ltd.	Tokyo (Japan)	80.00
OOO Evonik Chimia	Moscow (Russian Federation)	100.00

[a] Fully consolidated structured company in accordance with IFRS 10.B8 in conjunction with B19 (b).

4.2 Acquisitions and divestments

When accounting for acquisitions, all identifiable assets, liabilities, and contingent liabilities are measured at fair value as of the acquisition date. The principal estimation uncertainties relate to the determination of their fair values. Land and buildings are normally measured on the basis of independent valuations, while plant and machinery are recognized at their estimated replacement cost. The identification and measurement of intangible assets depends on the type of intangible asset and the complexity of determining the fair value using appropriate valuation techniques, which are normally based on a projection of the expected future cash flows. These valuations are closely linked to management assumptions regarding future changes in the value of the respective assets and the discount rate applied.

Acquisition of the Endexo® technology from Interface Biologics, Inc.

Evonik acquired the Endexo® technology from Interface Biologics, Inc., Toronto (Canada) on July 31, 2019 through an asset deal. The technology has been integrated into the Nutrition & Care segment.

Endexo® enhances the biocompatibility of medical devices such as catheters that come into contact with tissue, blood, or other biological fluids. This acquisition extends Evonik's ability to serve as a development partner and solution provider to medical device companies worldwide.

Purchase price allocation for the Endexo® technology as of the acquisition date T51

in € million	Fair value recognized
Intangible assets	27
Negative goodwill	–1
Purchase price pursuant to IFRS 3	**26**

The intangible assets include acquired technologies and the Endexo® brand. A useful life of between 15 and 20 years, including churn rates, is assumed for the technologies. For the Endexo® brand, a useful life of 20 years is assumed, including churn rates and a royalty rate of 2 percent. The discount factor applied was a weighted cost of capital based on companies with comparable business activities, after risk adjustments. Since the seller had not initiated an auction process with other potential buyers, this resulted in a negative difference, which was recognized in other operating income.

The purchase price was agreed in US dollars and settled out of cash and cash equivalents. Furthermore, under the agreements made, a payment of at most €3 million has to be made to the seller if defined sales targets are achieved. Only an immaterial portion of this amount was classified as purchase price in accordance with IFRS 3.

The contributions made by the Endexo® technology to sales and earnings were not material relative to the Nutrition & Care segment, either in the period since its acquisition, or on pro forma basis since January 1, 2019.

Divestment of the methacrylates business

In order to sharpen its focus on less cyclical specialty chemicals, on March 4, 2019 Evonik signed an agreement to sell the methacrylates business to Advent International Corporation, Boston (Massachusetts, USA). This business comprised large-volume monomers such as methylmethacrylate (MMA), various specialty monomers, and polymethylmethacrylate (PMMA) molding compounds and semi-finished products marketed under the PLEXIGLAS® brand. The transaction was closed on July 31, 2019 and mainly took the form of share deals. After taking into account the liabilities and cash and cash equivalents transferred, and the provisional, contractually agreed purchase price adjustments prior to closing, the payment received was €2.4 billion. In the cash flow statement, this has to be offset against the divested cash and cash equivalents totaling €0.2 billion, so the cash flow statement shows an inflow of €2.2 billion from this divestment. Contractual agreements such as the final valuation of net working capital after closing may result in changes in the purchase price into the first half of 2020. Until the transaction was closed, the methacrylates business was classified as a discontinued operation in accordance with IFRS 5 Non-current assets held for sale and discontinued operations; see note 4.3 p. 111.

Other divestments

Under an agreement dated July 12, 2019, Evonik sold its 100 percent stake in Evonik Agroferm Zrt., Kaba (Hungary) to Bug Venture, LLC (Conagen, Inc.), Rancho Santa Margarita (California, USA). The divestment of this company, which was part of the Nutrition & Care segment, was closed on September 4, 2019.

Under an agreement dated November 15, 2019, Evonik sold its 100 percent stake in Evonik Thai Aerosil Co., Ltd., Bangkok (Thailand) to Shin-Etsu Silicones (Thailand) Limited, Bangkok (Thailand). The divestment of this company, which was part of the Resource Efficiency segment, was closed on December 2, 2019. The provisional purchase price is in the low double-digit million euro range and the full amount was received as a cash inflow.

Impact of divestments on the balance sheet

The divestments impacted the balance sheet as follows as of the date of deconsolidation or sale:

Impact of divestments on the balance sheet T52

in € million	
Non-current assets	1,062
Current assets	710
thereof cash and cash equivalents	*227*
Total assets	**1,772**
Non-current liabilities	737
Current liabilities	181
Total liabilities	**918**
Net assets	**854**

Result from the deconsolidation of subsidiaries

The deconsolidation result was €1,472 million (2018: −€6 million). This includes €1,469 million from divestment of the methacrylates business. This amount, along with the proceeds from the divestment of an investment recognized at equity, which was also sold as part of the divestment of the methacrylates business, is recognized in income before income taxes, discontinued operations.

4.3 Assets held for sale and discontinued operations

A **non-current asset or a disposal group** is classified on the balance sheet as **held for sale** if the corresponding carrying amount is to be realized principally through a sale transaction rather than through continued use. The prior-year figures are not restated. A disposal group may also contain current assets and liabilities.

The assets and liabilities must be measured in accordance with the previously relevant accounting standards immediately before initial classification as held for sale. The non-current assets or disposal groups are subsequently valued at the lower of the carrying amount and fair value less costs to sell. In the income statement, their income is still included in income from continuing operations.

Additionally, a non-current asset or disposal group classified as held for sale may meet the criteria for classification as a **discontinued operation.** This is either a major line of business or geographical area of the company that has been, or is to be, sold or shut down on the basis of a single coordinated plan, either as a whole or in parts, or a subsidiary acquired with a view to resale.

The income from the operating activities, measurement, and divestment of a discontinued operation is reported separately from continuing operations in the income statement. Similarly, the cash flows are reported separately in the cash flow statement. The prior-year figures are restated in each case.

Income after taxes, discontinued operations T53

	Operating income after taxes		Divestment gains/ losses after taxes		Income after taxes, discontinued operations	
in € million	2018	2019	2018	2019	2018	2019
Methacrylates business	243	72	–	1,283	243	1,355
Other discontinued operations	–	–	3	–2	3	–2
	243	**72**	**3**	**1,281**	**246**	**1,353**

On March 4, 2019, Evonik signed an agreement to divest the methacrylates business to Advent International Corporation, Boston (Massachusetts, USA). The transaction was closed on July 31, 2019; see note 4.2 p. 109 f. The methacrylates business constituted a major line of business and was therefore classified as a discontinued operation until the closing of the transaction.

Operating income of the methacrylates business T54

in € million	2018	2019
Income	1,779	994
Expenses	–1,471	–893
Operating income before income taxes, methacrylates business	**308**	**101**
Income taxes	–65	–29
Operating income after taxes, methacrylates business	**243**	**72**

Divestment gains/losses from discontinued operations T55

in € million	2018	2019
Methacrylates business	–	1,506
Other discontinued operations	3	–2
Income before income taxes from the divestment of discontinued operations	**3**	**1,504**
Methacrylates business	–	–223
Other discontinued operations	–	–
Income taxes	**–**	**–223**
Methacrylates business	–	1,283
Other discontinued operations	3	–2
Income after taxes from the divestment of discontinued operations	**3**	**1,281**

5. Notes to the income statement

5.1 Sales

Revenue is normally **recognized** when the distinct performance obligations set out in a contract or bundle of contracts are satisfied. The amount of revenue recognized is the transaction price allocated to these performance obligations.

If a contract with a customer has enforceable commercial substance, the payment terms are known, and it is probable that the transaction will take place, it falls within the **scope of IFRS 15** Revenue from contracts with customers. **Contracts entered into with the same customer are combined** for accounting purposes if they are concluded close together and are commercially linked. Exchange-type transactions (exchange of similar products) with competitors to overcome bottlenecks or reduce transportation costs are explicitly outside the scope of IFRS 15 and therefore do not result in revenue recognition.

A **performance obligation is distinct** if the products or services contained in the contract can be identified individually, and the customer can benefit from the goods or services directly and separate them from other products and services in the same contract. Freight services relating to product deliveries are distinct performance obligations if the freight service takes place after transfer of control of the products to the customer. If, in connection with the sale of products to the customer, temporary storage of the products until final collection by the customer or shipment to the customer is agreed, and if the storage takes place after transfer of control over the products to the customer, there is a distinct performance obligation in the form of storage. If customers are granted additional benefits, these normally also constitute a distinct performance obligation.

The **transaction price** is the consideration expected to be received from the customer for transfer of the products or performance of the service. It contains both fixed and variable components. When determining the transaction price, volume-based rebates and bonuses are included at their expected value. This regularly results in an adjustment of the transaction price on the basis of the estimate of the annual volumes for the rebates and bonus payments. If the price includes a significant financing component as a result of prepayments by the customer, the transaction price is increased and the financing component results in recognition of financing expenses.

If there are several performance obligations, the **transaction price** (including possible price discounts) **is allocated** among the individual performance obligations on the basis of the relative stand-alone selling price. If stand-alone selling prices cannot be determined from an observable market price, appropriate estimates are used. For freight or warehouse services that comprise a distinct performance obligation within the context of product deliveries, part of the transaction price specified in the agreement on the delivery of the product must be allocated to the freight or warehouse service. If a free additional benefit constitutes a separate performance obligation, and the underlying product delivery agreement contains a fixed take-off amount, it is assumed that the customer pays the consideration for the free additional benefit delivered via the minimum take-off amount, so part of the transaction price is allocated to the free additional benefit.

The criteria for **satisfaction of a performance obligation** are differentiated as follows: The Evonik Group recognizes **revenue from product deliveries** at the point in time when the customer obtains control of the product. For this purpose, the provisions of the General Business Conditions and any individual contractual arrangements must be taken into account; these include the Incoterms©. The Evonik Group has consignment warehouse agreements with some customers. Here, transfer of control of the goods to the customer normally only takes place when the goods are removed from the warehouse. In most cases, billing for the goods takes place monthly with short payment terms (less than three months). The Evonik Group recognizes **revenue for services** over time. The level of revenue to be recognized is determined from the stage of fulfillment based on the work already performed relative to the overall service. The stage of fulfillment is determined using both input- and output-based methods.

A contract liability for non-current prepayments by customers is recognized as revenue on a straight-line basis over the contractually agreed performance period.

Sales totaled €13,108 million (2018: €13,267 million). In all segments, they consist principally of revenue from the sale of products and services.

All segments **sell products** on the basis of multi-year master agreements with annual adjustment of volumes and prices. There are also agreements with customers on the provision of fixed capacities. In these cases, volumes and prices are also regularly renegotiated. Further, the Evonik Group delivers to some of its customers on the basis of short-term orders. In individual cases, Evonik has agreements with customers on firmly agreed minimum take-off amounts. The underlying prices are often variable, in other words, based on commodity prices or indexed to energy prices, and are only fixed at the time of delivery or transfer of control. In addition, there are volume-based rebates and bonuses that are normally agreed annually. In some cases, customers make long-term prepayments for keeping or building up customer-specific production capacity. These are recognized as contract liabilities from contracts with customers and released to revenue over the performance period. The Evonik Group supplies energy (for example, steam, water, electricity, gas) to customers on the basis of site agreements, which are generally concluded for the long term. Energy is normally supplied free to the customer's place of consumption, i.e., including transportation from the generating facility to the place of consumption. Order volumes are determined by the customer. Prices comprise components for the work performed and for services. Billing is on delivery, at least monthly. Payment terms are normally short-term, i.e., between 30 and 60 days.

Services are provided principally by the Services segment and, to a smaller extent, by the other operating segments (for example, contract manufacturing of certain chemical products). The Services segment provides site management, utilities, waste management, technical, process technology, engineering, and logistics services for the three chemical segments and external customers at our sites.

Further, the Nutrition & Care segment undertakes **customer-specific development work.** The development process is normally long-term and may be structured either as a service agreement or as an agreement with a target outcome. In the second case, transaction prices are often dependent on milestones. Customer payments are due shortly after reaching each milestone. In such cases, revenue is recognized over time using output-based methods. In the case of contracts for customer-specific developments, for which Evonik has no alternative use and which cannot be offered to other customers, revenue is recognized over time whenever Evonik is entitled to remuneration for the work performed, including a margin. Revenue is also recognized over time if Evonik drives forward the development of an existing customer product or customer-specific know-how. If the achievement of milestones is dependent on factors that Evonik cannot influence, for example, successful registration of active ingredients or products by the customer, revenue is only recognized when achievement of the milestone is certain.

Furthermore, in the three chemical segments, **licenses** are granted, for example, for the use of know-how, the construction of plants, or the production and commercialization of products. The licenses normally constitute a distinct performance obligation, either as a right of use or as a right of access. In the case of a right of use, revenue is recognized at a point in time, while for rights of access it is recognized over time. In some cases, the transaction prices for licenses include firmly agreed royalties, which are often due shortly after achievement of a predefined milestone. In other cases, customers pay sales-based royalties, which are only recognized as revenues when the revenue is actually generated with the customer.

Sales by segments and regions 2019 T56

in € million	Nutrition & Care	Resource Efficiency	Performance Materials	Services	Other operations	Corporate, consolidation	Total Group
Western Europe	1,327	2,117	1,383	698	5	1	**5,531**
Eastern Europe	303	367	139	1	4	–	**814**
North America	1,403	1,343	161	45	–	–	**2,952**
Central & South America	365	155	69	–	2	–	**591**
Asia-Pacific North	624	1,236	147	17	18	–	**2,042**
Asia-Pacific South	386	367	65	1	4	–	**823**
Middle East & Africa	174	100	79	1	1	–	**355**
Total Group	**4,582**	**5,685**	**2,043**	**763**	**34**	**1**	**13,108**
thereof sales outside the scope of IFRS 15	*–32*	*–36*	*–10*	*14*	*4*	*–*	*–60*

Sales by segments and regions 2018 T57

in € million	Nutrition & Care	Resource Efficiency	Performance Materials	Services	Other operations	Corporate, consolidation	Total Group
Western Europe	1,385	2,178	1,523	630	2	1	**5,719**
Eastern Europe	309	348	130	–	–	–	**787**
North America	1,381	1,336	196	30	1	–	**2,944**
Central & South America	370	168	70	–	1	–	**609**
Asia-Pacific North	576	1,206	176	2	11	–	**1,971**
Asia-Pacific South	408	369	71	–	–	–	**848**
Middle East & Africa	217	103	67	2	–	–	**389**
Total Group	**4,646**	**5,708**	**2,233**	**664**	**15**	**1**	**13,267**
thereof sales outside the scope of IFRS 15	*23*	*25*	*11*	*9*	*4*	*–*	*72*

Prior-year figures restated.

Sales outside the scope of IFRS 15 comprise the results of currency hedging of forecast sales in foreign currencies, which are included in hedge accounting, and revenues from operating leases.

Sales may result from performance obligations satisfied in prior periods. In the case of rebate and bonus agreements, this may apply if the refund liability for rebate and bonus agreements recognized in previous years does not match the final invoice in the current fiscal year. Further, it applies to license agreements comprising a right of use with sales-based royalties.

Sales from performance obligations satisfied in previous periods T58

in € million	2018	2019
Rebate and bonus agreements	13	18
License agreements	1	1
	14	**19**

Prior-year figures restated.

Firmly agreed performance obligations that had not been satisfied in full as of the reporting date are expected to result in revenue realization, as shown below. Further, Evonik applies the practical expedient set out in IFRS 15.121 and does not disclose the unsatisfied performance obligations for contracts with an expected duration of one year or less.

Transaction prices of unsatisfied performance obligations T59

	Revenue realization in			2019
in € million	more than 1 and up to 3 years	more than 3 and up to 5 years	more than 5 years	**Total**
Transaction prices of unsatisfied performance obligations	867	452	1,006	2,325

Transaction prices of unsatisfied performance obligations T60

	Revenue realization in			2018
in € million	more than 1 and up to 3 years	more than 3 and up to 5 years	more than 5 years	**Total**
Transaction prices of unsatisfied performance obligations	1,038	482	965	2,485

Prior-year figures restated.

The transaction price of the unsatisfied performance obligations is based on the volumes and services contractually agreed with the customer as of the reporting date for which the customer has a take-off obligation, and Evonik has a performance obligation. Variable transaction elements are included in future sales on the basis of an estimate based on the present price. Sales- or usage-based royalties structured as a right of access are included if there is a legally enforceable minimum take-off amount.

Further information on contract assets from contracts with customers can be found in note 6.8 p. 128, while further information on contract liabilities from contracts with customers can be found in note 6.13 p. 139 f.

5.2 Function costs

Function costs are derived from cost accounting data. IFRS accounting policies are the central recognition principles used at Evonik. Therefore, implicit costs may not be allocated to the functional areas. Function costs are determined after internal cross-charging to ensure that they take account of transactions between the functional areas.

Evonik distinguishes between the following functional areas: cost of sales, selling expenses, research and development expenses, and general administrative expenses.

Operating expenses that cannot be allocated to the functional areas are recognized as other operating expense.

Function costs were €11,920 million in 2019 (2018: €11,870 million).

In 2018, the function costs included impairment losses pursuant to IAS 36 Impairment of Assets of €1 million. Note 6.5 p. 124 ff. contains details of segmentation and additional information, together with details of the impairment losses pursuant to IAS 36 recognized in other operating expense.

5.3 Other operating income/expense

Other operating income/expense T61

in € million	Other operating income 2018	Other operating income 2019	Other operating expense 2018	Other operating expense 2019
Restructuring measures	3	83	−207	−101
thereof impairment losses/ reversal of impairment losses pursuant to IAS 36	*–*	*–*	*−5*	*−6*
thereof from the disposal of assets	*–*	*–*	*−6*	*−8*
thereof income from the reversal of/ additions to other provisions	*3*	*73*	*−156*	*−56*
Impairment losses/reversal of impairment losses pursuant to IAS 36	–	–	−33	−52
Recultivation and environmental protection measures	1	1	−9	−23
REACH Regulation	2	1	−11	−10
Disposal of assets	8	21	−12	−9
Operational currency hedging (net presentation)[a]	–	–	−26	−7
Reversal of/additions to other provisions	63	86	−73	−34
Impairment losses/reversals of impairment losses pursuant to IFRS 9 (net presentation)[a]	2	–	–	−5
Currency translation of operating monetary assets and liabilities (net presentation)[a]	5	–	–	−4
Other income/expense	139	167	−210	−221
	223	**359**	**−581**	**−466**
thereof adjustments	*24*	*138*	*−336*	*−240*

Prior-year figures restated.

[a] The gross income and expense from operational currency hedging, currency translation of operating monetary assets and liabilities, and impairment losses/reversal of impairment losses pursuant to IFRS 9 are netted. The corresponding net amounts are recognized in other operating income or other operating expense as appropriate.

The income and expenses relating to **restructuring measures** mainly come from the program to reduce selling and administrative expenses. In 2019, a new estimate was made of the obligations relating to this program due to a change in the employees affected. This resulted in reversals of provisions for restructuring and the establishment of new provisions. Moreover, it includes expenses in connection with the shutdown and completed sale of the production site in Hungary. Furthermore, this item contains impairment losses for property, plant and equipment at sites in Europe in connection with the drive to enhance the efficiency of oleochemicals in the Nutrition & Care segment. In 2018, the income and expenses relating to restructuring measures mainly resulted from programs to reduce selling and administrative expenses, enhance the efficiency of oleochemicals, and optimize the product portfolio in the Performance Materials segment, and from the closure of the production site in Hungary. Further, the line item for restructuring measures includes income and expenses that by nature would otherwise be allocated to other line items in other operating income and expense.

Overall, other operating expense contains **impairment losses pursuant to IAS 36** amounting to €58 million (2018: €38 million). Note 6.5 p. 124 ff. contains details of segmentation and additional information on the impairment losses determined pursuant to IAS 36, together with the impairment losses pursuant to IAS 36 recognized in function costs.

Disposal of assets T62

in € million	Income 2018	Income 2019	Losses 2018	Losses 2019
Property, plant and equipment	8	10	−8	−4
Investments	–	11	−8	−7
Trade accounts receivable	–	–	−2	−3
Other assets	–	–	–	−3
	8	**21**	**−18**	**−17**

Prior-year figures restated.

The income and losses from the disposal of investments result from the divestment of the subsidiaries Evonik Thai Aerosil Co., Ltd., and Evonik Agroferm Zrt. In the previous year, the losses on the disposal of investments contained effects in connection with the dissolution of the StoHaas joint venture and the optimization of the product portfolio in the Performance Materials segment.

In 2019, **impairments/reversal of impairments** for expected credit losses **pursuant to IFRS 9** Financial Instruments did not result in net income. In 2019, they comprised a net amount of €2 million from trade accounts receivable.

The net income and expense from the **currency translation of operating monetary assets** and from **operational currency hedging** mainly comprises balance sheet items recognized in foreign currencies that arose in the course of the operating business, where the currency risk is hedged using the portfolio approach; see note 9.4.5 p. 158 ff.

The **other income** of €167 million (2018: €139 million) contains income of €71 million (2018: €59 million) from occasional, unplanned business activities not intended to be permanent operations (non-core operations). Furthermore, this item contains income of €7 million (2018: €15 million) from subsidies in connection with measures relating to the change in German energy policy. In addition, the other income contains insurance refunds, insurance premiums, and commission.

The **other expense** of €221 million (2018: €210 million) contains an expense of €41 million (2018: €27 million) in connection with the acquisition of PeroxyChem, Philadelphia (Pennsylvania, USA), other acquisitions made in previous years, and the divestment of the methacrylates business. Further, this item includes expenses for insurance deductibles, outsourcing, non-core businesses, commission payments, other taxes, and legal and consultancy fees.

Evonik refers to the special items that are factored out when calculating the operational performance indicators adjusted EBITDA and adjusted EBIT as **adjustments.** These adjustments are included in other operating income and expense in the income statement and relate to the following functional areas:

Adjustments T63

	Other operating income		Other operating expense	
in € million	2018	2019	2018	2019
Production-related	7	23	–43	–76
Sales-related	–	18	–42	–22
Administration-related	6	43	–145	–74
Not allocated to any functional area	11	54	–106	–68
	24	**138**	**–336**	**–240**

Prior-year figures restated.

5.4 Result from investments recognized at equity

Result from investments recognized at equity T64

in € million	2018	2019
Income from measurement at equity	11	19
Expenses for measurement at equity	–1	–14
	10	**5**
thereof adjustments	*–*	*–13*

Prior-year figures restated.

The expenses for 2019 contain an impairment loss of €13 million, which is included in the adjustments. Note 6.5 p. 124 ff. contains details of segmentation and additional information on impairment losses determined in accordance with IAS 36.

5.5 Financial result

Financial result T65

in € million	2018	2019
Income from securities and loans	5	12
Interest and similar income from derivatives	13	7
Other interest-type income	31	85
Interest income	**49**	**104**
Interest expense on financial liabilities	–50	–47
Interest and similar expenses for derivatives	–53	–36
Interest expense for other provisions[a]	–17	–34
Net interest expense for pensions	–60	–66
Interest expense for leases	–	–16
Other interest-type expense	–20	–22
Interest expense	**–200**	**–221**
Result from currency translation of financing-related assets and liabilities	–17	–12
Income from financing-related currency hedging	15	3
Miscellaneous financial income and expenses	–2	–6
Other financial income/expense	**–4**	**–15**
	–155	**–132**

Prior-year figures restated.
[a] This item contains expense from the unwinding of discounting and from changes in interest rates.

The interest income from loans and the interest expense on financial liabilities are recognized on a pro rata temporis basis using the effective interest method. As in 2018, negative interest on short-term deposits resulted in negative interest income of €1 million, which is included in interest expense on financial liabilities.

The **other interest-type income** contains an amount in the mid-double-digit millions from the reversal of provisions for legal disputes that have ended and €16 million (2018: €21 million) relating to taxes in connection with income from plan assets.

Interest and similar expenses for derivatives and the corresponding income item mainly comprise accrued and realized interest from cross-currency interest rate swaps used for currency hedging of non-current intragroup loans.

The **other interest-type expense** contains €1 million (2018: €1 million) for a significant financing component in connection with non-current prepayments by customers.

The **result from currency translation of financing-related assets and liabilities** included in **other financial income** mainly results from the exchange rate risk of current intragroup financing transactions (cash pooling) denominated in foreign currencies and from cash and cash equivalents in foreign currencies as these balance-sheet items are not included in hedge accounting. The effects of the associated currency hedging are recognized in **income from financing-related currency hedging,** which also includes any ineffectiveness; see note 9.4.5 p. 158 ff.

The **miscellaneous financial income and expenses** do not include any net profit (2018: €1 million) in respect of impaired financial assets.

5.6 Income taxes

Income taxes shown in the income statement T66

in € million	2018	2019
Other income taxes	**182**	**356**
thereof relating to other periods	*–18*	*72*
Deferred taxes	**4**	**–176**
thereof relating to other periods	*–19*	*–72*
thereof relating to temporary differences	*13*	*–129*
	186	**180**

Prior-year figures restated.

The tax reconciliation shows the development of expected income taxes relative to the effective income taxes stated in the income statement. The expected income taxes are based on an overall tax rate of 32 percent. The overall tax rate comprises German corporation tax of 15 percent, a solidarity surcharge of 5.5 percent, and an average trade tax rate of around 16 percent. The effective income taxes include other income taxes and deferred taxes.

Tax reconciliation T67

in € million	2018	2019
Income before income taxes, continuing operations	**894**	**954**
Expected income taxes	286	305
Variances due to differences in the assessment base for trade tax	5	5
Deviation from the expected tax rate	–48	–67
Changes in the valuation of deferred taxes	–29	–12
Losses not affecting deferred taxes and the use of loss carryforwards	–5	–60
Changes in tax rates and tax legislation	–	–11
Non-deductible expenses	20	47
Interest ceiling	–	–
Tax-free income	–20	–14
Result from investments recognized at equity	–	–2
Other	–23	–11
Effective income taxes (current income taxes and deferred taxes)	**186**	**180**
Effective income tax rate in %	20.8	18.9

Prior-year figures restated.

The changes in the valuation of deferred taxes mainly comprise revaluation of previously non-recognized deferred taxes. This was countered by valuation allowances of €2 million, which relate entirely to loss carryforwards. In the previous year, this line item related to reversals of impairment losses only, mainly temporary differences. "Other" contains other income taxes and deferred taxes relating to different periods.

5.7 Income after taxes

Income after taxes T68

in € million	2018	2019
Income after taxes, continuing operations	**708**	**774**
thereof attributable to		
Non-controlling interests	686	753
Shareholders of Evonik Industries AG	22	21
Income after taxes, discontinued operations	**246**	**1,353**
thereof attributable to		
Non-controlling interests	–	–
Shareholders of Evonik Industries AG	246	1,353

Prior-year figures restated.

5.8 Earnings per share

Earnings per share as shown in the income statement are calculated by dividing net income by the weighted average number of shares issued, i.e., 466,000,000 shares. Net income comprises the total earnings for the year less non-controlling interests, including the earnings of discontinued operations. Earnings per share could be diluted by potential ordinary shares. Since there were no potential ordinary shares in either 2019 or 2018, diluted earnings per share are identical to basic earnings per share.

Earnings per share T69

in € million	2018	2019
Income after taxes, continuing operations	708	774
Income after taxes, discontinued operations	246	1,353
Less income after taxes attributable to non-controlling interests	–22	–21
Income after taxes attributable to shareholders of Evonik Industries AG (net income)	**932**	**2,106**
Earnings per share in € (basic and diluted)		
from continuing operations	1.52	1.66
from discontinued operations	0.53	2.90
less earnings per share attributable to non-controlling interests	–0.05	–0.04
Earnings per share in € (basic and diluted) attributable to shareholders of Evonik Industries AG	**2.00**	**4.52**

Prior-year figures restated.

6. Notes to the balance sheet

6.1 Intangible assets

Intangible assets are capitalized at acquisition or production cost and amortized using the straight-line method if their useful life is finite. An impairment test is conducted on assets with a finite useful life if there are indications of a possible impairment and on assets with an indefinite useful life, especially goodwill, at least once a year.

The estimated useful life of **franchises, trademarks, and licenses** is between 5 and 25 years. Trademarks with no restriction on their use (an indefinite useful life) are tested annually for impairment and to check that their useful life is still indefinite. If the assessment changes and the useful life is reclassified as finite, the carrying amounts of such trademarks are amortized over their estimated remaining useful life using the straight-line method.

Development costs are capitalized if they can be clearly assigned to a newly developed product or process that is technically feasible and designated for captive use or commercialization. They are amortized over their estimated useful life of between 3 and 15 years using the straight-line method.

The **other intangible assets** mainly comprise acquired customer relationships. Their useful life is estimated on the basis of contractual data and experience and is generally between five and 20 years. Amortization also takes account of the probability of continuance of the customer relationship in the form of a churn rate.

Change in intangible assets

T70

in € million	Goodwill	Franchises, trademarks, and licenses	Capitalized development costs	Other intangible assets	Total
Cost of acquisition/production					
As of January 1, 2018	**4,739**	**2,085**	**164**	**1,266**	**8,254**
Currency translation	94	3	–	24	121
Additions from business combinations	18	2	–	1	21
Other additions	–	15	–	12	27
Reclassification in accordance with IFRS 5	–6	–	–	–	–6
Disposal	–	–11	–	–	–11
Reclassification	–	32	–	–15	17
As of December 31, 2018	**4,845**	**2,126**	**164**	**1,288**	**8,423**
Currency translation	57	3	–	15	75
Additions from business combinations	5	1	–	26	32
Other additions	–	13	2	12	27
Reclassification in accordance with IFRS 5	–240	–56	–20	–2	–318
Disposal	–1	–23	–	–	–24
Reclassification	–	12	–	–6	6
As of December 31, 2019	**4,666**	**2,076**	**146**	**1,333**	**8,221**
Amortization and impairment losses					
As of January 1, 2018	**97**	**1,380**	**163**	**509**	**2,149**
Currency translation	–	2	–	3	5
Amortization	–	80	–	53	133
Impairment losses	–	13	–	–	13
Disposal	–	–11	–	–	–11
As of December 31, 2018	**97**	**1,464**	**163**	**565**	**2,289**
Currency translation	–	2	–	2	4
Amortization	–	78	1	57	136
Impairment losses	–	1	–	–	1
Reclassification in accordance with IFRS 5	–	–22	–20	–2	–44
Disposal	–	–23	–	–	–23
As of December 31, 2019	**97**	**1,500**	**144**	**622**	**2,363**
Carrying amounts as of December 31, 2018	**4,748**	**662**	**1**	**723**	**6,134**
Carrying amounts as of December 31, 2019	**4,569**	**576**	**2**	**711**	**5,858**

Franchises, trademarks, and licenses include trademarks with an indefinite useful life totaling €172 million (2018: €203 million).

As in the previous year, on the reporting date there were no intangible assets to which title was restricted.

6.2 Property, plant and equipment

Property, plant and equipment are carried at acquisition or production cost and depreciated over their useful life. If there are indications of a possible impairment, an impairment test is conducted.

The **cost of acquisition** includes expenses directly attributable to the acquisition. The cost of production comprises all direct costs, plus the systematically allocable material costs and manufacturing overheads. Costs relating to obligations to dismantle or remove non-current assets at the end of their useful life are also included in the cost of acquisition or production.

Acquisition and production costs may also include transfers from gains and losses on cash flow hedges entered into to hedge foreign currency exposures in connection with the purchase of plants that were recognized in other comprehensive income in the statement of comprehensive income until they were reclassified to property, plant and equipment.

Borrowing costs that can be allocated directly to the acquisition, construction, or production of a qualifying asset (necessary timescale: more than one year) are included in the cost of acquisition or production.

Government grants for the purchase or construction of property, plant and equipment reduce the cost of acquisition or production of such assets. They are reflected in the income statement over the useful life of the assets through lower depreciation.

Property, plant and equipment are **depreciated** using the straight-line method over the expected useful life of the assets. This is between 5 and 50 years for buildings, between 2 and 25 years for plant and machinery, and between 3 and 25 years for other plant, office furniture, and equipment.

Gains and losses on disposal are recognized in profit or loss via other operating income or expense.

Change in property, plant and equipment

T71

in € million	Land, land rights, and buildings	Plant and machinery	Other plant, office furniture, and equipment	Advance payments and construction in progress	**Total**
Cost of acquisition/production					
As of January 1, 2018	**3,560**	**13,457**	**1,077**	**1,048**	**19,142**
Currency translation	38	100	3	19	160
Other additions	51	203	36	733	1,023
Reclassification in accordance with IFRS 5	–5	–97	–1	–8	–111
Disposal	–19	–163	–36	–5	–223
Reclassification	76	416	27	–539	–20
As of December 31, 2018	**3,701**	**13,916**	**1,106**	**1,248**	**19,971**
Currency translation	33	98	4	13	148
Other additions	42	216	41	526	825
Reclassification in accordance with IFRS 5	–334	–1,413	–59	–71	–1,877
Disposal	–47	–199	–54	–6	–306
Reclassification	197	699	32	–922	6
As of December 31, 2019	**3,592**	**13,317**	**1,070**	**788**	**18,767**
Depreciation and impairment losses					
As of January 1, 2018	**1,766**	**9,955**	**873**	**53**	**12,647**
Currency translation	15	72	3	–	90
Depreciation	83	553	68	–	704
Impairment losses	3	20	–	1	24
Reclassification in accordance with IFRS 5	–3	–63	–1	–	–67
Disposal	–17	–156	–32	–3	–208
Reclassification	1	–7	3	–1	–4
As of December 31, 2018	**1,848**	**10,374**	**914**	**50**	**13,186**
Currency translation	11	65	3	–	79
Depreciation	89	526	66	–	681
Impairment losses	4	51	1	–	56
Reclassification in accordance with IFRS 5	–211	–1,113	–49	–6	–1,379
Disposal	–40	–200	–53	–1	–294
Reclassification	2	1	–	–	3
As of December 31, 2019	**1,703**	**9,704**	**882**	**43**	**12,332**
Carrying amounts as of December 31, 2018	**1,853**	**3,542**	**192**	**1,198**	**6,785**
Carrying amounts as of December 31, 2019	**1,889**	**3,613**	**188**	**745**	**6,435**

The carrying amount of property, plant and equipment used as collateral for liabilities of Evonik is €23 million (2018: €22 million).

Property, plant and equipment include assets of €3 million (2018: €3 million) that Evonik as lessor lets to third parties under operating leases. These assets are mainly land.

6.3 Right-of-use assets

Right-of-use assets are normally recognized at the amount of the lease liability and depreciated. If there are indications of a possible impairment, an impairment test is conducted.

Right-of-use assets are depreciated using the straight-line method over the expected lease term of the right-of-use asset. This is generally between 2 and 99 years for land, land rights, and buildings, between 5 and 50 years for plant and machinery, and between 2 and 20 years for other plant, office furniture, and equipment.

The right-of-use assets for plant and machinery mainly relate to power plants and storage tanks. The right-of-use assets for other plant, office furniture, and equipment mainly relate to rail wagons and transport containers, ships, and motor vehicles.

Development of right-of-use assets T72

in € million	Land, land rights, and buildings	Plant and machinery	Other plant, office furniture, and equipment	Total
Cost of acquisition/production				
As of January 1, 2019	**176**	**338**	**148**	**662**
Currency translation	3	1	1	5
Other additions	83	22	30	135
Reclassification in accordance with IFRS 5	–3	–9	–14	–26
Disposal	–8	–2	–9	–19
As of December 31, 2019	**251**	**350**	**156**	**757**
Amortization and impairment losses				
As of January 1, 2019	**–**	**–**	**–**	**–**
Depreciation and amortization	38	39	53	130
Impairment losses	–	–	1	1
Reclassification in accordance with IFRS 5	–	–	–1	–1
Disposal	–3	–2	–8	–13
As of December 31, 2019	**35**	**37**	**45**	**117**
Carrying amounts as of December 31, 2019	**216**	**313**	**111**	**640**

6.4 Investments recognized at equity

Associates and joint ventures are generally recognized using the equity method. They are initially measured at cost of acquisition, including all directly allocable ancillary costs. If there are indications of a possible impairment, an impairment test is conducted.

For initial measurement, the difference between the cost of acquisition and the investor's share in the investee's equity is determined. Any positive difference remaining after allocation of hidden reserves or hidden liabilities is treated as goodwill and recognized in the carrying amount of the investment. Negative differences are included in income by increasing the carrying amount of the investment.

Starting from the cost of acquisition of the investment, in subsequent periods its carrying amount is increased or reduced by the investor's share in the investee's net income. Further adjustments to the carrying amount of the investment are necessary if the equity of the investment alters as a result of items contained in other comprehensive income. Subsequent measurement must take into account depreciation of the hidden reserves identified at the time of initial recognition, which must be deducted from the investor's share in the investee's net income. To avoid dual recognition, any dividends received must be deducted from the carrying amount.

Investments recognized at equity T73

in € million	Dec. 31, 2018	Dec. 31, 2019
Carrying amount of individually non-material associates	8	8
Carrying amount of individually non-material joint ventures	38	37
	46	**45**

The condensed financial data for the investments recognized at equity which are classified individually as non-material for Evonik, based on Evonik's interest, are as follows:

Condensed financial data for individually non-material investments recognized at equity T74

	Associates		Joint ventures	
in € million	2018	2019	2018	2019
Income after taxes, continuing operations	6	8	4	–3
Total comprehensive income	**6**	**8**	**4**	**–3**

Prior-year figures restated.

For information on contingent liabilities to associates and joint ventures, see note 9.5 p. 167 f.

6.5 Impairment test pursuant to IAS 36

If there are indications of possible impairment, an impairment test is conducted on intangible assets, property plant and equipment, right-of-use assets, investments recognized at equity, and certain other assets in accordance with IAS 36 Impairment of Assets.

Goodwill and other intangible assets with an indefinite useful life are tested for impairment at least once a year. The impairment test is generally conducted for a cash-generating unit (CGU) or a group of CGUs. For the impairment test, the recoverable amount of the CGU/group of CGUs is compared with its carrying amount. The recoverable amount is determined as the higher of the fair value less costs to sell and the value in use of the CGU/group of CGUs. An impairment loss is recognized if the recoverable amount is below the carrying amount. The impairment loss is reversed—except in the case of goodwill—if the reason for the original impairment charge no longer applies.

When **testing goodwill for impairment,** the recoverable amount of goodwill is determined from the fair value less costs of disposal of the relevant segment. The fair value less costs of disposal is determined as the present value of future cash flows using a valuation model and thus on the basis of non-observable inputs (level 3 of the fair value hierarchy defined in IFRS 13 Fair Value Measurement). Future cash flows are derived from the current three-year mid-term plan, which is based on a mixture of experience and expectations of future market trends. The main economic data, such as growth in gross domestic product, the development of exchange rates, raw material and energy prices, and the increase in wages and salaries used for planning purposes, are derived from internal and external market expectations and are set centrally by

Evonik. The specific growth rates for individual segments are derived from experience and future expectations; a terminal growth rate is also assumed. The expected future cash flows are discounted using the segment-specific weighted average cost of capital (WACC) after taxes. The weighted average cost of capital is determined for each segment on the basis of a capital asset pricing model and is the weighted average cost of debt and equity. In connection with the initial application of IFRS 16, adjustments were made to the determination of the cost of capital and the derivation of the recoverable amount.

For **impairment testing of other intangible assets, property, plant and equipment, and right-of-use assets,** the recoverable amount is normally determined by calculating the value in use of the CGU/group of CGUs.

The carrying amounts of goodwill are normally recognized directly in the segments. The goodwill relating to former acquisitions of shares in Evonik Operations GmbH (Evonik Operations), Essen (Germany), forms an exception to this rule. In the segment reporting, it is assigned to "Corporate, consolidation." For impairment testing, this goodwill is also allocated among the three chemical segments.

As in the previous year, the **impairment test on goodwill** did not result in any impairment losses. The impairment test on goodwill requires assumptions and estimates that could change, leading to impairment losses in future periods. In none of the segments would a relative increase in the weighted average cost of capital after taxes of 10 percent or a reduction of 10 percent in the net cash flow or terminal growth rate result in an impairment loss.

Parameters used in impairment testing and allocation of goodwill by segment T75

	WACC after taxes (in %)		Terminal growth rate (in %)		Goodwill (in € million)	
	2018	**2019**	2018	**2019**	Dec. 31, 2018	**Dec. 31, 2019**
Nutrition & Care	7.17	7.52	1.50	1.50	2,040	2,070
Resource Efficiency	7.33	6.63	1.50	1.50	2,160	2,155
Performance Materials	7.30	7.07	1.50	1.50	486	286
Services	7.28	7.09	1.50	1.50	62	59

The **impairment tests on other intangible assets and on property, plant and equipment, and right-of-use assets** resulted in impairment losses and reversals of impairment losses for individual CGUs:

Impairment losses by assets and segments T76

	Nutrition & Care		Resource Efficiency		Services		Other operations		**Total Group**	
in € million	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**
Intangible assets	3	–	10	–	–	–	–	1	13	1
Property, plant and equipment	13	13	5	6	1	37	–	–	19	56
Right-of-use assets	–	–	–	–	–	1	–	–	–	1
Investments recognized at equity	–	13	–	–	–	–	–	–	–	13
Other receivables	–	–	–	–	7	–	–	–	7	–
Total Group	**16**	**26**	**15**	**6**	**8**	**38**	**–**	**1**	**39**	**71**

Prior-year figures restated.

The **impairment losses** in the Nutrition & Care segment relate to production facilities in Europe, which were fully impaired, and a container facility at the Singapore site, which was also fully impaired. In addition, one investment recognized at equity was partially impaired. A decision not to continue research and development projects led to impairment losses on property, plant and equipment in the Resource Efficiency segment. In the Services segment, an impairment loss was taken on the full carrying amount of a coal-fired power plant at the site in Marl (Germany). Since research and development projects are not being pursued, impairment losses were recognized for further property, plant and equipment, and right-of-use assets. All impairment losses involved a write-down of the value in use.

The impairment test on trademarks with an indeterminable useful life is conducted at business line level. The carrying amounts of the trademarks are split among the segments as follows:

Carrying amount of trademarks with an indefinite useful life by segment T77

in € million	Dec. 31, 2018	**Dec. 31, 2019**
Nutrition & Care	45	45
Resource Efficiency	130	125
Performance Materials	28	2
	203	**172**

Trademarks are valued using the relief from royalty method. The cash flow from an intangible asset is approximated by analogy with royalties. The method calculates the fictitious royalties that would have to be paid if the intangible asset were owned by a third party. The calculation is based on the revenues for the respective trademark, derived from the current three-year mid-term plan. The royalty rate is determined on the basis of experience. For information on the weighted average cost of capital for discount purposes, please refer to our comments on impairment testing of goodwill at the start of this section.

6.6 Financial assets

Financial assets T78

	Dec. 31, 2018		**Dec. 31, 2019**	
in € million	**Total**	thereof non-current	**Total**	thereof non-current
Trade accounts receivable	**1,686**	**–**	**1,569**	**–**
Cash and cash equivalents	**988**	**–**	**1,165**	**–**
Other investments	149	149	556	556
Loans	63	7	47	7
Securities and similar claims	24	16	1,225	22
Receivables from derivatives	118	58	58	37
Miscellaneous other financial assets	19	3	17	3
Other financial assets	**373**	**233**	**1,903**	**625**
	3,047	**233**	**4,637**	**625**

The divestment of the methacrylates business reduced **trade accounts receivable** by €176 million.

The **other investments** are all designated at fair value through other comprehensive income, without reclassification. The investment in Borussia Dortmund GmbH & Co. KGaA is recognized at its stock market value on the reporting date; the remaining equity investments are not listed on a stock exchange. As a result of a change in the strategy for pension assets, in 2019, Evonik Pensionstreuhand e.V. purchased 7.5 percent of the shares in Vivawest GmbH at a purchase price of €369 million. The other unlisted equity investments totaling €52 million (2018: €41 million) comprise a mid-double-digit number of investments whose individual fair values are immaterial in a range of €0 million to €8 million. €32 million of this amount (2018: €28 million) comprises equity investments resulting from venture capital activities.

Other investments T79

in € million	Dec. 31, 2018	Dec. 31, 2019
Borussia Dortmund GmbH & Co. KGaA	108	120
Vivawest GmbH	–	384
Other	41	52
	149	**556**

Securities and similar claims comprise listed bonds and money market paper purchased for short-term investment of liquid funds, and shares in unlisted investment funds relating to venture capital activities in which Evonik has a long-term strategic investment.

Receivables from derivatives T80

in € million	Dec. 31, 2018	Dec. 31, 2019
Receivables from interest rate swaps	1	2
Receivables from cross-currency interest rate swaps	101	33
Receivables from forward exchange contracts, currency options, and currency swaps	16	23
	118	**58**

The **miscellaneous other financial assets** of €17 million (2018: €19 million) comprise time deposits at banks, receivables from profit-and-loss transfer agreements with investments that are not fully consolidated, and claims relating to the termination of contracts. They also include receivables of €3 million (2018: €6 million) from finance leases.

6.7 Inventories

Inventories are measured at the lower of cost and net realizable value. Normally, the cost of inventories is determined uniformly using an average, the first-in first-out method, or the standard cost method. The cost of production of finished goods and work in progress comprises the cost of raw materials and supplies, directly attributable personnel expenses, other direct costs, and general overheads that can be assigned to production.

Inventories T81

in € million	Dec. 31, 2018	Dec. 31, 2019
Raw materials and supplies	483	427
Work in progress	73	85
Finished goods and merchandise	1,746	1,372
Rights to return inventories	2	–
	2,304	**1,884**

The divestment of the methacrylates business reduced **inventories** by €253 million.

Impairment losses on **raw materials, supplies, and merchandise** totaling €19 million were recognized in 2019 (2018: €50 million), while reversals of impairment losses amounted to €44 million (2018: €20 million). Reversals of impairment losses were mainly due to higher selling prices and improved market conditions.

Rights to return inventories result from exchange-type transactions with competitors, which are outside the scope of IFRS 15.

6.8 Other assets

Other assets T82

in € million	Dec. 31, 2018 Total	Dec. 31, 2018 thereof non-current	Dec. 31, 2019 Total	Dec. 31, 2019 thereof non-current
Advance payments made	25	–	22	–
Deferred expenses	47	10	42	9
Contract assets from contracts with customers	11	6	18	12
Miscellaneous other assets	268	40	387	61
	351	**56**	**469**	**82**

Contract assets from contracts with customers arise from license agreements based on milestones, where a customer is granted a right of use, from agreements to develop products, which are realized over time, and from take-or-pay agreements, where it is probable that the contractually agreed minimum take-off amount will not be achieved. The contract assets are reclassified to receivables as soon as the associated rights become unconditional. Information on risk provisioning is presented in note 9.4.5 p.158 ff.

Development of contract assets from contracts with customers T83

in € million	2018	2019
As of January 1	**5**	**11**
Additions	9	10
Reclassification to receivables	–3	–3
As of December 31	**11**	**18**

Miscellaneous other assets mainly comprise receivables from other taxes, receivables from governments, and receivables from insurance policies.

6.9 Equity

Issued capital and capital reserves contain the paid-up capital of Evonik Industries AG. By contrast, the capital earned by the Evonik Group that is attributable to shareholders of Evonik Industries AG is recognized in retained earnings including distributable profit, and in other equity components. The share of paid-up and earned equity of consolidated subsidiaries of the Evonik Group that is attributable to non-controlling interests is presented in the line item non-controlling interests.

As in the previous year, the company's **fully paid-up capital** was €466,000,000 on the reporting date. It is divided into 466,000,000 no-par registered shares. The arithmetic value of each share is €1. Each no-par share entitles the holder to one vote.

A resolution on **authorized capital** was adopted at the annual shareholders' meeting on May 23, 2018. This authorizes the executive board until May 22, 2023 to increase the company's capital stock, subject to the approval of the supervisory board, by up to €116,500,000 by issuing new registered no-par shares (authorized capital 2018). This authorization may be exercised through one or more issuances.

The new shares may be issued against cash and/or contributions in kind. The executive board is authorized, subject to the approval of the supervisory board, to exclude shareholders' statutory subscription rights when issuing new shares in the following cases:

- capital increases against contributions in kind
- if the capital increase is against cash and the proportionate share of the capital stock attributable to the new shares does not exceed 10 percent of the capital stock, and the issue price of the new shares is not significantly below the stock market price of shares already listed on the stock exchange
- to exclude fractional amounts arising from the subscription ratio
- insofar as is necessary to grant holders and/or creditors of warrants or conversion rights or obligors of warrant and/or conversion obligations subscription rights to new shares to the extent that they would be entitled to them after exercise of their warrants and/or conversion rights or fulfillment of their warrant or conversion obligations
- to grant shares to employees (employee stock), provided that the new shares for which subscription rights are excluded do not in aggregate account for a proportionate share of the capital stock in excess of 1 percent
- for the execution of a scrip dividend

The proportionate amount of the capital stock attributable to the shares for which subscription rights are excluded, together with the proportionate amount of the capital stock attributable to treasury stock or to conversion and/or warrant rights or obligations arising from debt instruments, which are sold or issued after May 23, 2018 under exclusion of subscription rights, may not exceed 20 percent of the capital stock. If the sale or issue takes place in application—analogously or mutatis mutandis—of section 186 paragraph 3 sentence 4 of the German Stock Corporation Act (AktG), this shall also be deemed to constitute an exclusion of subscription rights.

The executive board is authorized, subject to the approval of the supervisory board, to define further details of capital increases out of the authorized capital 2018.

The authorized capital has not yet been utilized.

Under a further resolution adopted by the annual shareholders' meeting of May 23, 2018, the capital stock is conditionally increased by up to €37,280,000, divided into up to 37,280,000 registered shares with no par value (**conditional capital** 2018). This conditional capital increase relates to a resolution of the above shareholders' meeting granting authorization to issue convertible and/or warrant bonds.

The conditional capital increase will only be conducted insofar as holders or creditors of warrant or conversion rights or obligors of warrant or conversion obligations arising from warrant bonds and/or convertible bonds issued or guaranteed on the basis of the authorization resolved at the annual shareholders' meeting of May 23, 2018, exercise their warrants or conversion rights or, insofar as they have an obligation to exercise the warrants or conversion obligations, meet the obligation to exercise the warrant or conversion obligations, and other forms of settlement are not used. In principle, the shareholders have a statutory right to subscription rights to the convertible and/or warrant bonds; the authorization sets out specific cases where the executive board may exclude subscription rights to convertible and/or warrant bonds, subject to the approval of the supervisory board. The new shares shall be issued at the warrant or conversion price set in accordance with the above provisions of the resolution.

The new shares are entitled to a dividend from the start of the fiscal year in which they are issued.

The executive board is authorized, subject to the approval of the supervisory board, to define further details of capital increases out of the conditional capital.

The conditional capital has not yet been utilized.

On March 5, 2019, Evonik Industries AG announced that it would be utilizing the authorization granted by the annual shareholders' meeting on May 18, 2016 to purchase **shares in the company** totaling up to €143,880,000 by April 5, 2019 at the latest. The purpose of purchasing the shares was to grant shares under an employee share program to employees of Evonik Industries AG and certain subordinated affiliated companies in the Evonik Group, and to members of the management of subordinated affiliated companies of Evonik Industries AG.

Through this share buyback program, by March 29, 2019 Evonik Industries AG purchased a total of 681,009 shares in the company (corresponding to 0.1 percent or €681,009 of the capital stock). A total of €16.8 million was spent on the shares, corresponding to an average price of €24.67 per share. The purchases were made from March 7, 2019 at an average daily volume of around 40,000 shares on each Xetra trading day through a bank acting on the instructions of Evonik Industries AG. The maximum purchase price of each share repurchased (excluding ancillary costs) could not exceed or fall short of the opening price as set in the opening auction for the trading day for shares in Evonik Industries AG in Xetra trading on the Frankfurt stock exchange by more than 5 percent. In April, 608,209 ordinary shares (including 162,913 bonus shares) were transferred to participating employees on the basis of the share price of €25.53 on April 4, 2019 and the exchange rates prevailing on the same date. The remaining 72,800 ordinary shares were sold to third parties via the stock exchange by April 29, 2019 at an average price of €26.52 per share. As of December 31, 2019, Evonik Industries AG therefore no longer held any treasury shares.

The **capital reserve** mainly contains other payments received from shareholders pursuant to section 272 paragraph 2 no. 4 of the German Commercial Code (HGB).

Retained earnings including distributable profit amounted to €7,341 million (2018: €6,237 million) and comprises Group earnings from 2019 and previous years, as well as other comprehensive income from the remeasurement of the net benefit liability for defined benefit pension plans.

A proposal will be submitted to the annual shareholders' meeting that €950,000,000 of the distributable profit of Evonik Industries AG be used to pay a dividend of €535,900,000 for 2019 and that the remaining amount of €414,100,000 be allocated to other retained earnings. That corresponds to a dividend of €1.15 per no-par share.

The **other equity components** contain gains and losses that are recognized outside of profit or loss, i.e., that are not included in the income statement. The other equity components from equity instruments contain increases and decreases in the fair value of other investments, which are recognized outside of profit or loss. The other equity components from hedging instruments for designated risk components comprise net gains or losses from the change in the fair value of the effective portion of cash flow hedges and hedges of a net investment. The other equity components from hedging instruments for the cost of hedging reflect changes in the time value of options, and the interest spread and foreign currency basis spreads on forward currency transactions and currency swaps. The cost of hedging relates to hedged items recognized both at a point in time and over time. The other equity components for the revaluation of acquisitions in stages contain the change in the fair value of shares previously held in subsidiaries that were consolidated for the first time on or before December 31, 2009. The other equity components from currency translation comprise differences arising from the translation of foreign financial statements.

Change in other equity components attributable to shareholders of Evonik Industries AG T84

in € million	Available-for-sale securities (IAS 39)	Financial instruments in hedging relationships (IAS 39)	Equity instruments recognized at fair value in OCI	Hedging instruments: designated risk components	Hedging instruments: cost of hedging	Revaluation of acquisitions made in stages	Currency translation	**Total**
As of December 31, 2017	38	72	–	–	–	7	–331	–214
Changes pursuant to IAS 8	–38	–72	22	72	–	–	–	–16
As of January 1, 2018	**–**	**–**	**22**	**72**	**–**	**7**	**–331**	**–230**
Other comprehensive income as in the statement of comprehensive income	**–**	**–**	**29**	**–86**	**–13**	**–**	**162**	**92**
Recognized gains and losses	–	–	29	–55	–30	–	–	–56
Amounts reclassified to the income statement	–	–	–	–71	13	–	–	–58
Currency translation	–	–	–	–	–	–	160	160
From investments recognized at equity (after income taxes)	–	–	–	–	–	–	2	2
Deferred taxes	–	–	–	40	4	–	–	44
Other changes	**–**	**–**	**–**	**–**	**–**	**–3**	**–**	**–3**
As of December 31, 2018	**–**	**–**	**51**	**–14**	**–13**	**4**	**–169**	**–141**
Other comprehensive income as in the statement of comprehensive income	**–**	**–**	**25**	**5**	**5**	**–**	**104**	**139**
Recognized gains and losses	–	–	25	–27	–33	–	–	–35
Amounts reclassified to the income statement	–	–	–	40	35	–	–	75
Currency translation	–	–	–	–	–	–	104	104
Deferred taxes	–	–	–	–8	3	–	–	–5
Other changes	**–**	**–**	**–**	**–**	**–**	**–2**	**–**	**–2**
As of December 31, 2019	**–**	**–**	**76**	**–9**	**–8**	**2**	**–65**	**–4**

In 2019, –€75 million was reclassified from other equity components for designated risk components and for the cost of hedging (2018: €58 million) to the income statement:

Reclassification of hedging results from other equity components to the income statement T85

in € million	2018	2019
Sales	62	–80
Cost of sales	1	2
Other operating income/expense	2	2
Net interest expense	–2	–
Other financial income/expense	–5	1
	58	**–75**

For further information on changes in the other equity components from hedging instruments for designated risk components and for the cost of hedging and their allocation among the various risk types, see note 9.4.5 p. 158 ff.

Non-controlling interests amounting to €90 million (2018: €96 million) comprise shares in the issued capital and reserves of consolidated subsidiaries that are not attributable to the shareholders of Evonik Industries AG. Other changes in 2019 totaling €15 million contain €8 million from the sale of companies with non-controlling interests.

Changes in shareholdings in subsidiaries without loss of control were negligible in the reporting period, as in the previous year.

The other equity components for non-controlling interests are –€1 million (2018: –€1 million) and relate entirely to other comprehensive income from currency translation.

6.10 Provisions for pensions and other post-employment benefits

Provisions for pensions and other post-employment benefits are measured using the projected unit credit method for defined benefit obligations in accordance with IAS 19 Employee Benefits. This method takes account of future salary and pension increases, biometric assumptions, as well as pension obligations and accrued entitlements as of the reporting date. Pension obligations are determined using country-specific parameters and measurement principles.

Actuarial gains and losses relating to pension obligations and income from plan assets (apart from interest income) are derived from the difference between the expected pension obligations and the actual obligation calculated at year end, and from deviations between the expected and actual fair value of plan assets calculated at year end.

Changes that arise as a result of actuarial gains/losses relating to pension obligations, income from plan assets (excluding interest income), changes in the asset ceiling (excluding interest cost), and income from claims to refunds (excluding interest income) are offset directly in other comprehensive income.

The defined benefit obligations at year end are compared with the fair value of the plan assets (funded status) and pension provisions are derived from this, taking into account the asset ceiling and the net defined benefit assets from overfunded plans recognized on the assets side.

Defined contribution plans result in an expense in the period in which the contribution is made. Defined contribution plans exist for both company pension plans and state pension plans (statutory pension insurance).

Provisions for pensions are established to cover benefit plans for retirement, disability, and surviving dependents' pensions. The benefit obligations vary depending on the legal, tax, and economic circumstances in the various countries in which the companies operate. The level of the benefit obligations generally depends on the length of service and remuneration.

At the German companies, occupational pension plans are predominantly defined benefit plans. They are primarily funded by provisions, pension fund assets, and a contractual trust arrangement (CTA).

The pension plans at foreign companies may be either defined contribution or defined benefit plans.

The present value of the defined benefit obligations and the fair value of the plan assets as of December 31, 2019 mainly relate to the following countries:

Breakdown of the present value of the defined benefit obligations and the fair value of plan assets T86

	2018		2019	
in € million	Defined benefit obligation	Plan assets	Defined benefit obligation	Plan assets
Evonik Group	**11,669**	**8,037**	**12,225**	**8,364**
thereof Germany	10,417	6,938	10,847	7,134
thereof pension fund/reinsured support fund	*4,843*	*3,474*	*5,424*	*3,660*
thereof funded through CTA	*5,239*	*3,464*	*5,096*	*3,474*
thereof USA	606	395	658	455
thereof UK	479	576	529	630

The main pension plans for employees in **Germany** are as follows:

Pension fund (Pensionskasse): There are a number of closed pension plans. Income-related contributions are converted into defined benefits and invested with the company-owned Degussa Pension Fund. The structure of the tariffs, including investment of the assets, is subject to oversight by the supervisory authority for the insurance sector. The pension fund is a multi-employer fund. It is funded on a projected benefit basis. The level of plan assets required to cover the projected benefits is derived from a technical business plan approved by the supervisory authority, and from statutory requirements. Funding must be sufficient at all times to cover benefits, which have to be upheld even if the employer's contributions are terminated. The company contribution to Tariff DuPK is calculated to ensure that, together with the employee contributions, funding of the resulting entitlements in line with the technical business plan is assured. The company contribution to the Marl and Troisdorf tariffs is proposed by the responsible actuary and is based on the funds required to cover the benefits. As the sponsoring company of this pension fund, Evonik Operations GmbH has a contractual obligation to cover benefits under the Marl and Troisdorf tariffs if sufficient funding is not available. This obligation is not limited to the company where the insurees are employed. The obligation was assumed on the basis of a requirement stipulated by the supervisory authority when these tariffs were established. At that time, only company employees were insured in the plan. At present, it is not possible to estimate whether this obligation could be of relevance as a supplement to the tools set out in the pension fund regulation, such as increasing company contributions or cutting benefits in the event of a loss.

Support fund (Unterstützungskasse): The support fund comprises two plans, one of which is open to new employees. It also allows for deferred compensation arrangements. Income-related contributions are converted into defined benefits and reinsured with the company-owned Degussa Pension Fund. The structure of the tariffs, including investment of the assets, is subject to oversight by the supervisory authority for the insurance sector. Pension increases of 1 percent p.a. are a firm commitment. The support fund meets the criteria for classification as a multi-employer plan. It is funded through reinsurance with the Degussa Pension Fund, which covers pension adjustments for the open plan. The Degussa Pension Fund maintains sufficient funding for this in compliance with the German Insurance Supervision Act and the ordinances issued by the supervisory authority. Funding must be sufficient at all times to cover benefits, which have to be upheld even if the employer's contributions are terminated. The level of benefits is based on the contributions paid into the fund. The support fund does not have any arrangements under which the Group is liable for the obligations of companies outside the Evonik Group in the event of inadequate funding.

Direct pension commitments: These comprise various defined benefit plans where the pension benefit is generally directly or indirectly linked to the final salary. Most of these plans grant higher benefits for income components above the ceiling for contributions to the state pension insurance plan or are intended exclusively to cover such income components. All final salary plans are closed and, in most cases, now only operate through the protection of the accrued benefits for insurees who are currently still working.

Direct commitments of this type are now only used for senior executives and voluntary deferred compensation arrangements. In such cases, a defined benefit is calculated on the basis of an income-related contribution or an amount credited by the employee. Insurees can choose between various forms of payment, for example, as a lump sum, an annuity, or installment payments. The benefits include a fixed pension increase of 1 percent p.a.

Plan assets for large companies in the Evonik Group, which account for the vast majority of obligations under direct commitments, are managed by Evonik Pensionstreuhand e.V. This fund is not subject to regulatory oversight or minimum funding requirements. It uses an asset-liability matching strategy, whereby changes in obligations are offset through changes in the plan assets. In this strategy, the interest rate and credit sensitivities of the liabilities are partially replicated in the plan assets.

Description of the potential risks arising from pension plans:

Most German pension plans grant lifelong pension benefits. A specific risk here is that rising life expectancy could increase the benefit obligation. In most cases, increases in the benefits paid by these funds are linked to the consumer price index. This entails an additional inflation risk. In the case of plans where employees can choose between a lump-sum payment or an annuity, there is a risk that the option could be selected on the basis of individual assessments of health and life expectancy.

For final salary plans, the benefit risk relates to future salary trends for employees covered by collective agreements and exempt employees and, in some cases, changes in the ceiling for contributions to statutory pension insurance.

Where assets are invested externally by the pension fund, support fund, and Evonik Pensionstreuhand e.V., plans are exposed to a capital market risk. Depending on the composition of the investment portfolio, this comprises a risk of changes in value and income risks, which could mean that the assumed performance or return is not generated over the term of the investment. Under German legislation on occupational pensions, the employer is liable to cover firm benefit commitments and guaranteed returns.

The main pension plans for employees in the **USA:**

In the USA there are unfunded, fully funded, and partially funded pension plans and post-employment benefits under healthcare plans. The majority of the obligations relate to funded plans. The defined benefit pension plans in the USA are not open to new employees. Benefits are based on a range of parameters such as final salary, average salary during career, individual pension accounts, and fixed benefits. Most plans include a lump-sum option with a corresponding risk to the company that this will be utilized. An asset-liability matching strategy supports compliance with minimum funding levels to avoid volatility. This is implemented primarily through US government bonds and corporate bonds denominated in US dollars. The assets are managed by a pension trust.

The main pension plans for employees in the **UK:**

The majority of the obligations in the UK relate to vested benefits for former employees and retirees. The plans are organized through external trusts and the majority of the assets are invested in funds. Only one plan is still open to new employees. Almost all plans are final salary plans. The plan assets are subject to the asset ceiling. They are required to meet minimum funding requirements that are agreed with the trustees. Similarly, surplus assets cannot be returned to the companies without the approval of the trustees. The investment strategy for plan assets is an asset-liability matching strategy, which is implemented principally through inflation-linked British government bonds and British corporate bonds.

The table shows the weighted average assumptions used for the actuarial valuation of the obligations:

Assumptions used in the actuarial valuation of pension obligations T87

	Evonik Group		Germany	
in %	2018	2019	2018	2019
Discount rate as of December 31	2.15	1.44	2.00	1.30
Future salary increases	2.55	2.55	2.50	2.50
Future pension increases	1.58	1.57	1.50	1.50
Healthcare cost trend	6.27	6.47	–	–

The discount rate for Germany and the euro zone countries is extrapolated from a yield structure curve derived from AA-rated corporate bonds denominated in euros and, where there are no longer any market data, a yield curve for zero-coupon German government bonds, taking into account a risk premium for euro-denominated AA-rated corporate bonds. The data on AA-rated euro-denominated corporate bonds are based on bonds with an AA rating from at least one of the major rating agencies. The yield structure curve derived from AA-rated euro-denominated corporate bonds is used to determine the present value of the cash flows from company pension obligations. The discount rate comprises the rounded constant interest rate that results in the same present value when applied to the cash flow.

As of December 31, 2019, rounding was altered from 25 basis points to 10 basis points, in line with common practice at other companies. If this change had not been made, the discount rate as of December 31, 2019 would have been 1.25 percent. The new rate is 1.30 percent. If a discount rate of 1.25 percent had been applied, the present value of pension obligations would have been €98 million higher. In 2020, the original rounding would have led to a reduction of €4 million in the net interest cost.

Analogous methods are used in the UK and the USA. As of December 31, 2019, the rounded discount rate was 3.29 percent for the USA (2018: 4.26 percent) and 1.94 percent for the UK (2018: 2.75 percent).

In Germany, valuation is based on the biometric data in the 2018 G mortality tables published by Klaus Heubeck. For the companies in the UK, the S2PXA tables are used, and for the USA the MP-2019 mortality projection scales are used.

Change in the present value of the defined benefit obligation T88

in € million	2018	2019
Present value of the defined benefit obligation as of January 1	**11,563**	**11,669**
Current service cost	185	186
Interest cost	240	232
Employee contributions	43	42
Actuarial gains (–) and losses (+) (remeasurement component)	61	1,355
of which based on financial assumptions	–66	1,378
of which based on demographic assumptions	92	1
of which changes in the past fiscal year	35	–24
Benefits paid	–456	–435
Past service cost	2	–3
Changes at the companies	6	–3
Reclassification in accordance with IFRS 5	–	–849
Gain/loss from settlement	–	–10
Currency translation	25	41
Present value of the defined benefit obligation as of December 31	**11,669**	**12,225**

The weighted term of the obligations is 17.6 years (2018: 16.9 years).

Breakdown of the present value of the defined benefit obligation T89

in € million	2018	2019
Unfunded plans	364	361
Partially or fully funded plans	11,205	11,761
Healthcare benefit obligations	100	103
Present value of the defined benefit obligation as of December 31	**11,669**	**12,225**

The valuation of pension provisions is subject, among other things, to assumptions about discount rates, expected future salary and pension increases, the cost trend for healthcare, and mortality tables. The actual data may differ from these assumptions as a result of changes in economic or market conditions.

Sensitivity analysis: effects of changes in parameters on the defined benefit obligation T90

	Reduction of 1 percentage point		Increase of 1 percentage point	
in € million	Dec. 31, 2018	**Dec. 31, 2019**	Dec. 31, 2018	**Dec. 31, 2019**
Group-wide discount rate	2,218	2,449	–1,696	–1,852
Future salary increases	–146	–123	157	129
Future pension increases	–906	–904	1,087	1,084
Healthcare cost trend	–9	–9	11	11

Assuming all other parameters remain unchanged, a reduction of 20 percent in mortality in the retirement phase would increase the defined benefit obligation by €956 million (2018: €861 million).

Change in the fair value of plan assets T91

in € million	2018	2019
Fair value of plan assets as of January 1	**8,087**	**8,037**
Interest income from plan assets	173	167
Employer contributions	213	206
Employee contributions	11	10
Income from assets excluding interest income from plan assets (remeasurement component)	–250	606
Other administrative expense	–5	–6
Benefits paid	–206	–383
Reclassification in accordance with IFRS 5	–	–313
Currency translation	14	40
Fair value of plan assets as of December 31	**8,037**	**8,364**

In 2019, for the first time, benefits paid contained reimbursement by the CTA of pension payments by companies.

Breakdown of the fair value of plan assets T92

	Dec. 31, 2018		Dec. 31, 2019	
	in € million	in %	in € million	in %
Cash/balances with banks	209	2.6	268	3.2
Shares—active market	755	9.4	1,171	14.0
Government bonds—active market	1,045	13.0	786	9.4
Government bonds—no active market	24	0.3	17	0.2
Corporate bonds—active market	2,363	29.4	2,777	33.2
Corporate bonds—no active market	603	7.5	586	7.0
Other bonds—active market	338	4.2	510	6.1
Real estate (direct and indirect investments)—active market	16	0.2	17	0.2
Real estate (direct and indirect investments)—no active market	1,712	21.3	1,012	12.1
Alternative investments (infrastructure/hedge funds/commodities)—active market	587	7.3	736	8.8
Alternative investments (infrastructure/hedge funds/commodities)—no active market	273	3.4	351	4.2
Other—active market	32	0.4	33	0.4
Other—no active market	80	1.0	100	1.2
	8,037	**100.0**	**8,364**	**100.0**

In 2019, as in 2018, none of the other assets included in the plan assets were used by the company.

Change in the asset ceiling T93

in € million	2018	2019
Asset ceiling as of January 1	**109**	**100**
Interest expense on the unrecognized portion of plan assets	3	3
Changes in asset ceiling, excluding interest expense (remeasurement component)	–11	–1
Currency translation	–1	4
Asset ceiling as of December 31	**100**	**106**

Change in the net defined benefit liability T94

in € million	Dec. 31, 2018	Dec. 31, 2019
Net defined benefit liability as of January 1	**3,585**	**3,732**
Current service cost	185	186
Past service cost	2	–3
Gain/loss from settlement	–	–10
Net interest cost	70	68
Employee contributions	32	32
Other administrative expense	5	6
Changes recognized in OCI (remeasurement)	300	748
Benefits paid	–250	–52
Employer contributions	–213	–206
Changes at the companies	6	–3
Reclassification in accordance with IFRS 5	–	–536
Currency translation	10	5
Net defined benefit liability as of December 31	**3,732**	**3,967**

The pension provisions recognized on the balance sheet included healthcare benefit entitlements, mainly of retirees of US subsidiaries.

The methacrylates business was reclassified to discontinued operations on March 4, 2019. As of the divestment date, July 31, 2019, the pension provisions allocated to the discontinued operations amounted to €612 million (€941 million present value of pension obligations and €329 million fair value of plan assets).

Expected change in net benefit payments T95

in € million	Prior year	Reporting period
2019	247	–
2020	258	236
2021	263	243
2022	268	249
2023	274	253
2024	–	260

The presentation of future net benefit payments does not include any pension reimbursements by Evonik Pensionstreuhand e.V. in the reporting period because it is up to the companies to decide whether to claim such reimbursements for the respective fiscal year.

Employer contributions of €168 million are expected to be incurred for the following year (2018: €216 million).

The net interest cost is included in the financial result; see note 5.5 p.117. The other pension amounts are allocated to the functional areas as personnel expense (pension expenses). A breakdown of overall personnel expense is given in note 10.2 p.170.

For details of the deferred tax assets relating to pension provisions, see note 6.14, deferred taxes, other income taxes p.140f.

Foreign subsidiaries paid a total of €32 million (2018: €34 million) into defined contribution plans, which are also included in personnel expense (pension expenses).

Further, €135 million (2018: €151 million) were paid into defined contribution state plans (statutory pension insurance) in Germany and abroad. This is also reported in personnel expense (expenses for social security contributions).

6.11 Other provisions

Other provisions are liabilities of uncertain timing or amount. They are established to cover a present legal or constructive obligation to third parties based on past events that will probably lead to a cash outflow. In addition, it must be possible to reliably estimate the level of the obligation.

Provisions are based on the probable settlement obligations and take account of future cost increases. Non-current provisions are discounted.

Reversals of provisions are recognized as income in the functional areas where the original expense for the provision was recognized.

The determination of other provisions, especially provisions for legal risks, recultivation, environmental protection, and restructuring, is naturally exposed to significant estimation uncertainties regarding the level and timing of the obligation. In some cases, the company has to make assumptions about the probability of occurrence or future trends, such as the costs to be recognized for the obligation, on the basis of experience. In particular, the level of non-current provisions depends to a large extent on the selection and development of the market-oriented discount rates. The Evonik Group uses different interest rates for different currencies and terms to maturity.

Other provisions T96

in € million	Dec. 31, 2018 Total	Dec. 31, 2018 thereof non-current	Dec. 31, 2019 Total	Dec. 31, 2019 thereof non-current
Personnel-related	932	304	687	248
Recultivation and environmental protection	299	246	308	261
Restructuring	241	160	193	121
Sales and procurement	44	8	22	6
Other taxes and interest on taxes	49	37	64	47
Other obligations	337	100	283	96
	1,902	**855**	**1,557**	**779**

Overall, the other provisions were €345 million lower than in 2018. This was mainly due to the development of personnel-related provisions, partly due to reclassification to discontinued operations, and to the change in provisions for restructuring and for other obligations. It is expected that half of total provisions will be utilized in 2020.

Provisions relating to relevant legal risks are allocated to the various categories of provisions on the basis of their type. In 2019 and 2018, all of these provisions were recognized in other obligations. They contain appropriate expenses for court and lawyers' fees, payments to plaintiffs, and any payments for settlement or indemnity. The level of such provisions is based, among other factors, on the type of dispute or claim, the status of the legal proceedings, the opinion of lawyers, experience of comparable cases, and probability assumptions. A relevant legal risk for which a provision has been established comprises a lawsuit filed by the purchaser of the former carbon black business for an alleged claim to indemnification from environmental guarantees. Further, a provision has been recognized for the expected costs of a legal dispute involving proceedings to fine Evonik in connection with deliveries of methionine to Brazil. The background is outlined in detail in section 6.4 p.60ff of the combined management report. Evonik refrains from stating the amount of such provisions established in the reporting period as this could impair its position in the ongoing legal disputes.

Change in other provisions T97

in € million	Personnel-related	Recultivation, environmental protection	Restructuring	Sales, procurement	Other taxes, interest on taxes	Other obligations	Total
As of January 1, 2019	**932**	**299**	**241**	**44**	**49**	**337**	**1,902**
Additions	359	40	60	6	45	116	626
Utilization	–515	–27	–31	–3	–4	–70	–650
Reversal	–23	–20	–75	–22	–26	–96	–262
Unwinding of discounting/interest rate changes	16	16	–	–	–	–	32
Reclassification in accordance with IFRS 5	–88	–1	–2	–3	–	–6	–100
Other	6	1	–	–	–	2	9
As of December 31, 2019	**687**	**308**	**193**	**22**	**64**	**283**	**1,557**

Personnel-related provisions are established for many different reasons and include bonus payments and variable remuneration, including long-term incentive plans. These are performance-related remuneration plans for Evonik's executives and members of the executive board. The resulting obligations are settled in cash and expensed in accordance with IFRS 2 Share-based Payment. Further personnel-related provisions are established for statutory and in-house early retirement arrangements, lifetime working arrangements, and anniversary bonuses. About half of non-current personnel-related provisions will result in payments after the end of 2024.

Provisions for recultivation and environmental protection are established on the basis of laws, contracts, and regulatory requirements. They cover soil reclamation obligations, water protection, the recultivation of landfills, and site decontamination obligations. Slightly more than three-quarters of the non-current provisions will result in payments after the end of 2024.

Restructuring provisions are only established if constructive obligations exist on the basis of a formal, detailed plan, and those affected have been given justifiable expectations that the restructuring will be carried out. Such measures comprise programs which are planned and controlled by the company and will materially alter one of the company's areas of business activity or the way in which a business activity is carried out. Restructuring provisions may only be established for costs that are directly attributable to the restructuring program. These include severance packages, redundancy and early retirement arrangements, expenses for the termination of contracts, dismantling and soil reclamation expenses, rents for unused facilities, and all other shutdown and wind-up expenses. As of the reporting date, this item included provisions for programs to optimize the sales and administrative functions. The change in these provisions was the principal reason for the reduction in provisions for restructuring in the reporting period. Most of the non-current portion of all restructuring provisions will be utilized by the end of 2024.

The **provisions for sales and procurement** mainly relate to guarantee obligations and contracts where the unavoidable costs of performing the contractual obligation exceed the expected economic benefits. The non-current portion will be utilized by the end of 2024.

Provisions for other taxes and interest on taxes mainly comprise property tax, value-added tax, and interest obligations relating to all types of taxes. The non-current portion will be utilized by the end of 2024.

Provisions for other obligations comprise provisions for a variety of obligations that cannot be allocated to the above categories. These include provisions for legal disputes, administrative proceedings or fines, liability risks, guarantee claims relating to divestments, and dismantling obligations. Further, this item includes provisions for legal and consultancy expenses, audit fees, and changes in public law regulations, for example, in connection with the levy on renewable energy sources[1] and European emissions trading. The non-current portion of provisions for other obligations will be utilized by year-end 2024.

[1] German Renewable Energies Act (EEG).

6.12 Financial liabilities

Financial liabilities T98

in € million	Dec. 31, 2018 Total	Dec. 31, 2018 thereof non-current	Dec. 31, 2019 Total	Dec. 31, 2019 thereof non-current
Trade accounts payable	**1,493**	**–**	**1,324**	**–**
Bonds	3,632	3,632	3,637	3,137
Liabilities to banks	214	52	150	25
Loans from non-banks	18	–	18	–
Lease liabilities	–	–	650	539
Liabilities from derivatives	107	5	68	1
Refund liability	61	–	45	–
Miscellaneous other financial liabilities	52	–	63	11
Other financial liabilities	**4,084**	**3,689**	**4,631**	**3,713**
	5,577	**3,689**	**5,955**	**3,713**

The divestment of the methacrylates business reduced **trade accounts payable** by €112 million.

The following reconciliation shows the **change in financial debt.** Additions and repayments are disclosed in the cash flow statement in cash flow from financing activities. The definition of financial debt is explained in section 2.9 p. 32 ff. of the combined management report.

Financial debt T99

in € million	Bonds	Liabilities to banks	Loans from non-banks	Lease liabilities [a]	Miscellaneous other financial liabilities [b]	Total
As of December 31, 2017	**3,624**	**350**	**18**	**–**	**53**	**4,045**
Addition and repayment of financial liabilities [c]	–	–128	–	–	–6	–134
Changes in the scope of consolidation	–	–1	–	–	–	–1
Currency translation	–	–8	–	–	–	–8
Other	8	1	–	–	2	11
As of December 31, 2018	**3,632**	**214**	**18**	**–**	**49**	**3,913**
Changes pursuant to IFRS 16	–	–	–	666	–	666
As of January 1, 2019	**3,632**	**214**	**18**	**666**	**49**	**4,579**
Addition and repayment of financial liabilities	–	–63	–	–126	4	–185
Changes in the scope of consolidation	–	–1	–	–	–	–1
Currency translation	–	–	–	4	–	4
Reclassification in accordance with IFRS 5	–	–	–	–26	–	–26
Other	5	–	–	132	10	147
As of December 31, 2019	**3,637**	**150**	**18**	**650**	**63**	**4,518**

[a] The other changes contain €137 million from the addition of new leases.
[b] Excluding financial liabilities from exchange-type transactions with competitors.
[c] The addition and repayment of financial liabilities amounting to €3 million is contained in the cash flow from financing activities, discontinued operations.

Bonds T100

in € million	Interest coupon in %	Nominal value	Carrying amount Dec. 31, 2018	Carrying amount Dec. 31, 2019	Stock market value Dec. 31, 2018	Stock market value Dec. 31, 2019
Evonik Industries AG						
Fixed-interest bond 2013/2020	1.875	500	499	500	511	503
Fixed-interest bond 2015/2023	1.000	750	747	747	761	771
Hybrid bond 2017/2077[a]	2.125	500	496	497	481	516
Evonik Finance B.V.						
Fixed-interest bond 2016/2021	0.000	650	649	650	646	651
Fixed-interest bond 2016/2024	0.375	750	746	747	720	755
Fixed-interest bond 2016/2028	0.750	500	495	496	452	512
		3,650	**3,632**	**3,637**	**3,571**	**3,708**

[a] The formal tenor of the bond is 60 years, but Evonik has a first redemption right in 2022.

The accrual of €18 million (2018: €18 million) for payment of the coupon on the bonds is recognized in current **loans from non-banks.**

The **lease liabilities** contain the present value of future lease payments. Further information on lease liabilities can be found in notes 9.2 p. 145 f. and 9.4 p. 148 ff.

Liabilities from derivatives T101

in € million	Dec. 31, 2018	Dec. 31, 2019
Liabilities from cross-currency interest rate swaps	22	–
Liabilities from forward exchange contracts and currency swaps	84	64
Liabilities from commodity derivatives	1	4
	107	**68**

The **refund liabilities** show the liabilities under rebate and bonus agreements arising from contracts with customers.

The **miscellaneous other financial liabilities** contain financial liabilities of €54 million to partners in joint operations (2018: €34 million). In 2018 this item contained €3 million relating to exchange-type transactions with competitors. Exchange-type transactions with competitors are outside the scope of IFRS 15.

6.13 Other payables

Other payables T102

in € million	Dec. 31, 2018 Total	Dec. 31, 2018 thereof non-current	Dec. 31, 2019 Total	Dec. 31, 2019 thereof non-current
Contract liabilities from contracts with customers	89	40	133	75
Deferred income	11	3	24	15
Miscellaneous other payables	302	4	411	3
	402	**47**	**568**	**93**

Contract liabilities from contracts with customers mainly result from prepayments received from customers and from freight services that are declared as distinct performance obligations. Revenues are only recognized when the corresponding performance obligation is satisfied.

Development of contract liabilities T103

in € million	2018	2019
As of January 1	**82**	**89**
Currency translation	2	1
Additions	47	82
Reclassification	1	–
Reclassification in accordance with IFRS 5	–5	–6
Refunds	–1	–2
Revenue recognition	–37	–31
As of December 31	**89**	**133**

Revenue recognition relating to contract liabilities arising from contracts with customers totaling –€31 million (2018: –€37 million) includes contract liabilities of –€13 million (2018: –€24 million) established in prior years and contract liabilities of –€18 million (2018: –€13 million) recognized in 2019.

The **miscellaneous other payables** mainly comprise liabilities for other taxes, liabilities to the public sector, and liabilities from insurance contracts.

6.14 Deferred taxes, other income taxes

Deferred tax assets and liabilities are established for temporary valuation and recognition differences between the assets and liabilities recognized in the balance sheets prepared for tax purposes and those prepared in accordance with IFRS. Tax-deductible loss carryforwards that will probably be utilized in the future are capitalized at the amount of the deferred tax asset, taking into account whether they can be carried forward for a limited or unlimited period.

The **recognition of deferred tax assets** at companies with tax-deductible loss carryforwards is based, on the one hand, on current planning calculations, which are normally for a five-year period, and on the other hand, on the availability of sufficient temporary tax differences. Deferred tax assets are recognized where it is probable that future taxable income will be generated, which can cover these temporary differences. If these expectations are not met, an impairment loss must be recognized in income for the deferred tax assets.

Deferred taxes are calculated on the basis of the tax rates applicable on the date when temporary differences are likely to be reversed.

Deferred tax assets and liabilities are netted if the company is permitted to net other income tax assets and liabilities and if the deferred tax assets and liabilities relate to income taxes in the same tax jurisdiction.

Other income taxes for the reporting period and previous periods are recognized on the basis of the expected payment or refund. They are calculated using the company-specific tax rates applicable on the reporting date.

Group companies are liable to pay income tax in many countries around the world. When evaluating global income tax assets and liabilities, there may be some uncertainty relating, in particular, to the interpretation of tax regulations. It cannot be ruled out that the fiscal authorities will take a different view on the correct interpretation of tax regulations. Changes in assumptions regarding the correct interpretation of tax regulations, for example, as a result of changes in legal decisions, are reflected in the recognition of uncertain income tax assets and liabilities for the corresponding fiscal year. Uncertain tax assets and liabilities are recognized as soon as their probability of occurrence is more than 50 percent. Uncertain income tax positions are recognized on the basis of their most likely amount or expected amount, depending on which of these amounts better reflects the situation if the uncertainty materializes.

Deferred taxes and other income taxes reported on the balance sheet T104

	Dec. 31, 2018		Dec. 31, 2019	
in € million	**Total**	thereof non-current	**Total**	thereof non-current
Deferred tax assets	1,419	1,283	1,718	1,632
Other income tax assets	196	16	337	12
Deferred tax liabilities	557	487	537	497
Other income tax liabilities	287	223	379	320

The divestment of the methacrylates business reduced **deferred tax assets** by €233 million and **deferred tax liabilities** by €44 million.

In accordance with IAS 1 Presentation of Financial Statements, the current elements of deferred taxes are reported on the balance sheet under non-current assets and liabilities.

Deferred taxes by balance sheet item T105

in € million	Deferred tax assets Dec. 31, 2018	Deferred tax assets Dec. 31, 2019	Deferred tax liabilities Dec. 31, 2018	Deferred tax liabilities Dec. 31, 2019
Assets				
Intangible assets	6	175	207	210
Property, plant and equipment	63	28	382	354
Right-of-use assets	–	–	–	169
Financial assets	1,009	961	78	16
Inventories	64	47	–	2
Other assets	43	54	40	51
Liabilities				
Provisions	1,383	1,496	1,017	880
Payables	98	210	85	82
Special tax allowance reserves (based on local law)	–	–	38	44
Loss carryforwards	30	18	–	–
Tax credits	6	2	–	–
Other	9	–	2	2
Deferred taxes (gross)	**2,711**	**2,991**	**1,849**	**1,810**
Netting	–1,292	–1,273	–1,292	–1,273
Deferred taxes (net)	**1,419**	**1,718**	**557**	**537**

€1,351 million of the deferred tax assets (2018: €1,150 million) relate to the pension provisions recognized on the balance sheet.

Payables of €170 million are deferred tax assets relating to lease liabilities.

No deferred tax assets were recognized on temporary differences of €84 million (2018: €92 million) because it is not probable that there will be sufficient future taxable income to enable them to be realized.

The taxable temporary differences relating to shares in subsidiaries for which no deferred taxes were recognized amounted to €162 million (2018: €162 million). Evonik is in a position to manage the timing of the reversal of temporary differences.

Deferred tax assets of €25 million (2018: €89 million) were recognized for companies that made a loss. Utilization will be ensured by restructuring.

In addition to tax loss carryforwards for which deferred taxes were recognized, there were tax loss carryforwards that were not utilizable and for which no deferred taxes were recognized.

Tax loss carryforwards by expiration date T106

in € million	Corporation taxes (German and foreign) 2018	Corporation taxes (German and foreign) 2019	Local taxes (German and foreign) 2018	Local taxes (German and foreign) 2019	Tax credits (foreign) 2018	Tax credits (foreign) 2019
Up to 1 year	–	–	–	–	–	–
More than 1 and up to 5 years	165	40	–	–	–	–
More than 5 and up to 10 years	5	–	–	–	–	–
Unlimited	470	331	191	201	–	4
	640	**371**	**191**	**201**	**–**	**4**

7. Notes to the cash flow statement

The cash flow statement shows the changes in cash and cash equivalents of the Group in the reporting period. The cash flows are classified by operating, investing, and financing activities. The net cash flow from discontinued operations that is attributable to third parties is shown separately. The impact of changes in the scope of consolidation has been eliminated.

The **cash flow from operating activities** is calculated using the indirect method. Income before the financial result and income taxes, continuing operations, is adjusted for the effects of non-cash income and expenses and items that are allocated to investing or financing activities. Certain other changes in amounts shown on the balance sheet are calculated and added to the result. Cash inflows from dividends are also allocated to the cash flow from operating activities.

Cash inflows from interest are allocated to the **cash flow from investing activities.**

Cash outflows for interest and dividend payments are allocated to the **cash flow from financing activities.**

Cash and cash equivalents include both the cash and cash equivalents shown on the balance sheet and, where applicable, cash and cash equivalents included in assets held for sale. Cash and cash equivalents comprise balances with banks, checks, and cash. This item also includes highly liquid financial instruments with a maturity, calculated as of the date of purchase, of no more than three months, provided that they can be converted into cash and cash equivalents at any time and are only subject to negligible fluctuations in value. They are measured at fair value.

The **cash outflows to obtain control of businesses** include, among other things, the gross purchase prices for the shares in subsidiaries consolidated for the first time. As in the previous year, the entire purchase prices comprised a cash outflow. As in the previous years, no cash and cash equivalents were acquired with the businesses.

The **cash inflows from the divestment of the methacrylates business** and the **cash inflows/outflows relating to the loss of control over businesses** contain gross selling prices of €2,439 million (2018: €71 million) less cash and cash equivalents disposed of amounting to €227 million (2018: none). As in the previous year, the purchase prices were settled entirely through cash inflows. As in 2018, the other cash inflows/outflows relating to the loss of control over businesses relate to divestments in prior periods.

The **cash and cash equivalents** shown on the balance sheet amounted to €1,165 million (2018: €988 million).

8. Notes to the segment report

8.1 Reporting based on operating segments

The executive board of Evonik Industries AG decides on the allocation of resources and evaluates the earnings power of the Evonik Group's operations on the basis of the following reporting segments, which reflect the core operating business (subsequently referred to as segments):

- Nutrition & Care
- Resource Efficiency
- Performance Materials
- Services

The reporting based on operating segments therefore reflects the internal reporting and management structure of the Evonik Group (management approach). The same accounting standards are applied as for external financial reporting, see note 3 p. 104 ff., and the accounting policies described in the other notes, with the exception of intragroup leasing transactions, which are still recognized by the segments as income and expense.

Evonik's segments are outlined below:

The **Nutrition & Care** segment produces specialty chemicals, principally for use in consumer goods for daily needs, and in animal nutrition and healthcare products.

Ingredients, specialty additives, and system solutions for high-quality consumer goods and specific industrial applications are focal areas of this segment. It has outstanding knowledge of interfacial chemistry and, in particular, of the mode of action of the solutions its markets in customer-specific applications. Its products are based on an extensive range of oleochemical derivatives, organically modified silicones, and active ingredients produced by biotechnology. Key success factors are high innovative capability, integrated technology platforms, and strategic partnerships with important consumer goods manufacturers.

The Nutrition & Care segment also produces and markets essential amino acids and probiotics for animal nutrition. Alongside the segment's high technological competence, one success factor is its years of experience in chemical synthesis and biotechnology. Competence in sustainable solutions for animal nutrition, a global distribution network, and an extensive range of differentiated products and services drive the growth of this segment and give it a competitive advantage.

Nutrition & Care is a strategic partner for the healthcare industry, focusing on the synthesis of active ingredients and controlled release of active ingredients for modern drugs.

With its custom-tailored solutions, the **Resource Efficiency** segment helps customers in a wide range of industries position themselves better to meet future needs. Its environment-friendly and energy-efficient solutions are used, for example, in the paints and coatings, automotive and construction industries, and in many other sectors. In the automotive industry, for example, lightweight materials from this segment replace metal parts in the bodywork, chassis, interior, and engine. Products from the Resource Efficiency segment also improve the resistance and durability of paintwork, make a contribution to tires with low rolling resistance, and improve automotive and industrial lubricants. As well as reducing the weight of vehicles, they reduce fuel consumption and exhaust emissions. Furthermore, products from this segment are used in the construction of new buildings and energy-efficient refurbishment. The segment focuses specifically on innovative solutions. Consequently, it pays special attention to the development of promising growth areas such as 3D printing and gas separation membranes. Saving resources and developing energy-efficient and environmentally friendly products are key factors driving the business success of all nine business lines in this segment.

The heart of the **Performance Materials** segment is the production of polymer materials and intermediates, mainly for the rubber, plastics, and agriculture industries. Performance Materials aspires to be a leading supplier. Its special strengths are its product properties, integrated structures, experience, and expertise. For this reason, it is often the market leader with its high-volume intermediates and custom-tailored solutions. This applies to its integrated C_4 production facilities and to alkoxides, which are used, among other things, in the production of biodiesel.

The **Services** segment provides site management, utilities, waste management, technical, process technology, engineering, and logistics services for the chemical segments and external customers at Evonik's sites. This segment also supports the chemicals businesses and the management holding company by providing standardized group-wide business services, for example, in the areas of IT, human resources, accounting, and legal services.

Business activities that are not assigned to any of the reporting segments are bundled in **other operations.**

The column headed **Corporate, consolidation** includes the management holding company, strategic research, hidden reserves and liabilities, goodwill relating to former acquisitions of shares in Evonik Operations GmbH, and intersegment consolidation effects.

8.2 Reporting based on regions

For this purpose, countries and country groups are aggregated into regions. The reporting based on regions is outlined in more detail in note 8.3 p. 143 f.

8.3 Notes to the segment data

External sales reflect the segments' sales with parties outside the Evonik Group. Sales generated between the segments are internal sales and are cross-charged at market prices or using the cost-plus method.

Reconciliation from the sales of all reporting segments to Group sales T107

in € million	2018	2019
Sales, reporting segments	**15,515**	**15,072**
Sales, other operations	42	73
Corporate, consolidation, less discontinued operations	–2,290	–2,037
External sales of the Evonik Group	**13,267**	**13,108**

Prior-year figures restated.

External sales by country (location of customer) T108

in € million	2018	2019
USA	2,584	2,593
Germany	2,301	2,290
China	950	1,009
Switzerland	681	712
Netherlands	581	577
Japan	486	511
UK	504	391
France	431	387
Brazil	371	359
Italy	331	321
Other countries	4,047	3,958
External sales of the Evonik Group	**13,267**	**13,108**

Prior-year figures restated.

The result from investments recognized at equity corresponds to the result for these investments as reported in the income statement; see note 5.4. p. 116.

The executive board of Evonik Industries AG uses **adjusted EBITDA** as the main parameter to measure operating performance. Adjusted EBITDA is the main earnings parameter that can be influenced by the segment management. It comprises earnings before financial result, income taxes, depreciation, amortization, and impairment losses/reversal of impairment losses, after adjustments.

Reconciliation from adjusted EBITDA of the reporting segments to income before income taxes, continuing operations T109

in € million	2018	2019
Adjusted EBITDA, reporting segments	2,432	2,364
Adjusted EBITDA, other operations	−87	−39
Adjusted EBITDA, corporate	−193	−176
Consolidation	−2	4
Less discontinued operations	–	–
Adjusted EBITDA, corporate, consolidation	−195	−172
Adjusted EBITDA	**2,150**	**2,153**
Depreciation and amortization	−753	−932
Impairment losses/reversals of impairment losses	−38	−76
Depreciation, amortization, impairment losses/reversal of impairment losses included in adjustments	2	56
Adjusted depreciation, amortization, and impairment losses	−789	−952
Adjusted EBIT	**1,361**	**1,201**
Adjustments[a]	−312	−115
Financial result	−155	−132
Income before income taxes, continuing operations	**894**	**954**

Prior-year figures restated to reflect the reorganization of administrative functions (see note 3.5 p. 105 f.).
[a] See section 2.4 p. 20 ff. combined management report

The **adjusted EBITDA margin** is the ratio of adjusted EBITDA to external sales.

Adjusted EBIT comprises earnings before financial result and income taxes, after adjustments. It is used to calculate the internal management parameter return on capital employed (ROCE).

Capital employed comprises the net assets required by the reporting segments for their operations. It is calculated by determining the total of intangible assets, property, plant and equipment, investments, inventories, trade accounts receivable, and other non-interest-bearing assets. The sum of interest-free provisions, trade accounts payable, and other interest-free liabilities is then deducted from this.

The **return on capital employed (ROCE)** is another internal management parameter used by the Evonik Group. ROCE is calculated from the ratio of adjusted EBIT to capital employed. To smooth the closing date effect, the calculation uses average capital employed in the reporting period.

Depreciation and amortization relate to the depletion in the value of intangible assets, property, plant and equipment, and right-of-use assets over their estimated useful life.

Capital expenditures comprise additions to intangible assets (excluding goodwill from capital consolidation), property, plant and equipment in the reporting period. Additions resulting from changes in the scope of consolidation are not taken into account. Capital expenditures by region are based on the location of the subsidiaries.

Additions to investments recognized at equity, other investments, non-current loans, and non-current securities and similar claims made in the reporting period are recognized as **financial investments.** The acquisition of subsidiaries is shown as an addition to financial investments in the year of acquisition (including goodwill from capital consolidation).

The **headcount** is taken on the reporting date. It shows the number of employees. Part-time employees are included as absolute figures. The headcount by region is based on the location of the subsidiaries.

Goodwill, other intangible assets, and property, plant and equipment are segmented by the location of the subsidiaries. Together, these assets comprise the non-current assets in accordance with IFRS 8 Operating Segments (cf. IFRS 8.33 b).

Breakdown of non-current assets by country T110

in € million	Dec. 31, 2018	Dec. 31, 2019
Germany	4,700	5,037
USA	3,643	3,732
Singapore	1,071	1,129
Belgium	587	810
China	589	593
Other countries	1,563	1,632
Non-current assets	**12,153**	**12,933**

9. Other disclosures

9.1 Capitalized borrowing costs

Borrowing costs of €6 million (2018: €5 million) that could be allocated directly to the acquisition, construction, or production of a qualifying asset were capitalized. The average underlying cost of financing was 1.0 percent (2018: 0.8 percent).

9.2 Additional information on leases

A lease comprises an agreement that transfers the right to use an asset for a certain period in return for one or more payments.

As a lessee, the Evonik Group mainly leases assets required for business operations (see also note 6.3 p. 123); as a lessor, it mainly leases out land not required for business operations through operating leases (see also note 6.2 p. 121 ff.).

IFRS 16 specifies that, in principle, **lessees** must recognize all leases on the balance sheet at present value in the form of a right-of-use asset and a lease liability. The right-of-use asset is normally depreciated over the term of the lease and the lease liability is increased to reflect interest on the lease using the effective interest method and reduced to reflect lease payments. Consequently, lease expense is no longer recognized in the income statement. The right-of-use asset is subject to an impairment test pursuant to IAS 36.

The incremental borrowing rate is normally used to determine the present value of lease liabilities and the subsequent discount rate. The incremental borrowing rate is based on uniform discount rates, taking into account the contract currency, lease term, and the economic circumstances of the lease. The lease liabilities are recognized in other financial liabilities.

As lessee, Evonik applies the practical expedients for short-term leases and leases for low-value assets. These are not recognized on the balance sheet in accordance with IFRS 16; instead, lease expense is still recognized in the income statement (IFRS 16.5).

In addition, for the following classes of assets, lease and non-lease components are combined (IFRS 16.15): power plants, ships, and storage tanks.

Lessors are still required to classify leases as finance or operating leases based on the ratio of the opportunities and risks transferred.

In the case of finance leases, the underlying asset is derecognized from the balance sheet and a finance lease receivable is recognized.

In the case of operating leases, the underlying asset is still recognized on the balance sheet and the lease payments received are recognized in the income statement as revenue from operating leases.

Amounts recognized for lease transactions as lessee T111

in € million	2019
Right-of-use assets[a] as of December 31	640
Lease liabilities[b] as of December 31	650
Depreciation and impairment losses	131
Interest cost	16
Expenses for short-term leases	13
Expenses for leases for assets of low value	2
Expenses for unrecognized variable lease payments	7
Revenue from subleasing	2
Total cash outflows for leases	164
Gain or loss on sale-and-lease-back transactions	1

[a] See note 6.3 p. 123.
[b] See notes 6.12 p. 138 f. and 9.4 p. 148 ff.

In 2018, revenue from subleasing was also €2 million.

Evonik rents and leases assets required for its operations. Most of these are peripheral to production, or as in the case of administrative buildings, for example, have only a slight connection with production. The material right-of-use assets relate to land and land rights (18 percent), buildings (17 percent), power plants (12 percent), and storage tanks (32 percent). For information on lease terms, see note 6.3 p. 123.

As lessee, Evonik recognizes lease payments that are certain on the balance sheet as lease liabilities. In addition, it may potentially be necessary to make further lease payments that do not qualify for recognition on the balance sheet, either because recognition is not permitted (as in the case, for example, of variable lease payments based on use) or because the cash outflow is not sufficiently certain. In the Evonik Group, such variable lease payments are not material.

Many leases contain extension and/or termination options. These give Evonik the flexibility to adjust its lease portfolio to changing business requirements. There is considerable discretion involved in assessing the probability of exercise of such options. Taking into account all facts and circumstances, Evonik only regards the options as exercisable if there is reasonable certainty that they will be exercised. Exercise of the options is reassessed if the facts and circumstances change. Until then, Evonik regards the liability recognized on the balance sheet as the best indicator of future cash outflows. Note 9.4.5.2 p. 161 f. contains a detailed presentation of cash outflows for leases.

Evonik has no off-balance-sheet residual value guarantees that could result in possible cash outflows in the future, nor does it have any material leases that have been signed but did not have to be recognized for the first time until after the reporting date. Furthermore, there are no clauses in lease agreements that impose restrictions on Evonik or require it to achieve certain financial covenants. There are no material sale-and-leaseback transactions.

Amounts recognized for lease transactions as lessor T112

in € million	2018	2019
Assets under operating leases [a]	3	3
Receivables from finance leases [b]	6	3
Revenue (operating leases)	15	18
thereof revenue from variable lease payments that are based on use of the leased asset	–	1

[a] See note 6.2 p. 121 ff.
[b] See notes 6.6 p. 126 f. and 9.4 p. 148 ff.

As a lessor, Evonik is not exposed to any residual risks relating to the assets underlying finance leases.

Maturity structure of future minimum lease payments (lessor; operating leases) T113

in € million	2018	2019
Due within 1 year	5	14
Due in more than 1 and up to 2 years	5	9
Due in more than 2 and up to 3 years	5	7
Due in more than 3 and up to 4 years	4	5
Due in more than 4 and up to 5 years	4	5
Due in more than 5 years	144	142
	167	**182**

9.3 Performance-related remuneration

Evonik's remuneration system comprises a basic salary, annual short-term incentive payments and, as a long-term component, the long-term incentive (LTI) plans for members of the executive board and other executives. Following the stock exchange listing, the performance of Evonik shares became the central element in the LTI plan for the first time in 2013. The redesigned LTI plan was introduced for both executive board members and other executives.

It comprises share-based payments with cash settlement. They are valued on the reporting date using a Monte Carlo simulation, which models exercise patterns. The LTI plans result in personnel expense which is distributed over the term of each tranche.

Performance is measured by the absolute performance of Evonik's share price and its performance relative to the MSCI World Chemicals Index[SM].

Based on the contractually agreed target amount, which is defined in euros, a number of virtual shares is calculated using the share price at the start of the performance period. This is based on the price in the last 60 trading days before the start of performance period. The performance period starts on January 1 of the grant year and runs for four years. At the end of the performance period, the starting price of Evonik shares is viewed against the average share price at the end of the performance period. This is compared with the performance of the benchmark index (total shareholder return).

If the relative performance is below 70 percentage points, the relative performance factor is deemed to be zero. If the relative performance is above 130 percentage points, the relative performance factor is set at 130.

The payment is calculated by multiplying the relative performance by the number of virtual shares allocated and the average price of Evonik shares at the end of the performance period.

For LTI tranches up to and including 2018, there is a one-time option to extend the tranche for a further year at the end of the performance period. Partial exercise at the end of the original performance period is not permitted. The upper limit for these payments is set at 300 percent of the individual target amount.

Starting in 2019, the intrinsic value of the LTI is no longer measured at the end of the performance period; instead, it is measured at the end of each year in the four-year performance period.

In line with previous practice, the starting price of Evonik shares is viewed against the average share price at the end of each year of the performance period, plus any dividends per share actually paid in this period. This is then compared with the performance of the benchmark index (total shareholder return). At the end of the performance period, the overall performance is calculated as the average of the performance in each year. There is no longer an option to extend the performance period.

LTI plan for executive board members and other executives—Tranches 2014 through 2019 T114

		2014 tranche	2015 tranche	2016 tranche	2017 tranche	2018 tranche	**2019 tranche**
Grant date		Apr. 14, 2014	Apr. 29, 2015	May 18, 2016	Jun. 7, 2017	May 15, 2018	Jul. 2, 2019
No. of virtual shares granted		140,145	175,787	139,109	108,283	119,846	181,784
No. of virtual shares forfeited		–	–	–	–	–	–
No. of virtual shares exercised		140,145	147,281	–	–	–	–
No. of virtual shares as of December 31, 2019		–	28,506	139,109	108,283	119,846	181,784
Performance period	from–to	Jan. 1, 2014–Dec. 31, 2017	Jan. 1, 2015–Dec. 31, 2019[a]	Jan. 1, 2016–Dec. 31, 2020[a]	Jan. 1, 2017–Dec. 31, 2020	Jan. 1, 2018–Dec. 31, 2021	Jan. 1, 2019–Dec. 31, 2022
Expense (+)/income (–) for the period	in €'000	–	21	–486	675	825	1,008
Carrying amount of provision	in €'000	–	750	2,000	1,434	1,281	1,008

[a] Extension option utilized in some cases.

LTI plan for executives—Tranches 2014 through 2019 T115

		2014 tranche	2015 tranche	2016 tranche	2017 tranche	2018 tranche	**2019 tranche**
Grant date		Apr. 11, 2014	May 18, 2015	May 18, 2016	Jun. 6, 2017	May 11, 2018	Jul. 2, 2019
No. of virtual shares granted		420,598	535,195	436,125	523,169	460,694	532,476
No. of virtual shares forfeited		17,177	14,821	27,736	40,630	33,477	6,647
No. of virtual shares exercised		403,421	518,474	–	–	–	–
No. of virtual shares as of December 31, 2019		–	1,900	408,389	482,539	427,217	525,829
Performance period	from–to	Jan. 1, 2014–Dec. 31, 2018[a]	Jan. 1, 2015–Dec. 31, 2019[a]	Jan. 1, 2016–Dec. 31, 2020[a]	Jan. 1, 2017–Dec. 31, 2020	Jan. 1, 2018–Dec. 31, 2021	Jan. 1, 2016–Dec. 31, 2022
Expense (+)/income (–) for the period	in €'000	–	120	–2,733	2,722	2,824	2,916
Carrying amount of provision	in €'000	–	34	–	6,391	4,567	2,916

[a] Extension option utilized in some cases.

As of December 31, 2019, total provisions for share-based payment amounted to €20.4 million (2018: €27.2 million). In 2019, total expense for share-based payment was €7.9 million (2018: €2.8 million).

9.4 Additional information on financial instruments

Derivative and non-derivative **financial instruments** comprise contractually agreed rights and obligations resulting in an inflow or outflow of financial assets or the issue of equity instruments. Derivative financial instruments are used to hedge the risk of changes in exchange rates, the price of commodities, and interest rates. Derivatives are recognized on the balance sheet either on a stand-alone basis or as part of a hedging relationship with the corresponding hedged items (hedge accounting). While all financial derivatives are part of an economic hedging relationship, hedge accounting is only applied to a portion of these hedging relationships (see note 9.4.4 p. 153 ff.).

Non-derivative financial assets are **initially recognized** at the settlement date. They are **derecognized** when the contractual rights to receive payments lapse or are transferred, and Evonik has transferred substantially all opportunities and risks associated with ownership. Financial liabilities are derecognized when the obligation has been settled or canceled, or has expired.

Financial instruments are **initially measured** at fair value plus any directly attributable transaction costs. As an exception to this, trade accounts receivable without significant financing components are measured at the transaction price in accordance with the provisions of IFRS 15. Transaction costs for financial instruments assigned to the category at fair value through profit or loss are recognized directly in the income statement.

The **fair value** is the amount that would be received or paid for the sale of a financial asset or the transfer of a financial liability in an orderly transaction between market participants at the measurement date. It is therefore an exit price based on a hypothetical transaction on the measurement date. The fair value is determined on the basis of the three-level hierarchy set out in IFRS 13. Where available, it is determined from the quoted prices for identical financial assets LTI plan or liabilities in an active market without adjustment (level 1). If such data are not available, LTI plan measurement based on directly or indirectly observable inputs is used (level 2). In all other cases, valuation methods that are not based on observable market data are used (level 3). Where input factors from different levels are used, the level applicable for the lowest material input factor is determined and the overall fair value is assigned to this level.

Subsequent measurement of financial instruments is based on their valuation category. **Non-derivative financial assets** are allocated to the categories “at fair value through other comprehensive income, without reclassification,” “at amortized cost,” or “at fair value through profit or loss,” based on the business model used by the company to manage the respective financial assets and the characteristics of the contractual cash flows from the financial instrument. **Non-derivative financial liabilities** are allocated to the category “at amortized cost.” Stand-alone **derivative financial instruments** are carried at fair value through profit or loss. Derivatives included in hedge accounting are not allocated to any of the IFRS 9 valuation categories. They are also carried at fair value. However, the treatment of changes in their fair value is based on the special rules for hedge accounting. Voluntary designation at fair value through profit or loss (fair value option) is not currently used for either financial assets or financial liabilities.

The shares in other investments have been irrevocably designated as “at fair value through other comprehensive income, without reclassification” because Evonik classifies them as long-term, strategic investments. The category “at amortized cost” mainly comprises trade accounts receivable, loans, and miscellaneous other financial assets, insofar as the contractual terms solely comprise cash flows that are payments of principal and interest on the principal amount outstanding, and they are held within a "hold" business model. These financial assets are valued at amortized cost using the effective interest rate method and are subject to the impairment rules for expected credit losses. The category "at fair value through profit or loss" contains loans and securities, and miscellaneous other financial assets, whose contractual terms do not solely comprise cash flows from payments of principal and interest on the principal amount outstanding.

The financial liabilities in the category at amortized cost mainly comprise trade accounts payable, bonds, liabilities to banks, and loans from non-banks. They are measured at amortized cost using the effective interest rate method.

Financial assets and liabilities from exchange-type transactions with competitors, which are outside the scope of IFRS 15 and recognized by Evonik in miscellaneous other financial assets or liabilities, are carried at amortized cost.

Receivables and liabilities from finance leases, which are recognized at Evonik in miscellaneous other financial assets or miscellaneous other financial liabilities, are not allocated to any category because they are measured in accordance with IFRS 16 (2018: IAS 17) and not IFRS 9. Similarly, refund liabilities for rebate and bonus agreements pursuant to IFRS 15, which are recognized in other financial assets or liabilities, are not allocated to any category.

9.4.1 Disclosures on the carrying amounts and fair values of financial instruments

Carrying amounts and fair values of financial assets as of December 31, 2019 T116

in € million	Carrying amounts by valuation category				Dec. 31, 2019	
	At fair value through OCI without subsequent reclassification	At amortized cost	At fair value through profit or loss	Not allocated to any category	**Carrying amount**	**Fair value**
Trade accounts receivable	**–**	**1,569**	**–**	**–**	**1,569**	**1,569**
Cash and cash equivalents	**–**	**1,165**	**–**	**–**	**1,165**	**1,165**
Other investments	556	–	–	–	556	556
Loans	–	39	8	–	47	47
Securities and similar claims	–	–	1,225	–	1,225	1,225
Receivables from derivatives	–	–	11	47	58	58
Miscellaneous other financial assets	–	14	–	3	17	17
Other financial assets	**556**	**53**	**1,244**	**50**	**1,903**	**1,903**
	556	**2,787**	**1,244**	**50**	**4,637**	**4,637**

Carrying amounts and fair values of financial assets as of December 31, 2018 T117

in € million	Carrying amounts by valuation category				Dec. 31, 2018	
	At fair value through OCI without subsequent reclassification	At amortized cost	At fair value through profit or loss	Not allocated to any category	**Carrying amount**	**Fair value**
Trade accounts receivable	**–**	**1,686**	**–**	**–**	**1,686**	**1,686**
Cash and cash equivalents	**–**	**988**	**–**	**–**	**988**	**988**
Other investments	149	–	–	–	149	149
Loans	–	60	3	–	63	63
Securities and similar claims	–	–	24	–	24	24
Receivables from derivatives	–	–	8	110	118	118
Miscellaneous other financial assets	–	13	–	6	19	19
Other financial assets	**149**	**73**	**35**	**116**	**373**	**373**
	149	**2,747**	**35**	**116**	**3,047**	**3,047**

Carrying amounts and fair values of financial liabilities as of December 31, 2019 T118

in € million	At fair value through profit or loss	At amortized cost	Not allocated to any category	Carrying amount	Fair value
	Carrying amounts by valuation category			Dec. 31, 2019	
Trade accounts payable	**–**	**1,324**	**–**	**1,324**	**1,324**
Bonds	–	3,637	–	3,637	3,707
Liabilities to banks	–	150	–	150	153
Loans from non-banks	–	18	–	18	18
Lease liabilities	–	–	650	650	650
Liabilities from derivatives	16	–	52	68	68
Refund liability	–	–	45	45	45
Miscellaneous other financial liabilities	–	63	–	63	63
Other financial liabilities	**16**	**3,868**	**747**	**4,631**	**4,704**
	16	**5,192**	**747**	**5,955**	**6,028**

Carrying amounts and fair values of financial liabilities as of December 31, 2018 T119

in € million	At fair value through profit or loss	At amortized cost	Not allocated to any category	Carrying amount	Fair value
	Carrying amounts by valuation category			Dec. 31, 2018	
Trade accounts payable	**–**	**1,493**	**–**	**1,493**	**1,493**
Bonds	–	3,632	–	3,632	3,571
Liabilities to banks	–	214	–	214	223
Loans from non-banks	–	18	–	18	18
Liabilities from derivatives	14	–	93	107	107
Refund liability	–	–	61	61	61
Miscellaneous other financial liabilities	–	52	–	52	52
Other financial liabilities	**14**	**3,916**	**154**	**4,084**	**4,032**
	14	**5,409**	**154**	**5,577**	**5,525**

Financial instruments recognized at fair value are allocated to the following levels in the fair value hierarchy:

Financial instruments recognized at fair value as of December 31, 2019 T120

in € million	Publicly quoted market prices (level 1)	Directly observable market-related prices (level 2)	Individual valuation parameters (level 3)	Dec. 31, 2019
	Fair value based on			
Other investments	120	–	436	556
Loans	–	–	8	8
Securities and similar claims	1,201	–	24	1,225
Receivables from derivatives	–	58	–	58
Liabilities from derivatives	–	–68	–	–68

Financial instruments recognized at fair value as of December 31, 2018 T121

in € million	Fair value based on: Publicly quoted market prices (level 1)	Directly observable market-related prices (level 2)	Individual valuation parameters (level 3)	Dec. 31, 2018
Other investments	108	–	41	149
Loans	–	–	3	3
Securities and similar claims	6	–	18	24
Receivables from derivatives	–	118	–	118
Liabilities from derivatives	–	−107	–	−107

The financial instruments allocated to **level 1** are recognized at their present stock market price. They comprise securities, funds, and one equity investment.

As of the present reporting date, all derivatives are allocated to **level 2.** They comprise currency, interest rate, and commodity derivatives whose fair value was determined with the aid of a discounted cash flow method or option pricing models on the basis of the exchange rates at the European Central Bank, observed interest rate structure curves, FX volatilities, observed commodity prices, and observed credit default premiums.

The other investments, which are allocated to **level 3,** are unlisted equity investments and are measured on the basis of the best available information as of the reporting date. The shares in Vivawest GmbH were valued using the discounted cash flow method (fair value as of December 31, 2019: €384 million). The material non-observable inputs in the valuation were the cost of capital and sales growth. An increase in the cost of capital accompanied by a drop in sales growth of 10 percent would reduce the fair value by €127 million. A reduction in the capital cost accompanied by an increase in sales growth of 10 percent would increase the fair value by €166 million. Their fair value of the remaining other investments (€52 million) was derived from observable prices in connection with equity refinancing and using discounted cash flow and multiples methods. A 10 percent relative change in the key valuation parameters (segment-specific cost of capital, sustained dividend expectations, EBITDA multiple) does not result in a material change in the fair values. There is no intention of selling these investments.

The loans allocated to level 3 are convertible bonds. The fair values recognized are based on the nominal value of the bonds. The conversion right is taken into account if it is material. Securities and similar claims, which are allocated to level 3, are unlisted investment funds. The fair values recognized are the net asset values provided by the investment fund companies, which are determined on the basis of internationally recognized valuation principles.

There were no transfers between the levels of the fair value hierarchy in the reporting period.

Fair value of level 3:
Reconciliation from the opening to the closing balances T122

in € million	Other investments	Loans	Securities and similar claims	**Total**
As of January 1, 2018	**35**	**6**	**12**	**53**
Additions/disposal	2	−3	5	4
Gains or losses recognized in OCI in the reporting period	4	–	–	4
Gains or losses recognized in profit or loss in the reporting period (other financial income/expense)	–	–	1	1
As of December 31, 2018	**41**	**3**	**18**	**62**
Additions/disposal	382	5	2	389
Gains or losses recognized in OCI in the reporting period	13	–	–	13
Gains or losses recognized in profit or loss in the reporting period (other financial income/expense)	–	–	4	4
As of December 31, 2019	**436**	**8**	**24**	**468**

The **fair value of financial instruments recognized at amortized cost** is calculated as follows: The fair value of bonds is their directly observable stock market price on the reporting date. For loans, miscellaneous other financial assets, liabilities to banks, loans from non-banks, and miscellaneous other financial liabilities, the fair value is determined as the present value of the expected future cash inflows or outflows and is therefore allocated to level 2. Discounting is based on the interest rate for the respective maturity on the reporting date, taking the creditworthiness of the counterparties into account. Since the majority of other financial receivables and liabilities and trade accounts receivable and payable are current, their fair values—like the fair value of cash and cash equivalents—correspond to their carrying amounts.

9.4.2 Results of financial instruments

The income and expenses, gains and losses from financial instruments reflected in the income statement are allocated to the following IFRS 9 valuation categories:

Net result by valuation category 2019 T123

	Net result by valuation category				2019
in € million	Financial assets at amortized cost	Financial liabilities at amortized cost	Financial assets at fair value through other comprehensive income (without reclassification)	Financial assets and liabilities at fair value through profit or loss	
Proceeds from disposals	–3	–	–	–	–3
Result from currency hedging	–	–	–	–4	–4
Result from currency translation of monetary assets and liabilities	–15	–	–	–	–15
Impairment losses/reversals of impairment losses	–6	–	–	–	–6
Interest income	6	–	–	13	19
Interest expense	–	–47	–	–36	–83
Result from securities and other investments[a]	–	–	1	–4	–3
	–18	**–47**	**1**	**–31**	**–95**

[a] In the reporting period, dividends of €1 million were received from other investments. They do not contain any dividends received from other investments divested during the fiscal year.

Net result by valuation category 2018 T124

	Net result by valuation category				2018
in € million	Financial assets at amortized cost	Financial liabilities at amortized cost	Financial assets at fair value through other comprehensive income (without reclassification)	Financial assets and liabilities at fair value through profit or loss	
Proceeds from disposals	–5	–	–	–	–5
Result from currency hedging	–	–	–	–11	–11
Result from currency translation of monetary assets and liabilities	–12	–	–	–	–12
Impairment losses/reversals of impairment losses	3	–	–	–	3
Interest income	5	–	–	13	18
Interest expense	–1	–50	–	–53	–104
Result from securities and other investments[a]	–	–	1	–	1
	–10	**–50**	**1**	**–51**	**–110**

[a] In 2018, dividends of €1 million were received from other investments. They do not contain any dividends received from other investments divested during the fiscal year.

Income from derivatives does not include income from derivative financial instruments for which hedge accounting is applied.

As in 2018, net interest expense did not include any interest income on the impaired portion of financial assets or trade accounts receivable.

9.4.3 Notional value of derivatives

The notional value of interest rate swaps is the principal on which the swap agreement is based, while the notional value of the cross-currency interest rate swaps, forward exchange contracts, currency options, and currency swaps is the hedged foreign exchange amount translated into euros. The notional value of the commodity derivatives is the hedged procurement cost translated into euros.

Notional value of derivative financial instruments T125

	Dec. 31, 2018			**Dec. 31, 2019**		
in € million	**Total**	thereof current	thereof non-current	**Total**	thereof current	thereof non-current
Interest rate swaps	650	–	650	650	–	650
Cross-currency interest rate swaps	1,668	1,017	651	460	–	460
Forward exchange contracts, currency options, and currency swaps	4,755	4,481	274	5,637	5,413	224
Commodity derivatives	15	13	2	34	27	7
	7,088	**5,511**	**1,577**	**6,781**	**5,440**	**1,341**

9.4.4 Hedge accounting

Derivatives used as hedging instruments and the corresponding hedged items form a hedging relationship. Hedge accounting requires, in particular, extensive documentation of the hedging relationship and its effectiveness. The effectiveness of the hedging relationship is determined prospectively. It takes account of the economic relationship between the hedged item and the hedging instrument, and the credit risk. A derivative no longer qualifies for hedge accounting if these conditions are not fulfilled. While hedging instruments with a positive fair value are contained in the balance sheet item financial assets, those with a negative fair value are recognized as financial liabilities.

The purpose of **cash flow hedges** (CFH) is to minimize the risk of volatility of future cash flows. This risk may result from a recognized asset or liability or a forecast transaction that is considered highly probable. The effective portion of changes in the fair value of a hedging instrument is recognized in other comprehensive income and the ineffective portion of the change in value is recognized in the income statement. The ineffective portion of hedges is recognized in other operating income or expense if the hedges relate to forecast sales in foreign currencies or to forecast purchases of raw materials, in other financial income if they relate to intragroup loans in foreign currencies and planned acquisitions, and in interest expense if they relate to the interest rate risk. Possible ineffectiveness may result from significant changes in the default risk of Evonik or the counterparty to the derivatives transaction, irrespective of the risk category. Amounts recognized in other comprehensive income on the statement of comprehensive income are reclassified to the income statement as soon as the hedged item has an impact on the income statement. In the case of interest rate hedges, such amounts are included in net interest income or expense, while in the case of currency hedges for forecast sales in foreign currencies they are included in sales revenues, and hedges on the procurement of goods are included directly in the cost of sales. If the hedged future transaction comprises a non-financial asset or a non-financial liability, the gain or loss previously recognized in other comprehensive income is included in the cost of acquisition of the asset or liability when it is initially recognized. Hedge accounting must also be halted if the forecast transaction is no longer expected. The amount recognized in other comprehensive income is reclassified to the income statement.

The purpose of a **hedge of a net investment** (NIH) is to reduce the foreign currency risk involved in an investment in a company whose functional currency is not the euro. Such hedges are accounted for in the same way as cash flow hedges. Gains and losses recognized in other comprehensive income are reclassified to the income statement when the foreign subsidiary is divested or the investment in it is reduced.

The purpose of **fair value hedges** (FVH) is to hedge the fair value of assets or liabilities reflected on the balance sheet. Both changes in the fair value of the hedging instrument and changes in the value of the hedged item are recognized in the income statement. In view of this method, changes in the value of the hedged item and the hedge cancel each other out in the income statement.

The effectiveness of the hedging relationships is determined using the dollar offset method, critical term match, the hypothetical derivatives method, and regression analysis.

The principal hedging transactions for which hedge accounting was applied in the reporting period are outlined below:

Forward exchange contracts and currency swaps are used as cash flow hedges to hedge **forecast foreign currency sales** against exchange rate movements. Only part of the forecast foreign currency sales are hedged. The currency component is designated using the spot-to-spot method, while the forward components and the foreign currency basis spreads are managed as hedging costs. The effective portions of these components are recognized in other equity components. A direct hedging relationship is used, and the economic relationship is reviewed by comparing the notional values of the hedging instruments and the hedged items. Ineffectiveness may occur if the notional values of the hedging instruments and the hedged items do not correspond or their maturities differ. A maturity mismatch may be caused by the fact that the hedging instruments expire as of the date of revenue recognition, while the hypothetical derivative that reflects the characteristics of the hedged item and is used to measure effectiveness expires as of the expected date of payment. As in the previous year, the resulting ineffectiveness was not material.

Evonik hedges the **currency risk arising from intragroup foreign currency loans** against the functional currency of the relevant Group company through cross-currency interest rate swaps, forward exchange contracts, and currency swaps recognized as cash flow hedges. In forward exchange transactions and currency swaps, the currency component is designated using the spot-to-spot method, while the forward components and the foreign currency basis spreads are managed as hedging costs. In cross-currency interest rate swaps, the currency component is designated using the forward-to-forward method, and only the foreign currency basis spreads are managed as hedging costs. The effective portions of these components are recognized in other equity components. A direct hedging relationship is used, and the economic relationship is reviewed by comparing the notional values of the hedging instruments and the hedged items. The maturities of the hedging instrument and hedged item normally correspond. Ineffectiveness may occur if the notional value of the hedging instruments and hedged items do not correspond or their maturities differ.

The following weighted average hedging rates for the major currency pairs are derived from hedging of the currency risk:

Hedging of currency risk T126

	Maturing in 2020	Maturing in 2021
Average EUR/USD exchange rate	1.18	1.07
Average EUR/CNH[a] exchange rate	8.06	8.11
Average EUR/SGD exchange rate	1.57	–

[a] CNH is the technical market designation for renminbi that are tradable and deliverable outside the territory of China.

To hedge the **currency risk of the acquisition** of PeroxyChem, which was closed after the reporting date, a USD currency option transaction was concluded. This was recognized as a cash flow hedge until July 2019. The notional value of this transaction was US$113 million. The intrinsic value of the option was designated. The time value of the option was recognized as hedging expense together with its effective portion in other equity components from hedging instruments. A direct hedging relationship was used and the economic relationship was reviewed by comparing the notional value of the hedging instruments and the hedged item. Since the notional amounts and maturities of the hedging instruments and the hedged item corresponded, there was no ineffectiveness. Hedge accounting was ended in July 2019, when the Federal Trade Commission (FTC) in the USA filed its lawsuit. The transfer of the effective designated risk components and the hedging expense from other equity components to the hedged item took place when the transaction was closed.

Forward exchange contracts and currency swaps are used as **net investment hedges** to hedge UK subsidiaries against **foreign currency risks** on a rolling basis. In addition, there is a hedge of a net investment that has ended but will only be reclassified when the hedged company is divested.

To hedge the **risk of changes in interest rates,** Evonik uses cash flow hedges and fair value hedges. In addition, there is a fair value hedge expiring in 2021, where the interest rate of 0.00 percent has been swapped for a variable exchange rate.

The **price risk relating to forecast purchases of raw materials** is hedged using gas and coal commodity swaps recognized as cash flow hedges. In 2019, a proxy hedge for a naphtha component in raw material procurement contracts, which was closed out in the previous year, was reclassified from other equity components and released to operating income when the methacrylates business was sold.

Hedging instruments used in hedge accounting as of December 31, 2019 T127

in € million	**Notional value, total**	thereof non-current	Receivables from derivatives	Liabilities from derivatives
Currency risks				
Forward exchange contracts and currency swaps	1,962	224	6	44
Currency options transactions	95	–	6	–
Cross-currency interest rate swaps	460	460	32	–
Cash flow hedges	**2,517**	**684**	**44**	**44**
Forward exchange contracts and currency swaps	76	–	–	4
Hedge of a net investment	**76**	**–**	**–**	**4**
	2,593	**684**	**44**	**48**
Interest rate risks				
Interest rate swaps	650	650	2	–
Fair value hedges	**650**	**650**	**2**	**–**
Commodity price risks				
Gas derivatives[a]	16	7	–	2
Coal derivatives[b]	18	–	–	2
Cash flow hedges	**34**	**7**	**–**	**4**

[a] Hedged volume of gas derivatives 193 million m^3 (of which non-current: 89 million m^3).
[b] Hedged volume of coal derivatives 329 thousand metric tons (of which non-current: none).

Hedging instruments used in hedge accounting as of December 31, 2018 T128

in € million	**Notional value, total**	thereof non-current	Receivables from derivatives	Liabilities from derivatives
Currency risks				
Forward exchange contracts and currency swaps	1,792	271	4	70
Currency options transactions	96	–	3	–
Cross-currency interest rate swaps	1,668	651	101	22
Cash flow hedges	**3,556**	**922**	**108**	**92**
Forward exchange contracts and currency swaps	73	–	1	–
Hedge of a net investment	**73**	**–**	**1**	**–**
	3,629	**922**	**109**	**92**
Interest rate risks				
Interest rate swaps	650	650	1	–
Fair value hedges	**650**	**650**	**1**	**–**
Commodity price risks				
Gas derivatives[a]	8	2	–	–
Coal derivatives[b]	7	–	–	1
Cash flow hedges	**15**	**2**	**–**	**1**

[a] Hedged volume of gas derivatives 167 million m^3 (of which non-current: 91 million m^3)
[b] Hedged volume of coal derivatives 123 thousand metric tons (of which non-current: none).

Excluding deferred taxes, the other equity components from hedging instruments for designated risk components and for the cost of hedging pursuant to IFRS 9 changed as follows:

Change in other equity components from hedging instruments for designated risk components T129

in € million	Currency hedges	Interest rate hedges	Commodity price hedges
As of January 1, 2018	**106**	**–2**	**–**
Gains/losses from effective hedging relationships recognized in OCI (CFH)	–61	–	5
Gains/losses from effective hedging relationships recognized in OCI (NIH)	1	–	–
Reclassification to the income statement due to realization of the hedged item (CFH)	–70	–	–1
Reclassification to the income statement due to realization of the hedged item (NIH)	–	–	–
Reclassification offset against cost of acquisition (CFH)	–	–	–
Reclassification due to early termination of the hedging relationship (CFH)	–	2	–2
As of December 31, 2018	**–24**	**–**	**2**
Gains/losses from effective hedging relationships recognized in OCI (CFH)	–22	–	–1
Gains/losses from effective hedging relationships recognized in OCI (NIH)	–4	–	–
Reclassification to the income statement due to realization of the hedged item (CFH)	44	–	–2
Reclassification to the income statement due to realization of the hedged item (NIH)	–	–	–
Reclassification offset against cost of acquisition (CFH)	–	–	–
Reclassification due to early termination of the hedging relationship (CFH)	–	–	–2
As of December 31, 2019	**–6**	**–**	**–3**

Change in other equity components from hedging instruments for the cost of hedging T130

in € million	Effect of foreign currency basis spreads and forward components of forward exchange transactions
As of January 1, 2018	
Hedges where the hedged item is realized at a point in time	–24
Hedges where the hedged item is realized over time	–6
Gains/losses from effective hedging relationships recognized in OCI (CFH)	**–30**
Hedges where the hedged item is realized at a point in time	6
Hedges where the hedged item is realized over time	6
Reclassification to the income statement due to realization of the hedged item (CFH)	**12**
Hedges where the hedged item is realized at a point in time	–
Reclassification offset against cost of acquisition (CFH)	**–**
Hedges where the hedged item is realized at a point in time	1
Hedges where the hedged item is realized over time	–
Reclassification due to early termination of the hedging relationship (CFH)	**1**
As of December 31, 2018	**–17**
Hedges where the hedged item is realized at a point in time	–33
Hedges where the hedged item is realized over time	–
Gains/losses from effective hedging relationships recognized in OCI (CFH)	**–33**
Hedges where the hedged item is realized at a point in time	35
Hedges where the hedged item is realized over time	–
Reclassification to the income statement due to realization of the hedged item (CFH)	**35**
Hedges where the hedged item is realized at a point in time	–
Reclassification offset against cost of acquisition (CFH)	**–**
Hedges where the hedged item is realized at a point in time	–
Hedges where the hedged item is realized over time	–
Reclassification due to early termination of the hedging relationship (CFH)	**–**
As of December 31, 2019	**–15**

Effects from changes in time value can only result from currency options transactions. There were no material effects in the reporting period. While effects of foreign currency basis spreads result from both the cross-currency interest rate swaps used, and from the forward exchange contracts and currency swaps, effects from forward components relate solely to forward exchange transactions and currency swaps.

Other equity components from active hedging relationships and those that had ended as of December 31, 2019 T131

in € million	Currency hedges	Interest rate hedges	Commodity price hedges
Carrying amount of other equity components from active hedging relationships	–16	–	–3
Carrying amount of other equity components from hedging relationships that have ended	–	–	–
Cash flow hedges	**–16**	**–**	**–3**
Carrying amount of other equity components from active hedging relationships	–8	–	–
Carrying amount of other equity components from hedging relationships that have ended	3	–	–
Hedge of a net investment	**–5**	**–**	**–**

Other equity components from active hedging relationships and those that had ended as of December 31, 2018 T132

in € million	Currency hedges	Interest rate hedges	Commodity price hedges
Carrying amount of other equity components from active hedging relationships	–40	–	1
Carrying amount of other equity components from hedging relationships that have ended	–	–	1
Cash flow hedges	**–40**	**–**	**2**
Carrying amount of other equity components from active hedging relationships	–4	–	–
Carrying amount of other equity components from hedging relationships that have ended	3	–	–
Hedge of a net investment	**–1**	**–**	**–**

An interest rate swap with a notional value of €650 million is used as a fair value hedge of the interest rate risk of a financial liability.

Fair value hedges recognized on the balance sheet T133

	Interest rate hedges	
in € million	2018	2019
Carrying amount of the hedged items on the balance sheet	649	648
Cumulative fair value hedge adjustment of active hedging relationships	–1	–2

To present the effectiveness of designated hedging relationships, the following table compares the changes in the fair value of the designated hedged items with the designated hedging instruments. No ineffective portions were recognized in profit or loss for any of the hedging relationships.

Effectiveness of the hedging relationships 2019 T134

in € million	Currency hedges	Interest rate hedges	Commodity price hedges
Change in the value of the hedged item	31	–	3
Changed in the designated value of the hedging instrument	–31	–	–3
Cash flow hedges	**–**	**–**	**–**
Change in the value of the hedged item	4	–	–
Changed in the designated value of the hedging instrument	–4	–	–
Hedge of a net investment	**–**	**–**	**–**
Change in the value of the hedged item	–	–	–
Changed in the designated value of the hedging instrument	–	–	–
Fair value hedges	**–**	**–**	**–**

Effectiveness of the hedging relationships 2018 T135

in € million	Currency hedges	Interest rate hedges	Commodity price hedges
Change in the value of the hedged item	198	–	–4
Changed in the designated value of the hedging instrument	–198	–	4
Cash flow hedges	**–**	**–**	**–**
Change in the value of the hedged item	–1	–	–
Changed in the designated value of the hedging instrument	1	–	–
Hedge of a net investment	**–**	**–**	**–**
Change in the value of the hedged item	–	–3	–
Changed in the designated value of the hedging instrument	–	3	–
Fair value hedges	**–**	**–**	**–**

9.4.5 Notes on financial risk management

As an international company, Evonik is exposed to financial risks in the normal course of business. A major objective of corporate policy is to minimize the impact of market, liquidity, and default risks on both the value of the company and profitability in order to check adverse fluctuations in cash flows and earnings without forgoing the opportunity to benefit from positive market trends. For this purpose, a systematic financial and risk management system has been established. Interest rate and exchange rate risks are managed centrally by the Finance division of Evonik Industries AG, while commodity risks are managed by the segments in accordance with established corporate policies.

The financial derivatives contracts used by Evonik are entered into exclusively in connection with a corresponding underlying transaction (hedged item) relating to normal operating business, which provides a risk profile directly opposite to that of the hedge. The instruments used are customary products found on the market. For the management of interest rates and exchange rates, they comprise currency swaps, forward exchange contracts, currency options, cross-currency interest rate swaps, and interest rate swaps. Commodity swaps are used to hedge the risk of fluctuations in the price of coal, natural gas, electricity, and petrochemical feedstocks. The procurement of emission allowances to meet obligations pursuant to section 6 of the German Greenhouse Gas Emissions Trading Act (TEHG) can be optimized through the use of emission allowance and emission reduction transactions based on swaps and futures.

Overview of financial risks T136

Risk	Exposure arising from	Measurement	Management
Market risk—foreign exchange	Off-balance-sheet transactions (firmly agreed or forecast) Recognized financial assets and liabilities denominated in currencies other than the company's functional currency	Cash flow forecasting Sensitivity analyses	Forward exchange contracts, currency options, currency swaps, cross-currency interest rate swaps
Market risk—risk of changes in variable interest rates	Non-current loans/bonds with variable interest rates	Sensitivity analyses	Interest rate swaps
Market risk—risk of changes in fixed interest rates	Non-current loans/bonds with fixed interest rates	Sensitivity analyses	Interest rate swaps
Market risk—impairment risk	Investments in equity instruments	Sensitivity analyses	Observation and portfolio decisions
Market risk—commodities	Purchase and sale of raw materials	Sensitivity analyses	Price escalation clauses, swaps
Liquidity risk	Unplanned liquidity requirements	Rolling cash flow forecasts	Cash and cash equivalents, availability of committed credit lines
Default risk	Cash and cash equivalents, trade accounts receivable, derivative financial instruments, debt instruments, and contract assets	Analysis of maturity structure Credit scoring/ratings	Diversification of bank deposits, credit lines, and letters of credit Investment guidelines for debt instruments

9.4.5.1 Market risk

Exchange rate risks relate to both the sourcing of raw materials and the sale of end-products in currencies other than the functional currency of the company concerned. One aim of currency risk management is to protect the company's operating business from fluctuations in earnings and cash flows resulting from changes in exchange rates. The opposite effects arising from procurement and sales activities are taken into account. Another objective of currency risk management is to eliminate the currency risk relating to financing transactions that are not denominated in the functional currency of the respective Group companies.

In the **management of currency risks,** Evonik distinguishes between risk positions recognized on the balance sheet and off-balance-sheet (i.e., firmly agreed or forecast) exposures. For currency hedging of current risk positions on the balance sheet, Evonik uses a portfolio approach where the hedged items and hedging instruments are accounted for separately. By contrast, micro hedging is applied for non-current loans and exposures arising from firmly agreed or forecast transactions. The hedging instrument and related hedged item are then designated in a formal hedge relationship (cash flow hedge accounting or net investment hedge accounting). This synchronizes the earnings impact of the hedging instruments with hedged items that can only be recognized on the balance sheet at a later date. In the case of hedges on loans, it allows the distribution of the cost of hedging on a straight-line basis over the term of hedging relationship. In individual cases, there may be a shift in the timing of the hedged item in forecast transactions. In this case, the hedging strategy is maintained unchanged, the amount exposed to the risk is updated, and the hedging transactions are adjusted.

In the **portfolio approach,** the net risk position in each foreign currency is determined for each company in the Evonik Group and then hedged via intragroup investment or borrowing via the cash pool. The net risk positions on cash pool balances at group level are hedged on the market on a currency-by-currency basis using external derivatives.

Gross income and expenses from currency translation of operating monetary assets and liabilities are netted; so are gross income and expenses from the corresponding operational currency hedging. The net result from the translation of operating monetary assets and liabilities and the net result of operational currency hedging calculated in this way are recognized in other operating income or other operating expense as appropriate. Gross income and expenses from the currency translation of financing-related risk positions and financing-related currency hedging are netted analogously. The resulting net results for currency translation and currency hedging are recognized in other financial income/expense. The net presentation of the results reflects both the management of risk positions in the Evonik Group and the economic substance.

Due to the application of hedge accounting for **micro-hedging** of foreign currency balance sheet exposure (for example, financing-related currency hedging of non-current loans through cross-currency interest rate swaps) and the hedging of planned or firmly agreed foreign currency cash flows (for example, hedging of forecast sales revenues), their hedge results are only reflected in profit or loss in any ineffective portions that are excluded from the hedge accounting relationship. By contrast, the effective results of micro-hedges reflected in cash flow hedge accounting and the cost of hedging (forward components, time value of options, and foreign currency basis spreads) are recognized in other equity components until the hedged transaction is realized. Subsequently, they are transferred to sales if they were used as a sales hedge, to inventories or the cost of sales if they were used to hedge cost risks relating to procurement, or to the initial carrying amount of property, plant and equipment if the purpose was to hedge the foreign currency risk relating to the procurement of assets of this type. In the case of currency hedges for loans for which cash flow hedge accounting is applied, the effective portion of the hedge is transferred from other equity components to offset the net result of currency translation of monetary assets and liabilities triggered by the hedged item; see note 6.9 p. 128 ff. (Other equity components). In addition, the currency risk relating to net investments in foreign operations are hedged and included in hedge account as hedges of a net investment.

The aim of **interest rate management** is to protect net income from the negative effects of fluctuations in market interest rates and the resulting changes in fair values or cash flows. Interest rate risk is managed using derivative and non-derivative financial instruments. The aim is to achieve an appropriate ratio of fixed rates (with interest rates fixed for more than one year) and variable rates (terms of less than one year), taking costs and risks into account. At year-end 2019, 98 percent (2018: 96 percent) of non-derivative financial instruments recognized as other financial liabilities were fixed-interest contracts. Taking financial derivatives into account, the proportion of fixed-interest financial instruments declines to 83 percent (2018: 79 percent). The bonds and money market paper recognized in securities and similar claims entail interest rate risks. These are minimized by a short investment horizon. The average interest rate duration is one year.

Several scenario analyses were carried out to **measure exchange rate and interest rate risk** as of December 31, 2019.

The most important currencies for Evonik are the US dollar (USD) and the Chinese renminbi yuan (CNY/CNH). CNH is the technical market designation for renminbi that are tradable and deliverable outside the territory of China. A sensitivity analysis was performed for these currencies as of December 31, 2019 by modeling a change of 5 percent and 10 percent in the exchange rate relative to all other currencies to simulate the possible loss of value of derivative and non-derivative financial instruments in the event of the appreciation or depreciation of these currencies. The percentage standard deviation of changes in exchange rates versus the euro in 2019 was 4.8 percent for the USD (2018: 6.7 percent), and 5.5 percent for the CNY/CNH (2018: 6.1 percent).

USD sensitivity analysis T137

	Dec. 31, 2018		Dec. 31, 2019	
in € million	Impact on income	Impact on equity	Impact on income	Impact on equity
+5%	4	–49	10	–41
–5%	–4	49	–10	41
+10%	8	–98	20	–83
–10%	–8	98	–20	83

CNY/CNH sensitivity analysis T138

	Dec. 31, 2018		Dec. 31, 2019	
in € million	Impact on income	Impact on equity	Impact on income	Impact on equity
+5%	1	–11	–	–11
–5%	–1	11	–	11
+10%	1	–22	–1	–21
–10%	–1	22	1	21

Several scenario analyses were carried out to measure interest rate risk as of December 31, 2019. These analyzed shifts of 50, 100 and 150 basis points in EUR interest rates or the EUR interest rate curve to simulate the possible impact on earnings and equity of a loss of value of derivative and non-derivative financial instruments.

EUR interest rate sensitivity analysis T139

	Dec. 31, 2018		Dec. 31, 2019	
in € million	Impact on income	Impact on equity	Impact on income	Impact on equity
+50 basis points	–	–1	–6	–
–50 basis points	–	1	6	–
+100 basis points	–	–2	–12	–1
–100 basis points	–	2	12	1
+150 basis points	–	–3	–18	–1
–150 basis points	–	3	18	1

Impairment risks relating to exchange-listed equity instruments result from company-specific data of individual funds and listed companies and from the general risk of possible negative developments on the equity market. For unlisted equity instruments, the risk results from company-specific aspects and the general economic situation. The risk is measured using sensitivity analysis and risk management comprises constant observation and the related portfolio decisions.

Commodity risks result from changes in the market prices for the purchase and sale of raw materials. Raw materials were purchased principally to meet in-house demand. Other factors of importance for Evonik's risk position are the availability and price of relevant raw materials, starting products, and intermediates. In particular, raw material prices of significance to the Evonik Group are dependent on exchange rates and the price of crude oil. Commodity management, which is the responsibility of the segments, involves identifying procurement risks and defining effective measures to minimize them. For example, price escalation clauses and swaps are used to reduce price volatility. Pricing and procurement risks are reduced through worldwide procurement and optimized processes to ensure immediate sourcing of additional raw material requirements. Further, the use of alternative raw materials is examined for various production processes and Evonik is working on the development of alternative production technologies.

Financial derivatives were also used on a small scale to hedge procurement price risks. If the price of natural gas had been 10 percent higher or lower, the impact of the fluctuation in the value of the commodity derivatives on other equity components from hedging components would have been +€1 million or –€1 million at year-end 2019, as in 2018. As in the previous year, the impact on income was immaterial.

9.4.5.2 Liquidity risk

Liquidity risk is managed through business planning to ensure that the funds required to finance the current operating business and current and future investments at all companies in the Evonik Group are available at the right time and in the right currency at optimum cost. Liquidity requirements for business operations, investments, and other financial activities are derived from a financing status and liquidity planning, which form part of liquidity risk management. Liquidity is pooled in a central cash management pool where this makes economic sense and is legally permissible. Central liquidity risk management facilitates low-cost borrowing and advantageous offsetting of financial requirements.

As of December 31, 2019, Evonik had cash and cash equivalents amounting to €1,165 million and current securities totaling €1,203 million. In addition, Evonik has a €1.75 billion revolving credit facility as a central source of liquidity. This credit facility was agreed in June 2017. Following exercise of the second and final extension option in June 2019, it runs until June 2024. It was not utilized in 2019 and does not contain any covenants requiring Evonik to meet specific financial ratios.

In addition, there are various credit lines to meet local requirements, especially in the Asia-Pacific region. As of December 31, 2019, €408 million of the total amount had not been drawn.

The table shows the remaining maturity of the non-derivative financial instruments based on the agreed dates for interest and redemption payments.

Remaining maturity of non-derivative financial instruments 2019 T140

	Payments due in				Dec. 31, 2019
in € million	up to 1 year	more than 1 and up to 3 years	more than 3 and up to 5 years	more than 5 years	
Trade accounts payable	**1,324**	**–**	**–**	**–**	**1,324**
Bonds	516	1,199	1,521	515	3,751
Liabilities to banks	124	19	6	1	150
Loans from non-banks	18	–	–	–	18
Lease liabilities	124	179	124	390	817
Miscellaneous other financial liabilities	53	12	–	–	65
Other financial liabilities	**835**	**1,409**	**1,651**	**906**	**4,801**

Remaining maturity of non-derivative financial instruments 2018 T141

	Payments due in				Dec. 31, 2018
€ million	up to 1 year	more than 1 and up to 3 years	more than 3 and up to 5 years	more than 5 years	
Trade accounts payable	**1,493**	**–**	**–**	**–**	**1,493**
Bonds	16	1,209	1,289	1,272	3,786
Liabilities to banks	168	48	8	1	225
Loans from non-banks	18	–	–	–	18
Miscellaneous other financial liabilities	52	–	–	–	52
Other financial liabilities	**254**	**1,257**	**1,297**	**1,273**	**4,081**

A disclosure on the maturity of existing financial guarantees can be found in the section on default risk below. The Evonik Group met all payment terms agreed for its financial liabilities.

The breakdown of the sum of interest and redemption payments by maturity in the following table relates to derivative financial instruments with positive and negative fair values. The table shows the net value of cash inflows and outflows. Since netting was not agreed for forward exchange contracts, currency swaps, interest rate swaps, or cross-currency interest rate swaps, they are presented as gross amounts:

Remaining maturity of derivative financial instruments 2019

T142

in € million	Payments due in up to 1 year	more than 1 and up to 3 years	more than 3 years	Dec. 31, 2019
Cash flow interest rate swaps	2	–	–	2
Cross-currency interest rate swaps	−12	32	–	20
Cash inflows	3	499	–	502
Cash outflows	−15	−467	–	−482
Forward exchange contracts, currency options, and currency swaps	16	−3	–	13
Cash inflows	1,898	195	–	2,093
Cash outflows	−1,882	−198	–	−2,080
Receivables from derivatives	**6**	**29**	**–**	**35**
Forward exchange contracts, currency options, and currency swaps	−71	−1	–	−72
Cash inflows	3,417	28	–	3,445
Cash outflows	−3,488	−29	–	−3,517
Commodity derivatives	−3	−1	–	−4
Liabilities from derivatives	**−74**	**−2**	**–**	**−76**

Remaining maturity of derivative financial instruments 2018

T143

in € million	Payments due in up to 1 year	more than 1 and up to 3 years	more than 3 years	Dec. 31, 2018
Cash flow interest rate swaps	2	2	–	4
Cross-currency interest rate swaps	25	21	4	50
Cash inflows	526	516	122	1,164
Cash outflows	−501	−495	−118	−1,114
Forward exchange contracts and currency swaps	11	−5	–	6
Cash inflows	1,393	173	–	1,566
Cash outflows	−1,382	−178	–	−1,560
Receivables from derivatives	**38**	**18**	**4**	**60**
Cross-currency interest rate swaps	−34	−3	–	−37
Cash inflows	473	84	–	557
Cash outflows	−507	−87	–	−594
Forward exchange contracts and currency swaps	−98	−5	–	−103
Cash inflows	2,993	101	–	3,094
Cash outflows	−3,091	−106	–	−3,197
Commodity derivatives	−1	–	–	−1
Liabilities from derivatives	**−133**	**−8**	**–**	**−141**

In the reporting period, receivables from cross-currency interest rate swaps comprised transactions with negative net cash flows resulting from positive inflows in euros and negative outflows in foreign currencies. In the maturity bracket up to one year, the foreign currency outflows translated into euros exceed the actual euro inflows. As a result of the translation and discounting of the higher notional value of the swap in later maturity brackets, overall the fair value of the cross-currency interest swaps is positive. This effect was also the reason for the negative net cash flow for payments for receivables from forward exchange contracts, options, and currency swaps in the maturity band more than 1 and up to 3 years in both 2019 and 2018.

9.4.5.3 Default risk

The default risk (= credit risk) is managed at group level. Three categories are defined for credit risk management, each of which is treated separately on the basis of its specific features. The categories are financial counterparties, (generally banks but also other financial institutions and industrial counterparties, insofar as derivatives transactions are concluded with them), other counterparties (mainly debtors and creditors), and countries. Credit risks are defined generally as a potential threat to earnings power and/or corporate value resulting from a deterioration of the respective contractual counterparty. More precisely, it means defaulting on payments as a result of financial difficulties/insolvency by the counterparty. On principle, Evonik does not hold any purchased or originated credit-impaired financial assets. To monitor any risk concentrations, the individual risk limits are set for business partners on the basis of internal and external ratings.

The credit risk of **financial counterparties** also includes additional earnings and value effects, which may be either direct (for example, a security held by a counterparty loses value as a result of a rating downgrade) or indirect due to a deterioration in the credit rating (for example, reduction in the probability that a counterparty will be able to fulfill a future obligation to Evonik—for example, from a guarantee bond or a loan commitment—in the manner originally agreed).

In addition, a specific limit is set for financial counterparties for each type of risk (money market, capital market, and derivatives). Maximum limits for each contracting party are set on the basis of the creditworthiness analyses. These are predominantly based on ratings and our own internal credit analysis. In addition, the development of the price of CDS (credit default swaps) and equity prices (where available) is analyzed. Country limits are set for the money and capital markets to ensure diversification of country risks.

In the case of **debtors, creditors, and other counterparties,** credit risk management also covers possible damage from orders that have been placed but not yet fulfilled and further potential damage to Evonik resulting from non-performance of a counterparty's supply, service, or other obligation.

An internal limit system is used for risk assessment and monitoring. Political risk (country risk) is also taken into account for export orders so that the overall risk assessment takes account of both political and economic risk factors. On the basis of this analysis, a maximum default risk is set for the contracting party. The credit standing of contracting parties is updated constantly via ratings or scoring processes. The internal credit scoring model used for this is shown in the next table. It comprises six risk categories (1 = high creditworthiness; 6 = low creditworthiness).

Scoring model for credit default risk T144

Risk category	Attributes
1 = high creditworthiness	• Very good payment profile in the past year • Long-term business relationships • Countries with good to very good economic and political risk assessments
2 = good creditworthiness	• Good payment profile in the past year • Business relationships over several months • Countries with good economic and political risk assessments
3 = medium creditworthiness	• Payments are made regularly • Relatively new business relationships • Countries with weaker economic and political prospects
4–6 = low creditworthiness	• Payments are sometimes unpunctual • Countries with economic and political risks

Evonik applies the **IFRS 9 impairment model for expected credit losses** as follows: For financial assets that are subject to the impairment rules of IFRS 9, loss allowances are recognized for expected credit losses. At Evonik, these include loans carried at amortized cost, miscellaneous other financial assets, which are subject to the general impairment approach, and trade accounts receivable (with and without financing components), receivables from finance leases, and contract assets (with and without financing components), for which the simplified approach using an impairment matrix is applied.

As a matter of principle, Evonik only places investments with financial counterparties with an investment grade rating. A low default risk **(level 1 of the general approach)** is assumed for financial counterparties that have an investment grade rating (at least Baa3 from Moody's or BBB- from Standard & Poor's or Fitch). Other instruments are considered to have a low risk of default if the risk of non-performance is low and the issuer is able to meet its contractual payment obligations at all times. The 12-month expected credit loss is calculated on the basis of the probability of default for each CDS as of the reporting date and a group-wide LGD (loss given default) of 40 percent is assumed. Forward-looking information is implicitly included in the CDS. The exposure at default (EAD) is the nominal value. A review of whether there has been a significant increase in the default risk since the last assessment **(level 2 of the general approach)** must be made at least quarterly. Transfer to level 2 takes place if payment is 30 days overdue. Unless there were indicators of an impairment of creditworthiness at an earlier period **(level 3 of the general approach),** impairment is generally assumed when payments are more than 90 days overdue. Financial assets that are significantly overdue, possibly by more than 90 days as a result of the customer structure, or where insolvency or similar proceedings have been initiated against the debtor, are tested individually for impairment.

The **impairment matrix used in the simplified approach** is based on the lifetime expected credit losses. It takes account of all components of receivables that are exposed to a risk, except where they are subject to an individual loss allowance. The matrix has a two-step structure. Components of receivables that are not exposed to credit losses (especially any value-added tax or sales tax and receivables covered by credit insurance) are disregarded when calculating the loss allowance. In the first step (ECL1), for all receivables deemed to be at risk, the expected credit loss is determined for all customers on the basis of the customer risk category. In a second step, for all customer in risk categories 4–6, an additional loss allowance is calculated on the basis of a past-due analysis (ECL2). The expected loss ratios are based on the payment profiles for sales in the past five years and the corresponding defaults in the same period. The historical loss ratios are adjusted to reflect current and future-oriented information on macroeconomic factors that affect the ability of customers to settle receivables. The determination of loss allowances for receivables from finance leases and contract assets is analogous to the procedure for trade accounts receivable, based on common risk characteristics and number of days overdue, because they essentially have the same risk characteristics and expected loss ratios as trade accounts receivable. Therefore, the expected loss ratios for trade accounts receivable represent an appropriate approximation for contract assets and receivables from finance leases.

In principle, cash and cash equivalents are also subject to the impairment provisions of IFRS 9. However, since they are due daily, impairment losses are normally immaterial.

As of December 31, 2019, the **general approach** was applied for loans amounting to €39 million (2018: €60 million) and miscellaneous other financial assets of €14 million (2018: €13 million), which are measured at amortized cost. Of these, loans amounting to €39 million and miscellaneous other financial assets totaling €3 million have an investment grade rating. Miscellaneous other financial assets totaling €11 million do not have an external rating. Analogously to the previous year, all loans and other financial assets have a low absolute default risk, so they were allocated to level 1, for which only the 12-month expected credit loss is calculated. No significant increase in the credit risk was identified in fiscal 2019. As of December 31, 2019, the allocation to level 1 was therefore unchanged for both loans and miscellaneous other financial assets. Calculation of the 12-month expected credit loss did not result in a material impairment either, so we do not present a table showing the change in loss allowances. No significant changes were made to the estimation method or assumptions during the reporting period. There were no overdue items.

As of December 31, 2019, the **simplified approach** was applied for trade accounts receivable of €1,569 million (2018: €1,686 million), receivables from finance leases of €3 million (2018: €6 million), and contract assets of €18 million (2018: €11 million). No significant changes were made to the estimation method or assumptions during the reporting period. The loss allowances for receivables from finance leases and contract assets calculated on this basis and the change in these loss allowances are not material.

Loss allowances for financial assets—simplified approach (loss allowance matrix) T145

in € million	Trade accounts receivable
As of January 1, 2018	**5**
Change	2
As of December 31, 2018	**7**
Change	2
As of December 31, 2019	**9**

Credit loss matrix as of December 31, 2019

T146

in € million	Credit default rate in %	Gross carrying amount	Lifetime expected credit loss based on credit risk criteria	Lifetime expected credit loss based on days overdue: 1–180 days	181–270 days	271–365 days	> 365 days
Receivables with a low default risk (category 1)	–	59	–	–	–	–	–
Receivables with a low default risk (category 2)	–	343	–	–	–	–	–
Receivables with a low default risk (category 3)	–	474	–	–	–	–	–
Receivables with a high default risk (categories 4–6)	2.4	375	2	1	–	–	6
Total		**1,251**	**2**	**1**	**–**	**–**	**6**

For receivables in categories 1–3, the lifetime expected credit losses based on credit risk criteria were less than €0.4 million. Therefore, they are not shown separately in the table.

Credit loss matrix as of December 31, 2018

T147

in € million	Credit default rate in %	Gross carrying amount	Lifetime expected credit loss based on credit risk criteria	Lifetime expected credit loss based on days overdue: 1–180 days	181–270 days	271–365 days	> 365 days
Receivables with a low default risk (category 1)	–	37	–	–	–	–	–
Receivables with a low default risk (category 2)	–	384	–	–	–	–	–
Receivables with a low default risk (category 3)	–	528	–	–	–	–	–
Receivables with a high default risk (categories 4–6)	1.5	461	2	1	–	1	3
Total		**1,410**	**2**	**1**	**–**	**1**	**3**

For receivables in categories 1–3, the lifetime expected credit losses based on credit risk criteria were less than €0.5 million. Therefore, they are not shown separately in the table.

Loss allowances for financial assets that have to be tested individually for impairment T148

in € million	Trade accounts receivable
As of January 1, 2018	**40**
Changes in the scope of consolidation	–
Additions	10
Utilization	–12
Reversal	–14
As of December 31, 2018	**24**
Changes in the scope of consolidation	–3
Additions	7
Utilization	–9
Reversal	–4
As of December 31, 2019	**15**

In the reporting period, no write-downs were made on financial assets where the amount was still outstanding under contract law and the receivables were still subject to enforcement proceedings.

Receivables are only derecognized when, based on an appropriate assessment, realization is no longer expected. This is the case, in particular, when insolvency proceedings in respect of the debt have been completed.

At year end, trade accounts receivable totaling €415 million (2018: €473 million) were covered by credit insurance (after factoring out the deductible). The maximum default risk was €1,154 million (2018: €1,213 million).

As of December 31, 2019, there was no collateral for any further financial assets subject to the scope of the impairment model. Their maximum default rate is therefore their carrying amount. As in the previous year, no terms were renegotiated for non-current loans or trade accounts receivable not yet due.

All further financial assets that are not subject to the IFRS 9 impairment model are carried at fair value through profit or loss. The default risk of these instruments is therefore their carrying amount. There is no default risk relating to other investments because they are equity instruments.

Owing to the diversity of business and the large number of customers and financial counterparties, there were no significant cluster risks.

The **default risk on financial derivatives** is equivalent to their positive fair value. This risk is minimized by setting high standards for the creditworthiness of counterparties. Only common instruments found on the market with sufficient liquidity are used. Consequently, no material risk of default is expected in this field.

Evonik concludes master netting arrangements and similar agreements for financial derivatives on a limited scale. These mainly come into effect in the event of the insolvency of a counterparty. The resulting net positions of receivables and liabilities from derivatives are presented in the following tables:

Offsetting rights for financial assets and liabilities T149

	Receivables from derivatives		Liabilities from derivatives	
in € million	Dec. 31, 2018	**Dec. 31, 2019**	Dec. 31, 2018	**Dec. 31, 2019**
Netting of financial assets/liabilities				
Gross amount of transactions affected by netting arrangements	117	57	104	64
Amounts set off in accordance with IAS 32	–	–	–	–
Amounts recognized for the relevant transactions	117	57	104	64
Affected by enforceable master netting arrangements or similar arrangements				
Receivables/liabilities that do not fully meet the offsetting criteria	42	22	42	22
Amounts related to financial collateral	–	–	–	–
Net amount	**75**	**35**	**62**	**42**

Further, there is a default risk relating to the granting of financial guarantees. As of the reporting date, guarantees with a total nominal value of €35 million (2018: €33 million) had been granted to a joint venture. This amount is also the maximum default risk; see note 9.6 p. 168 f. In principle, these guarantees can be called in full at any time during their residual term (2021 or 2022), as soon as the contractual conditions are met. At present, there is no indication that these financial guarantees will result in a loss.

9.5 Related parties

In addition to the subsidiaries included in the consolidated financial statements, the Evonik Group maintains relationships with related parties.

Related parties comprise RAG-Stiftung, Essen (Germany), as a shareholder of Evonik Industries AG, due to its controlling influence, fellow subsidiaries of Evonik owned by RAG-Stiftung, and associated companies and joint ventures of Evonik which are recognized at equity.

The dividend for fiscal 2018 was paid in the second quarter of 2019, following the adoption of the resolution by the annual shareholders' meeting on May 28, 2019. RAG-Stiftung, Essen (Germany) received €344 million.

In 2019, Evonik received dividends of €14 million (2018: €9 million), mainly from associates.

The contingent liability shown in the joint ventures column as of December 31, 2019 comprises €33 million resulting from a guarantee granted to secure a loan for the joint venture Saudi Acrylic Polymers Company, Ltd., Jubail (Saudi Arabia). In addition, two guarantees totaling €2 million were provided as collateral for a facility for hedging transactions at the joint venture LiteCon GmbH, Hönigsberg/Mürzzuschlag (Austria).

The Federal Republic of Germany and the federal states of North Rhine-Westphalia and Saarland are also classified as related parties as they are able to exercise a significant influence on RAG-Stiftung through their membership of the board of trustees of RAG-Stiftung.

Transactions effected between Evonik and these federal and state governments and their subsidiaries or joint ventures in the reporting period comprised generally available government grants and subsidies, and investments in their securities. Further, customary business relationships were maintained with the Deutsche Bahn Group and the Duisport Group.

Individuals defined as related parties include members of the management who are directly or indirectly responsible for corporate planning, management, and oversight, and members of their families. At Evonik, these parties comprise members of the executive board and supervisory board of Evonik Industries AG, members of the executive board and board of trustees of RAG-Stiftung, and other management members who hold key positions in the Evonik Group.

Business relations with related parties T150

	RAG-Stiftung		Fellow subsidiaries		Joint ventures		Associates	
in € million	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**
Goods and services supplied	–	1	1	2	28	28	7	3
Goods and services received	–	–	–23	–5	–	–	–2	–1
Other income	–	–	–	–	3	6	6	8
Receivables as of December 31	–	–	–	–	4	2	1	–
Liabilities as of December 31	–	–	–2	–1	–21	–38	–1	–
Contingent liabilities as of December 31	–	–	–	–	–33	–35	–	–

Remuneration paid to related parties T151

in €'000	Executive Board of Evonik Industries AG 2018	Executive Board of Evonik Industries AG 2019	Supervisory Board of Evonik Industries AG 2018	Supervisory Board of Evonik Industries AG 2019	Other management members 2018	Other management members 2019	Total 2018	Total 2019
Short-term remuneration	8,915	8,361	3,469	3,383	16,646	13,683	29,030	25,427
Share-based payment	566	2,044	–	–	567	1,653	1,133	3,697
Current service cost for pensions and other post-employment benefits	2,431	2,540	–	–	1,555	1,612	3,986	4,152
Termination benefits	–	–	–	–	–	–	–	–

Short-term remuneration comprises both amounts not related to performance and short-term performance-related payments. As of December 31, 2019, there were provisions of €3,015 thousand (2018: €4,375 thousand) for short-term performance-related remuneration of members of the executive board, and €7,872 thousand (2018: €12,525 thousand) for other management members.

At year-end 2019, provisions for **share-based payments** amounted to €6,473 thousand (2018: €7,915 thousand) for members and former members of the executive board, and €4,043 thousand (2018: €4,880 thousand) for other management members. The share-based payments are expenses incurred in 2019 for LTI tranches from 2015 to 2019.

The present value of **pension obligations** (defined benefit obligations) was €23,998 thousand (2018: €17,671 thousand) for the executive board and €38,884 thousand (2018: €29,009 thousand) for other members of the management.

Further, the employee representatives elected to the supervisory board of Evonik Industries AG continued to receive the regular salary agreed in their employment contract. The level of their salary provided appropriate remuneration for the exercise of their functions and tasks in the company.

Apart from the relationships stated above, Evonik did not have any other significant business relationships with related parties.

9.6 Contingent liabilities, contingent receivables, and other financial commitments

Contingent liabilities, except for those recognized in connection with a business combination, are possible or present obligations arising from past events where an outflow of resources is not improbable but which are not recognized on the balance sheet.

Contingent liabilities mainly comprise guarantee and warranty obligations totaling €58 million (2018: €56 million). They include guarantees of €35 million in favor of joint ventures, see note 9.5 p. 167 f., and indemnity obligations of €7.3 million in connection with divestments.

Through its corporate venture capital activities, the Evonik Group also invests indirectly in specialized technology funds. Evonik holds between 0.82 percent and 25 percent of the respective (sub-) fund assets and recognizes them in financial assets as securities and similar claims with a total carrying amount of €21 million (2018: €15 million). As a result of contractual agreements, there are obligations to make payments into the fund assets of a maximum of €17 million (2018: €14 million) at the request of the fund management companies. The maximum default risk arising from these investments is the sum of the carrying amounts on the balance sheet and the outstanding payment obligations. There is no intention of providing further financial or other support.

Furthermore, following completion of administrative proceedings outside Germany, it is not improbable that individual customers could file claims for compensation. Since the probability is considered to be low, Evonik is of the opinion that the risk is in the low double-digit million euro range.

There were no **contingent receivables** as of December 31, 2019.

Other financial commitments result from non-onerous executory contracts, continuous obligations, statutory requirements, and other commercial obligations that are not already included in the liabilities shown on the balance sheet or in contingent liabilities.

The other financial commitments are order commitments for the purchase of intangible assets, property, plant and equipment. As of the reporting date, the Group had commitments of €1 million (2018: €1 million) to purchase intangible assets and of €314 million (2018: €206 million) to purchase property, plant and equipment.

9.7 Events after the reporting date

On November 7, 2018, Evonik signed an agreement to acquire **PeroxyChem,** Philadelphia (Pennsylvania, USA) from One Equity Partners, Chicago (Illinois, USA). PeroxyChem is a manufacturer of hydrogen peroxide and peracetic acid. The acquisition was initially delayed because the FTC in the USA filed a lawsuit to block the transaction. The lawsuit was dismissed in January 2020, and the acquisition was then closed on February 3, 2020.

The acquisition comprised the purchase of 100 percent of the shares in 16 companies, a 50 percent share deal, and a 20 percent share deal. To meet antitrust requirements, the 100 percent stake in a Canadian PeroxyChem company had to be sold promptly.

PeroxyChem will be integrated into the Resource Efficiency segment. This acquisition extends Evonik's portfolio of environment-friendly, high-growth specialty applications. The company has above-average growth rates, low capital intensity, and low cyclical exposure.

The amount paid for the acquisition was €583 million. This was contractually agreed in US dollars and settled out of cash and cash equivalents. This amount could change as a result of finalization of the agreed purchase price adjustments, which relate, among other things, to net working capital, cash and cash equivalents, and liabilities as of the acquisition date. The costs shown in other operating expense in connection with the acquisition were €22 million in 2019 (2018: €8 million) and are contained in the adjustments.

Initial, provisional analyses by external valuation experts indicate that the hidden reserves to be disclosed in connection with the purchase price allocation mainly relate to intangible assets such as customer relationships and technology, and to inventories and property, plant and equipment. A report on the purchase price allocation is not yet available. In accordance with IFRS 3.B66, it is not possible to make further disclosures because the necessary information will only become available in the course of the purchase price allocation.

On February 14, 2020, Evonik reduced its stake in the listed company **Borussia Dortmund** GmbH & Co. KGaA from 14.8 percent to 9.8 percent. This transaction was connected to a change in the sponsoring concept, which resulted in a reduction in advertising rights.

10. Disclosures in compliance with German legislation

10.1 Information on shareholdings pursuant to section 313 paragraph 2 of the German Commercial Code (HGB)

The overview of all companies included in the consolidated financial statements and full details of the shareholdings in accordance with section 313 paragraph 2 of the German Commercial Code (HGB), along with details of the subsidiaries that are exempt from the obligation to prepare and publish financial statements, forms part of the audited consolidated financial statements submitted to the electronic Federal Gazette (Bundesanzeiger).

The complete list of shareholdings is also available on the internet. **www.evonik.com/list-of-shareholdings**

Evonik holds more than 5 percent of the voting rights in the following stock corporations:

Disclosure pursuant to section 313 paragraph 2 nos. 4 and 5 of the German Commercial Code (HGB) T152

	Shareholding in %		Income after taxes		Equity	
in € million	2018	**2019**	2018	**2019**	2018	**2019**
Borussia Dortmund GmbH & Co. KGaA	14.78	14.78	26.7	26.2	369	390
Vivawest GmbH [a]	25.00	15.00	217.6	165.6	1,833	1,822

[a] Based their nature as plan assets, shares amounting to 7.5 percent of this shareholding (2018: 25 percent) are measured at fair value in accordance with IAS 19.

10.2 Personnel expense and number of employees pursuant to section 314 paragraph 1 no. 4 of the German Commercial Code (HGB)

The disclosures pursuant to section 314 paragraph 1 no. 4 contain the methacrylates business both in 2018 and in 2019 until closure of the divestment.

Personnel expense T153

in € million	2018	2019
Wages and salaries	2,876	2,633
Social security contributions	414	416
Pension expenses	221	213
Other personnel expense	84	86
	3,595	**3,348**

Wages and salaries also include expenses related to restructuring.

The net interest expense for pension provisions is shown in the financial result; see note 5.5 p. 117.

Headcount (annual average) T154

No. of employees	2018	2019
Nutrition & Care	8,248	8,142
Resource Efficiency	10,263	10,213
Performance Materials	4,212	3,095
Services	12,915	12,512
Corporate, other operations	563	513
	36,201	**34,475**

The companies included in the consolidated financial statements on a pro rata basis do not have any employees.

10.3 Remuneration of the executive board and supervisory board pursuant to section 314 paragraph 1 no. 6 of the German Commercial Code (HGB)

Remuneration paid to the members of the executive board of Evonik Industries AG for their work in 2019 amounted to €12,387 thousand (2018: €11,969 thousand). The figure for 2019 includes bonus payments of €594 thousand for the previous year, for which no provision was established in 2018.

Further details, including an individual breakdown of remuneration, can be found in the remuneration report in the combined management report.

Total remuneration of former members of the executive board and their surviving dependents was €2,849 thousand in 2019 (2018: €1,872 thousand).

As of the balance sheet date, the present value of pension obligations (defined benefit obligations) for former members of the executive board and their surviving dependents amounted to €86,502 thousand (2018: €79,549 thousand).

The remuneration of the supervisory board for 2019 totaled €3,383 thousand (2019: €3,469 thousand).

10.4 Declaration on the German Corporate Governance Code

In December 2019, the executive board and supervisory board of Evonik Industries AG submitted the declaration required by section 161 of the German Stock Corporation Act (AktG) and made it permanently available to the public on the company's website. **www.evonik.com/declaration-on-corporate-governance**

10.5 Auditor's fees pursuant to section 314 paragraph 1 no. 9 of the German Commercial Code (HGB)

The auditor for the consolidated financial statements of the Evonik Group was PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (PwC), Frankfurt (Germany), Düsseldorf branch.

The fees charged by the PwC group for auditing financial statements mainly comprised expenses for the statutory audit of the separate and consolidated financial statements of Evonik Industries AG and its German and foreign subsidiaries, reviews of consolidated interim financial statements, audit-related support in connection with the change in the structure of the Evonik Group, and the audit of information systems and processes. The fees recognized as other audit-related services mainly relate to services in connection with regulatory and statutory requirements and the divestment of the methacrylates business. The other services were principally project-related consultancy services in connection with the change in the structure of the Evonik Group, and optimization and management of business processes.

Auditor's fees T155

	Germany		Other countries		Total fees	
in € million	2018	**2019**	2018	**2019**	2018	**2019**
Auditing of financial statements	4.7	4.2	4.3	4.0	9.0	8.2
Other audit-related services	0.7	1.2	–	0.2	0.7	1.4
Tax consultation services	–	–	–	–	–	–
Other services	1.6	1.4	–	0.1	1.6	1.5
	7.0	**6.8**	**4.3**	**4.3**	**11.3**	**11.1**

Responsibility statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position, and profit or loss of the Evonik Group in accordance with German accepted accounting principles and the management report for the Group, which is combined with the management report for Evonik Industries AG, includes a fair review of the development and performance of the business and the position of the Evonik Group, together with a description of the material opportunities and risks associated with the expected development of the Evonik Group.

Essen, February 19, 2020

Evonik Industries AG
The executive board

Kullmann Dr. Schwager

Wessel Wolf

SUPPLEMENTARY INFORMATION

Independent auditor's report

To Evonik Industries AG, Essen

Report on the audit of the consolidated financial statements and of the group management report

Audit Opinions

We have audited the consolidated financial statements of Evonik Industries AG, Essen, and its subsidiaries (the Group), which comprise the balance sheet as at 31 December 2019, and the statement of comprehensive income, income statement, statement of changes in equity and statement of cash flows for the financial year from 1 January to 31 December 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Evonik Industries AG, which is combined with the Company's management report, for the financial year from 1 January to 31 December 2019. In accordance with the German legal requirements, we have not audited the content of those parts of the group management report listed in the "Other Information" section of our auditor's report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2019, and of its financial performance for the financial year from 1 January to 31 December 2019, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of those parts of the group management report listed in the "Other Information" section of our auditor's report.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). We performed the audit of the consolidated financial statements in supplementary compliance with the International Standards on Auditing (ISAs). Our responsibilities under those requirements, principles and standards are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2019. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our view, the matters of most significance in our audit were as follows:

❶ Recoverability of goodwill
❷ Pension provisions
❸ Sale of the methacrylates business

Our presentation of these key audit matters has been structured in each case as follows:

① Matter and issue
① Audit approach and findings
① Reference to further information

Hereinafter we present the key audit matters:

❶ Recoverability of goodwill

① In the consolidated financial statements of Evonik Industries AG, goodwill amounting in total to EUR 4.57 billion is reported under the "Intangible assets" balance sheet item, representing 21 % of consolidated total assets. Goodwill is tested for impairment on the measurement reporting date or when there are indications that goodwill may be impaired. The result of this measurement depends to a large extent on the executive directors' assessment of future cash inflows and the discount rate used and is subject to considerable uncertainty. Against this background and due to the underlying complexity of the measurement of this significant item in terms of its amount, this matter was of particular significance for our audit.

② As part of our audit, we assessed the methodology used for the purposes of performing the impairment tests, among other things. We assessed the appropriateness of the expected future cash inflows used in the impairment tests in financial year 2019, among other things, by comparing this data with the current budgets in the medium-term business plan adopted by the executive directors and approved by the supervisory board, and by reconciling it with general and sector-specific market expectations. We discussed supplementary adjustments to the medium-term plan for the purposes of the impairment test with the specialist departments responsible and assessed their appropriateness. In addition we assessed the appropriate consideration of the costs for group functions. With the knowledge that even relatively small changes in the discount rate applied can have material effects on the value of the entity calculated using this method, we focused our testing in particular on the determination of the parameters used for the discount rate applied, including the average cost of capital, and evaluated the measurement model. Due to the materiality of goodwill and the fact that its measurement also depends on economic conditions which are outside of the Company's sphere of influence, in addition to the Company's analyses we carried out our own sensitivity analyses for the cash-generating units and found, based on the information available, that the respective items of goodwill are sufficiently covered by the discounted future net cash inflows. Overall, the measurement parameters and assumptions used by the executive directors are in line with our expectations and are also within the ranges considered by us to be reasonable.

③ The Company's disclosures on goodwill are contained in sections 6.1 "Intangible Assets" and 6.5 "Impairment test pursuant to IAS 36" of the notes to the consolidated financial statements.

❷ Pension provisions

① In the consolidated financial statements of Evonik Industries AG, pension provisions of EUR 3.97 billion are reported. For all defined benefit pension plans, the present value of the obligations amounts to EUR 12.23 billion, the fair value of the plan assets to EUR 8.36 billion and the effect of the asset ceiling to EUR 0.10 billion. Most of these amounts relate to pension commitments in Germany, the USA and the United Kingdom, with a smaller amount of additional obligations from medical care plans in the USA. Obligations from defined-benefit pension plans and the medical care plans are measured using the projected unit credit method in accordance with IAS 19. This requires assumptions to be made in particular about long-term salary and pension increases and average life expectancy, as well as the cost trend for medical care plans. Furthermore, the discount rate applied as of the balance sheet date must be determined by reference to market yields on high-quality corporate bonds with matching currencies and terms which are consistent with the expected maturities of the obligations. Changes to these actuarial assumptions are recognized in other comprehensive income as actuarial gains or losses. Actuarial losses arising in respect of the obligations in the past financial year amounted to EUR 1.36 billion. In our view, these matters were of particular significance in the context of our audit because the recognition and measurement of this significant item in terms of its amount are based to a large extent on estimates and assumptions made by the executive directors.

② Our audit included evaluating the actuarial expert reports obtained by the respective Group companies and the technical competence of the actuarial expert, among other things. Given the special features of the actuarial calculations, we received support from our internal pension specialists for this purpose. With their assistance, we assessed whether the valuation methods on which the valuations were based as well as the valuation parameters used were appropriate and complied with the relevant standards. In addition, we analyzed the development of the obligations and the cost components on the basis of the actuarial expert reports in the light of changes occurring in the valuation parameters and the changes in the numerical data, and assessed their plausibility. Finally, we reconciled the accounting entries for the provisions and the disclosures in the notes based on the actuarial expert reports. We evaluated an internal company valuation available to us for the audit of the fair value of the equity interest in Vivawest GmbH contained in the plan assets. We also obtained bank confirmations for the fair values of the quoted securities held directly, fund units and bank balances included in the plan assets. In the case of quoted securities for which the bank confirmations did not include fair values, unquoted bonds and structured products held directly as well as fund units, we assessed the methods on which the respective valuation was based and the valuation parameters used on a sample basis with the assistance of our internal specialists. Based on our audit procedures, we were able to satisfy ourselves that the estimates applied and assumptions made by the executive directors were justified and sufficiently documented.

③ The Company's disclosures relating to the pension provisions are contained in section 6.10 "Provisions for pensions and other post-employment benefits" of the notes to the consolidated financial statements.

❸ Sale of the methacrylates business

① Evonik Industries AG sold its methacrylates business to Advent International Corporation, Boston (Massachusetts, USA) pursuant to the sales agreement dated 4 March 2019. The sale was closed on 31 July 2019. The preliminary selling price of EUR 2.4 billion less costs to sell resulted in a net disposal gain after taxes of EUR 1.3 billion. Until completion of the sale and the associated deconsolidation, the methacrylates business was classified as a "disposal group" and "discontinued operations" in accordance with IFRS 5, i.e., the components to be sold were presented separately in the income statement and cash flow statement, and as "assets classified as held for sale" and "liabilities classified as held for sale" in the balance sheet. These balance sheet items were measured based on the specific requirements of IFRS 5, which generally provide for measurement at the lower of carrying amount and fair value less costs to sell. The impairment test carried out by the Company at the time of reclassification did not identify the need for impairment. In view of the complexity of the underlying contractual provisions and the material effects on the Group's assets, liabilities, financial position and financial performance, the separation of the components to be sold, the modified presentation and measurement in accordance with the requirements of IFRS 5 and the presentation of the sales transaction in the consolidated financial statements were of particular significance for our audit.

② As part of our audit and together with the support of our internal specialists from Capital Markets & Accounting Advisory Services (CMAAS), we first obtained an understanding of the company law principles and the underlying contractual agreements and their effects on the separation and presentation of the assets and liabilities of the methacrylates business, as well as the presentation of the sales transaction in the consolidated financial statements. In order to assess whether the conditions had been met for classification during the financial year as a "disposal group" and "discontinued operations" in accordance with IFRS 5, we held discussions with the responsible Evonik Group employees involved in the sales transaction and obtained further evidence. We then assessed the effects of classification as a "disposal group" during the financial year on the measurement of the assets and liabilities, and evaluated the impairment test including the underlying assumptions. We also assessed the deconsolidation of the methacrylates business and the presentation of the sales transaction in the notes to the consolidated financial statements. We were able to satisfy ourselves that the assumptions underlying the classification during the financial year as a "disposal group" and "discontinued operations" in accordance with IFRS 5 and the measurement of the assets and liabilities of the methacrylates business are sufficiently documented and substantiated, and that the presentation of the sales transaction in the consolidated financial statements and the corresponding disclosures in the notes to the consolidated financial statements are appropriate.

③ The Company's disclosures relating to the disposal of the methacrylates business and the presentation in accordance with IFRS 5 are contained in section 4.2 "Acquisitions and divestments" and 4.3 "Assets held for sale and discontinued operations" of the notes to the consolidated financial statements.

Other Information

The executive directors are responsible for the other information. The other information comprises the following non-audited parts of the group management report:

- the statement on corporate governance pursuant to § 289f HGB and § 315d HGB included in section "Corporate governance report and declaration on corporate governance" of the group management report
- the corporate governance report pursuant to No. 3.10 of the German Corporate Governance Code
- the separate non-financial report pursuant to § 289b Abs. 3 HGB and § 315b Abs. 3 HGB
- chapter 5.4 "Value chain" included in section 5 "Sustainability" of the group management report

The other information comprises further the remaining parts of the financial report—excluding cross-references to external information—with the exception of the audited consolidated financial statements, the audited group management report and our auditor's report.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) and supplementary compliance with the ISAs will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory requirements

Further Information pursuant to Article 10 of the EU Audit Regulation
We were elected as group auditor by the annual general meeting on 28 May 2019. We were engaged by the supervisory board on 17 October 2019. We have been the group auditor of Evonik Industries AG, Essen, without interruption since the Company first met the requirements as a public-interest entity within the meaning of § 319a Abs. 1 Satz 1 HGB in the financial year 2013.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

German public auditor responsible for the engagement

The German Public Auditor responsible for the engagement is Antje Schlotter.

Düsseldorf, February 20, 2020

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Eckhard Sprinkmeier Wirtschaftsprüfer (German Public Auditor)	Antje Schlotter Wirtschaftsprüferin (German Public Auditor)

Market positions 2019[a]

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Product	Application	Global ranking[a]	Capacity in metric tons p.a.
Nutrition & Care			
Amphoteric surfactants	Shampoos, shower gels	1–2	[d]
Ceramides, phytosphingosines	Cosmetics	1	[d]
Oleochemical, quaternary derivatives	Fabric softeners	1	[d]
Polyurethane additives	Stabilizers and catalysts for the production of polyurethane foam	1	[d]
Organically modified silicones	Cosmetics, radiation-cured separation coatings, super-spreading agents	1–2	[d]
Superabsorbents	Diapers, incontinence products, feminine hygiene products, technical applications	3	[d]
Amino acids and amino acid derivatives	Pharmaceutical intermediates and infusion solutions	3	[d]
Exclusive synthesis	Intermediates and active substances for pharmaceuticals and specialty applications	2	[d]
Pharmaceutical polymers	Drug delivery systems (e.g., tablet coatings) and medical products (e.g., bioresorbable implants)	2	[d]
DL-methionine	Animal nutrition	1	730,000
Resource Efficiency			
Hydrogen peroxide	Bleaching of pulp and textiles, oxidation agent for the chemical industry, starting product for polyurethane	2	> 950,000
Activated nickel catalysts	Life sciences and fine chemicals, industrial chemicals	2	[d]
Precious metal powder catalysts	Life sciences and fine chemicals, industrial chemicals	1	[d]
Oil and fat hydrogenation catalysts	Life sciences and fine chemicals, industrial chemicals	3	[d]
Amorphous polyalphaolefins	Thermoplastic hot melt adhesives	2	[d]
Polybutadienes	Automotive manufacturing (adhesives and sealants)	2	[d]
Polyester resins	Can and coil coating, reactive hot melt adhesives	1	[d]
Thermoplastic and reactive methacrylate resins	Binders for paints and coatings	1–2	[d]
Organically modified silicones	Binders for paints and printing inks	1–2	[d]
Isophorone chemistry	Environment-friendly coating systems, high-performance composites (crosslinkers)	1	[d]
PEEK	Special applications in the oil and gas, automotive, and aviation industries, electronics/semiconductors, specialty medical technology (e.g., implants)	3	[d]
Polyamide 12	High-performance specialty polymer applications (e.g., automotive, medical, sport, gas and offshore oil pipelines)	1	[d]
Oil additives	Viscosity modifiers	1	[d]
Organosilanes, chlorosilanes	Rubber, silicone rubber, paints and coatings, adhesives and sealants, building protection materials, pharmaceuticals, cosmetics, optical fibers	1[b]	[d]
Fumed silicas, fumed metal oxides, precipitated silicas, matting agents	High-temperature insulation, electronics, reinforcement of rubber, consumer products, additives for the coatings and printing inks industry, silicone rubber, paints and coatings, adhesives, sealants and plastics, pharmaceuticals, cosmetics	1	> 950,000
Performance Materials			
Butene-1	Co-monomer for polyolefins	1[c]	235,000
DINP	High-molecular plasticizers for use in flexible PVC	3	220,000
Isononanol	Intermediate for high-molecular plasticizers	2	400,000
Cyanuric chloride	Industrial applications and specialties (e.g., UV stabilizers, crosslinkers, and optical brighteners), and crop protection	3	[d]
Alkoxides	Catalysts for biodiesel, pharmaceuticals, agrochemicals, and other applications	1	[d]
TAA and TAA derivatives	UV stabilizers for plastics	1[c]	[d]

[a] Evonik's assessment based on various individual market reports/information and in-house market research.
[b] Chlorosilanes: freely traded volumes. Overall assessment—market position differs depending on application.
[c] Freely traded volumes.
[d] No data available.

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. 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 T157

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
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_2 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. We have also identified short-, mid- and long-term transition risks and physical risks. You can find an extensive description of the individual risks in the 2019 CDP Climate Change questionnaire. The short- and mid-term opportunities and risks are taken into account in our financial planning. To reduce our climate-driven risks, our strategy defines ambitious targets.	Management report, chapter 6. Opportunity and risk report p. 53 ff. Evonik Carbon Footprint www.evonik.com/responsibility 2019 CDP Climate Change response: chapter Business Strategy http://evonik.com/CDP-ClimateChange_2019
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
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_2eq [a] emissions are calculated on the basis of the Greenhouse Gas Protocol. In 2019, our CO_2eq emissions were: Scope 1 emissions: 4.9 million metric tons Scope 2 emissions [b]: 0.6 million metric tons Scope 3 emissions 21.0 million metric tons (2018)	Management report, chapter 1.2 Principles and objectives p. 15 f., 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

[a] CO_2 equivalents.

[b] Scope 2 emissions, net (market-based). In the net view, electricity and steam supplied to third parties are subtracted from the input volumes.

Separate combined non-financial report[1]

This is our non-financial report in accordance with sections 315b and 315c and sections 289b to 289e of the German Commercial Code (HGB). Sustainability is a central element in our strategy and our activities. Therefore, much of the content of the non-financial report is contained in the combined management report, including the management-related performance indicators on occupational and plant safety, and reporting on our non-financial targets. In addition to the chapters audited with reasonable assurance, we have included the chapter on the value chain in the management report so that all non-financial information is presented clearly and consecutively. The content of the chapter on the value chain was not included in the audit of the management report with reasonable assurance. However, most of it was included in the limited assurance review of the sustainability report. For 2020, we are planning to integrate the non-financial statement fully into the audit of the combined management report.

Since all non-financial information is contained in the combined management report, references to the relevant chapters in the management report can be found below. In these, we report on concepts, processes, measures, metrics, and risks relating to the individual aspects of the non-financial report. When preparing the non-financial report, we used the GRI standards of the Global Reporting Initiative (GRI) as a guide.

The topics of relevance for the non-financial statement for the Evonik Group are derived from the materiality analysis (see sustainability report www.evonik.com/sustainability-report) and the relevance of the topics for Evonik. The following table shows which chapters in the combined management report contain information on the various aspects and topics. For the disclosures required on the business model, please refer to section 1.1 Business model in the combined management report p. 13 f.

In 2019, we did not identify any material individual risks where there is a very high probability of negative impacts in connection with the respective non-financial matters. The opportunities and risks relating to the non-financial aspects are included in the opportunity and risk management system and described in the opportunity and risk report p. 53 ff. In addition, we refer to the risks relating to climate change, which are published in connection with our participation in CDP Climate Change. This information is available on our website. http://evonik.com/CDP-ClimateChange_2019

Information relating to Evonik Industries AG

Evonik Industries AG is the parent company of the Evonik Group. As a management holding company, it defines concepts and rules that have to be observed worldwide and monitors compliance with them. All aspects described here apply for both Evonik Industries AG and the Evonik Group.

[1] Outside the scope of the audit.

Management and monitoring are based on data compiled worldwide. Therefore, the focus is on indicators for the Evonik Group. Few of the key indicators are meaningful for Evonik Industries AG as it does not operate only production sites itself.

Key data on Evonik Industries AG T158

	2018	2019
Employees (as of December 31)	2,590	2,366
Women as a proportion of the total workforce in %	45.0	45.2
Female managers in %	28.0	29.9
Employee turnover rate in %	5.5	3.8
Average length of service in years	16.7	17.0

Aspects	Topics	Chapter in combined management report
Employee matters	Safety	Safety p. 47 f.
	Appeal as an employer	Employees p. 44 f.
	Working conditions	Employees p. 44 f.
	Diversity and equal opportunity	Employees p. 45 f.
	Health protection and promotion	Employees p. 46 f.
	Training/advanced training	Employees p. 46
Environmental matters	Climate change	The environment p. 48 ff.
	Water management	The environment p. 50
	Product stewardship	Value chain[a] p. 51 f.
Respecting human rights	Responsible corporate governance and human rights	Value chain[a] p. 52
Preventing bribery and corruption	Compliance	Value chain[a] p. 50 Declaration on corporate governance[a] p. 74 ff.
Supply chain	Responsibility within the supply chain	Value chain[a] p. 51
Social matters	Commitment to society	Value chain[a] p. 52

[a] Unaudited components of the combined management report.

Glossary

Technical terms

Accident frequency (occupational safety indicator)
All work-related accidents involving Evonik employees (excluding traffic accidents) resulting in absences of at least one full shift, per 1 million working hours.

Alkoxides
Evonik produces alkoxides, which are used as catalysts for efficient high-yield production of biodiesel. Using Evonik's catalysts, biodiesel can be manufactured in a water-free process. As a result, fewer unwanted by-products are generated and this simplifies the production of biodiesel.

Amino acids
Amino acids are building blocks for proteins that are used in animal nutrition. They are used to ensure that the amino acid content of animal feed is optimally aligned to requirements. As a result, livestock needs less feed. That also reduces excretion of nitrogen and undigested nutrients, which improves the carbon footprint of livestock farming and reduces overfertilization of the soil. Evonik also produces amino acids and their derivatives in pharmaceutical quality for use in infusion solutions for parenteral nutrition, as starting products for animal cell cultures, and in the manufacture of active ingredients.

Butadiene
Butadiene is mainly used in synthetic rubber, for example, for the manufacture of tires. It also has a wide range of applications in elastomers and plastics. For example, it increases the hydrocarbon resistance of nitrile rubber gloves. Butadiene is also an important precursor for the production of latex mattresses.

C_4 chemistry
C_4 crack is a by-product of crude oil refining. It is mainly produced in a steam cracker when naphtha is split into ethylene and propylene. After isolation, Evonik processes the C_4 hydrocarbons and places them on the market. The C_4-based materials are used in rubber, plastics, and specialty chemicals. In daily life they are mainly found in high-quality plastics and coatings, for example, for cars, the home, and leisure activities. However, applications are not confined to plastics. The wide ranging applications for C_4 materials include lubricants, fuel additives, cosmetics, and solvents in the chemical and pharmaceutical industries. Evonik's integrated C_4 technology platform ensures excellent product yields, and processes all hydrocarbons contained in C_4 crack.

CO_2 emissions
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_2 equivalent 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). Scope 3 emissions 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, 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.

Crosslinkers
Polymers comprise long chains of linked molecules. Crosslinking these chains to form three-dimensional networks creates materials with high mechanical and thermal stability. Evonik produces the key components for the crosslinking process for many important classes of polymers such as epoxy resin and polyurethanes.

Greenhouse Gas Protocol (GHG Protocol)
The Greenhouse Gas Protocol is the most widespread voluntary international standard for calculating and compiling data on greenhouse gas emissions from industry. It was developed by the World Business Council for Sustainable Development and the World Resources Institute and is the basis for classification of our CO_2eq emissions in scopes 1 to 3.

High-performance polymers
Evonik is a specialist for high-performance polymers. These have particularly high strength, making them a welcome alternative to metals in many fields, for example, in lightweight structures, medical, and industrial applications. Depending on where they are used, such materials have to withstand high temperatures, aggressive chemicals, and significant mechanical strain.

Hydrogen peroxide
Hydrogen peroxide (H_2O_2) is an environmentally friendly chemical: Its decomposition yields only oxygen and water. Due to its beneficial properties, it is used in a variety of areas, such as bleaching agent in the pulp and textile industries, etching agents in the electronics industry, and active pharmaceutical ingredients and cosmetic applications. H_2O_2 is also used as a sterilization and disinfection agent in food processing, an oxidizing agent in chemical and pharmaceutical synthesis, and in the production of peracetic acid, which is an important derivative. Together with ThyssenKrupp Industrial Solutions, Evonik has developed the hydrogen-peroxide-to-propylene-oxide (HPPO) technology. This process enables cost-efficient and eco-friendly industrial-scale synthesis of propylene oxide. Recently, Evonik developed the HYPROSYN™ technology, and entered into an exclusive technology partnership with Dow to bring a unique method for directly synthesizing propylene glycol (PG) from propylene and H_2O_2 to market maturity.

Incident frequency (plant safety indicator)
Number of incidents involving the release of substances, energy, fire, or explosion per 1 million working hours, as defined by the European Chemical Industry Council.

Integrated technology platforms
Integrated technology platforms allow efficient use of product streams and thus high added value by utilizing by-products from one production process as starting products for others. That saves resources, reduces CO_2 emissions, and leverages cost-efficiency. Examples of integrated technology platforms in the Evonik Group are isophorone, silicon, silicones, and oleochemicals.

Isophorone/isophorone diamine/isophorone diisocyanate
Isophorone is used as a solvent, for example, in the paints and coatings industry. It is also used to produce the derivatives isophorone diamine and isophorone diisocyanate. Isophorone diamine is an important curing agent for epoxy resin systems, for example, to strengthen rotor blades. Isophorone diisocyanate is used to produce light- and weather-resistant polyurethane coatings, for example, for instrument panels and other plastic components.

Oil additives
As a leading global supplier of oil additives, Evonik develops innovative technologies that improve the operative efficiency of engines, gears, and hydraulic systems. Specific and customized improvements in the flow properties of lubricants over a wide temperature range play an important role.

Polymers
Long-chain, short-chain, or crosslinked molecules (macro-molecules) produced from smaller molecules (monomers).

REACH
REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) is the European chemicals regulation (EC 1907/ 2006).

Responsible Care®
Responsible Care® is the chemical industry's worldwide voluntary commitment to drive continuous improvement in sound chemicals management. This goes beyond legislative and regulatory compliance and includes various initiatives involving stakeholders to foster the safe use of products and resources along the value chain.

Silanes
Silanes are a group of chemical compounds consisting of a silicon-based structure and up to four functional groups. Evonik produces three types of silanes:

- Organofunctional silanes have at least one functional hydrocarbon group and optionally another functional group. They are used to produce high-performance additives that improve the properties of inorganic particles, resins, and polymers. For example, they enhance the bonding properties of adhesives, make plastics heat-resistant, and add flame-retardant properties to cables.
- Sulfur-functional silanes have revolutionized the production of tires, where they are used in combination with precipitated silicas to improve key properties such as rolling resistance and wet grip.
- Chlorosilanes are key resources for the semiconductor and optical fiber industry.

Silica
Evonik manufactures both precipitated silica using a wet route and fumed silica, which is produced by a flame process. Silica is also known as silicon dioxide. These ultra-fine particles are used in a wide range of applications, including the life sciences (pharmaceuticals and cosmetics), construction, adhesives and sealants, paints and coatings, furniture manufacture, electronics applications such as polishing computer chips, and the production of toners for digital printing. They also play a key role in energy-saving tires with low rolling resistance ("green" tires).

Silica/silane system
Silica is used in combination with silanes to reinforce the tread of modern tires. The silica/silane system greatly reduces rolling resistance, resulting in fuel savings of up to 8 percent compared with conventional car tires. It also improves grip on wet and wintry roads.

Superabsorbents
Crosslinked polymers that are insoluble in water and can absorb and store large quantities of aqueous liquid through a mechanism that causes them to swell and form hydrogels. The liquid is not released even under pressure. Consequently, these polymers are mainly used in diapers. Special forms of superabsorbents are used in agriculture to regulate the moisture in soil. As well as absorbing large quantities of water, they can release it to the plants during dry periods.

Sustainable Development Goals
In 2015, the global community adopted the 2030 Agenda for Sustainable Development under the auspices of the United Nations, including 17 sustainable development goals (SDGs). Their vision is a better future that enables people to live a decent life and protects the natural basis of life. The SDGs cover economic, ecological, and social aspects. Evonik supports these goals and has been working intensively with them for a number of years.

UN Global Compact
The United Nations Global Compact is a strategic initiative for companies that undertake to align their business operations and strategies with ten principles relating to human rights, labor, environmental protection, and fighting corruption. Companies that join the Global Compact give an undertaking that they will report annually on their progress. Evonik has been a member of the UN Global Compact since 2009.

Financial and economic terms

Adjusted EBIT
Earnings before financial result and taxes, after adjustments. Earnings indicator showing Evonik's operating earnings performance irrespective of the structure of its assets.

Adjusted EBITDA
Earnings before financial result, taxes, depreciation, and amortization, after adjustments. Earnings indicator showing Evonik's operating earnings performance irrespective of the structure of its assets and its investment profile. This is a cash flow-related indicator, which is used in particular in the adjusted EBITDA margin to show the relationship to sales as a basis for comparison with competitors.

Adjustments
Evonik refers to the special items that are factored out when calculating the operational performance indicators adjusted EBITDA and adjusted EBIT as adjustments. They include restructuring, impairment losses/reversals of impairment losses, income and expenses in connection with the purchase/disposal of investments in companies, and other income and expense items that, due to their nature or amount, do not reflect the typical operating business.

Capital expenditures
Capital expenditures comprise investment in intangible assets, property, plant and equipment.

EVA®
Abbreviation for economic value added. The Indicator used for value-oriented management of the Evonik Group. EVA® is calculated from the difference between adjusted EBIT and the cost of capital employed. If EVA® is positive, value is created.

Free cash flow
The free cash flow is a measure of the company's internal financing capacity. The free cash flow is calculated from the cash flow from operating activities, continuing operations, less outflows for capital expenditures on intangible assets, property, plant and equipment.

Rating
In the financial community, a rating is an assessment of the creditworthiness of a debtor. Ratings are generally awarded by specialized rating agencies. The probability of default is calculated on the basis of specific criteria, and debtors are assigned to rating classes that are indicated by rating codes. Ratings are also awarded for corporate and government bonds. A rating indirectly affects the debtor's business activity. Normally, a better rating enables a debtor to obtain favorable terms for borrowing.

ROCE
The return on capital employed is a measure of the profitability of capital employed. It is calculated by dividing adjusted EBIT by the average capital employed in the reporting period.

Venture capital
Venture capital is risk capital that is made available to fund innovative concepts and ideas, generally at high-growth small and mid-sized enterprises. Through its venture capital activities, Evonik aims to invest up to €250 million in promising start-ups and leading specialized venture capital funds in the mid-term. The regional focus is Europe, the USA, and Asia.

Alternative performance measures

For internal management purposes, we use alternative performance measures that are not defined by IFRS. The calculation of these measures and their development are outlined in the management report in addition to the IFRS performance measures. The most important alternative performance measures are also presented in the segment reporting.

Alternative performance measures used T159

	For definition and calculation see page
Adjusted EBITDA	16, 20, 102, 144
Adjusted EBITDA margin	16, 20, 102, 144
Adjusted EBIT	16, 21, 102, 144
Adjustments	16, 20, 21
Adjusted net income	22
Adjusted earnings per share	22
Capital employed	16, 23, 102, 144
Economic value added (EVA®)	23
Free cash flow	16, 32
Net financial assets/debt	33
ROCE	16, 23, 102, 144

Financial calendar

Financial calendar 2020 T160

Event	Date
Interim report Q1 2020	May 7, 2020
Annual shareholders' meeting 2020	May 27, 2020
Interim report Q2 2020	August 4, 2020
Interim report Q3 2020	November 3, 2020

Credits

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Concept, Design, and Realization
HGB Hamburger Geschäftsberichte,
www.hgb.de

Printing
Griebsch & Rochol Druck GmbH

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