FINANCIAL REPORT 2018

POWER TO CREATE

Key figures for the Evonik Group

Key figures T01

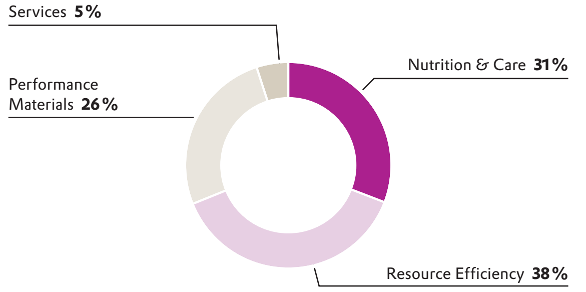
in € million	2014	2015	2016	2017	**2018**
Sales	12,917	13,507	12,732	14,383	15,024
Adjusted EBITDA[a]	1,882	2,465	2,165	2,357	2,601
Adjusted EBITDA margin in %	14.6	18.2	17.0	16.4	17.3
Adjusted EBIT[b]	1,256	1,752	1,448	1,486	1,724
ROCE[c] in %	12.5	16.6	14.0	11.2	12.1
Net income	568	991	844	713	932
Adjusted net income	782	1,128	930	1,007	1,294
Earnings per share in €	1.22	2.13	1.81	1.53	2.00
Adjusted earnings per share in €	1.68	2.42	1.99	2.16	2.78
Total assets as of December 31	15,685	17,005	19,645	19,940	20,282
Equity ratio as of December 31 in %	41.6	44.6	39.5	37.7	38.6
Cash flow from operating activities	1,066	1,971	1,769	1,551	1,704
Free cash flow[d]	−60	1,052	821	511	672
Capital expenditures[e]	1,123	877	960	1,078	1,050
Depreciation and amortization[e]	606	700	707	829	837
Net financial assets/debt as of December 31	400	1,098	1,111	−3,023	−2,907
Accident frequency[f]	1.18	0.97	1.24	1.16	0.87
Incident frequency[g]	1.40	1.29	0.95	1.11	1.08
Research and development expenses	413	434	438	476	459
No. of employees as of December 31	33,412	33,576	34,351	36,523	36,043

Prior-year figures restated.

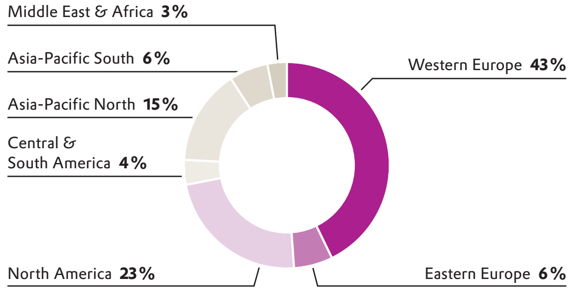
[a] Earnings before financial result, taxes, depreciation and amortization, after adjustments.
[b] Earnings before financial result and taxes, after adjustments.
[c] Return on capital employed.
[d] Cash flow from operating activities, continuing operations, less cash outflows for capital expenditures on intangible assets, property, plant and equipment.
[e] Intangible assets, property, plant and equipment.
[f] All work-related accidents (excluding traffic accidents) resulting in absences of at least one full shift, 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.

Contents

The creative power of specialty chemicals

Evonik stands for appealing businesses and innovative strength. Around 80 percent of our sales come from market-leading positions.

We work in a results-focused corporate culture that is geared to profitable growth and increasing the value of the company.

Our strengths include the balanced spectrum of our business activities, end-markets, and regions as well as close collaboration with our customers.

More than 36,000 employees are bound by a claim: No product is so perfect that it couldn't be made better.

Living better with Evonik

We do quite a lot to make things better.
What exactly? This selection gives an indication.

We make …

Car tires more fuel-efficient

Diapers more absorbent

Stadium seats more fade-resistant

Plastics more sustainable

Food healthier

Tablets more effective

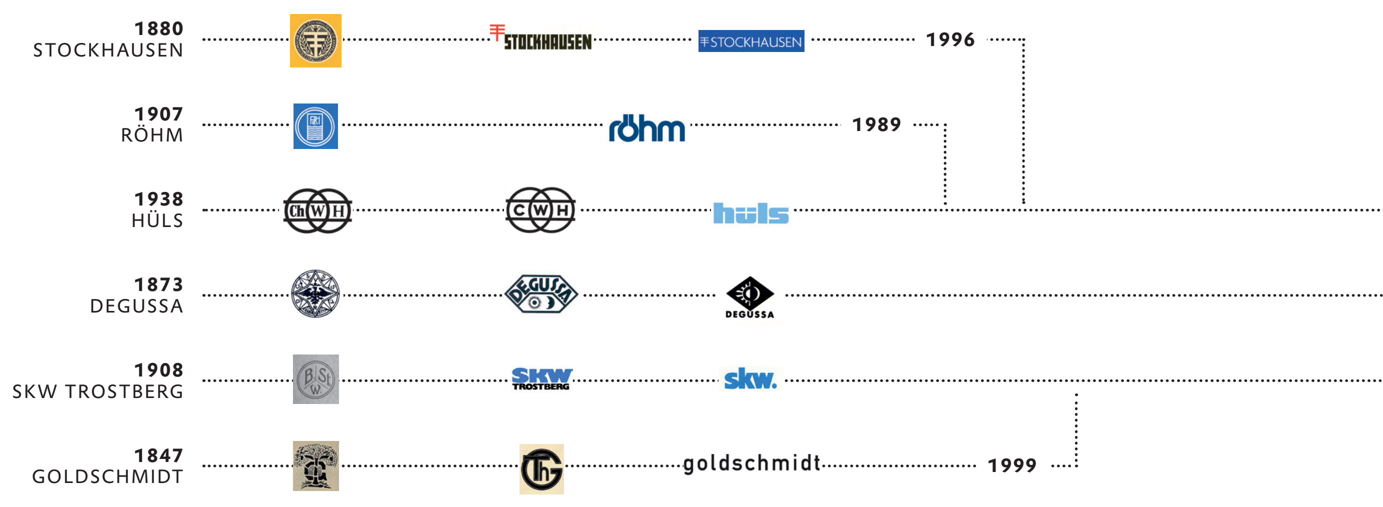
Haircare gentler

Airplanes lighter

Car paint more scratch-resistant

Monuments more weather-proof

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

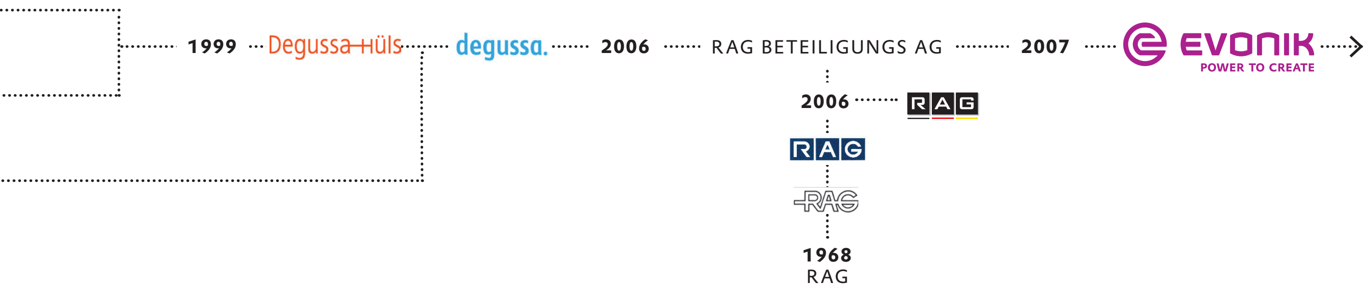


A successful year both strategically and operationally

- Good progress in **strengthening** our growth engines
- Programs to **cut costs** and raise efficiency are proving effective
- **Sales grew** 4 percent to €15.0 billion
- **Outlook achieved: adjusted EBITDA** up 10 percent at €2.6 billion in challenging conditions
- **Adjusted EBITDA margin** improved to 17.3 percent
- **Adjusted net income** rose to a new record of €1.3 billion (+29 percent)
- **Free cash flow** increased to €672 million
- **Outlook for 2019:** sales and adjusted EBITDA slightly lower to stable; significant improvement in free cash flow expected

170 years of competence in chemistry

The Evonik brand was introduced in 2007, but Evonik's historic roots go back to the first half of the 19th century.



CHRISTIAN KULLMANN
Chairman of the Executive Board

Ladies and Gentlemen,

Evonik stands for success. 2018 was another good year for the company: Evonik grew and utilized opportunities. In mid-2018, we raised our economic outlook for the fiscal year. Today we know that Evonik met these higher expectations. We delivered on what we announced—in an international environment made increasingly tough by political and economic uncertainty. The second half of the year was dominated by trade disputes, highly volatile raw material prices, and low growth forecasts. Looking beyond 2018, we are sticking to our central aspiration: We want to be a best-in-class specialty chemicals company. We are paving the way for that. We have announced a change in the company and we are realizing that step by step.

At present, there is mounting international concern about economic and political developments. Many experts fear that the global economic challenges will increase in 2019. As a specialty chemicals company with a presence throughout the world, Evonik cannot escape global economic trends. For this year, we therefore expect sales and adjusted EBITDA to be slightly lower or to remain stable compared to last year. Rising concern about the global economy left its mark on the capital markets at the end of 2018 and Evonik's share price suffered a setback in the fourth quarter.

Nevertheless, more difficult global economic conditions cannot be an excuse for delays and procrastination. We are continuing to implement our strategy for the future by strengthening our market-leading positions and opening up new opportunities.

Our achievements during the past year are a good starting point. We would like to thank our workforce of over 36,000 people for their contribution to this. Evonik grew sales 4 percent to €15.0 billion in 2018. Adjusted EBITDA increased 10 percent year-on-year to €2.6 billion. We would like our shareholders to benefit from that. At the annual shareholders' meeting, the executive board and supervisory board will be proposing another attractive dividend of €1.15 per share for 2018. That is also evidence that our company stands for continuity and reliability.

Evonik is consistently sharpening its focus on growth markets and high-margin businesses. In 2017, we acquired Air Products' specialty additives business and J. M. Huber's silica business. Integration of these businesses is almost complete and they made a good contribution to our earnings. In 2018, we made a further acquisition to reinforce our growth: The agreement to acquire the US company PeroxyChem for US$625 million will strengthen our Resource Efficiency growth segment. It will add fast-growing, environmentally friendly specialty applications to our portfolio.

At the same time, organic growth is continuing. Good examples are the investments in new capacity for silica and polyamide 12. Construction of an additional production complex for the amino acid DL-methionine in Singapore is already nearing completion. Alongside leading market positions, we are also striving to improve our cost leadership in this area.

In our selling and administrative processes, we are aiming for a lasting reduction of €200 million in costs by the end of

2020. We made impressive headway towards this in 2018 with savings of over €50 million. The results of our internal analysis also include cutting 1,000 jobs in sales and administration across Evonik by the end of 2020. We will be doing that with minimum social hardship. In Germany, there is a ban on dismissals for business-related reasons before mid-2023.

Systematic implementation of our strategy goes beyond acquisitions, investments, and cost-awareness. Our goal is profitable growth. We actively manage our portfolio to step up our focus on specialty chemicals, and any necessary steps are taken purposefully.

Innovations are a central element of our corporate strategy. As the creative power in specialty chemicals, Evonik has therefore defined specific growth fields, where we see particularly good opportunities for successful innovations. Through innovations in these fields, we want to generate additional sales of €1 billion by 2025.

We are resolutely utilizing the opportunities of digitalization. For instance, we are working on platform business models. Examples are the OneTwoChem e-commerce solution to successfully initiate and arrange chemical transactions at short notice. At our sites, we are increasingly utilizing the opportunities offered by digitalization to plan the operation and maintenance of our facilities. At the same time, it is important to us to make sure that people are at the heart of all Evonik's digitalization activities.

Alongside our active portfolio management and our innovative capability, we have a third strategic success factor: an open and performance-oriented culture. Therefore, we defined four global corporate values in 2018: performance, openness, speed, and trust. We say what's important to us and act on it.

We want to safeguard our long-term competitiveness. That includes investing in the vocational training of young people. In Germany alone, more than 500 young men and women started an apprenticeship at Evonik in 2018. At around 7 percent, our training rate was once again above average. There were 18 applicants for each apprenticeship. In our view, that is further evidence of the enormous trust we enjoy as a company and an attractive employer. Evonik is firmly committed to strengthening that trust worldwide by delivering further success in 2019.

Christian Kullmann

THE EXECUTIVE BOARD

From left:

THOMAS WESSEL
Chief Human Resources Officer

UTE WOLF
Chief Financial Officer

CHRISTIAN KULLMANN
Chairman of the Executive Board

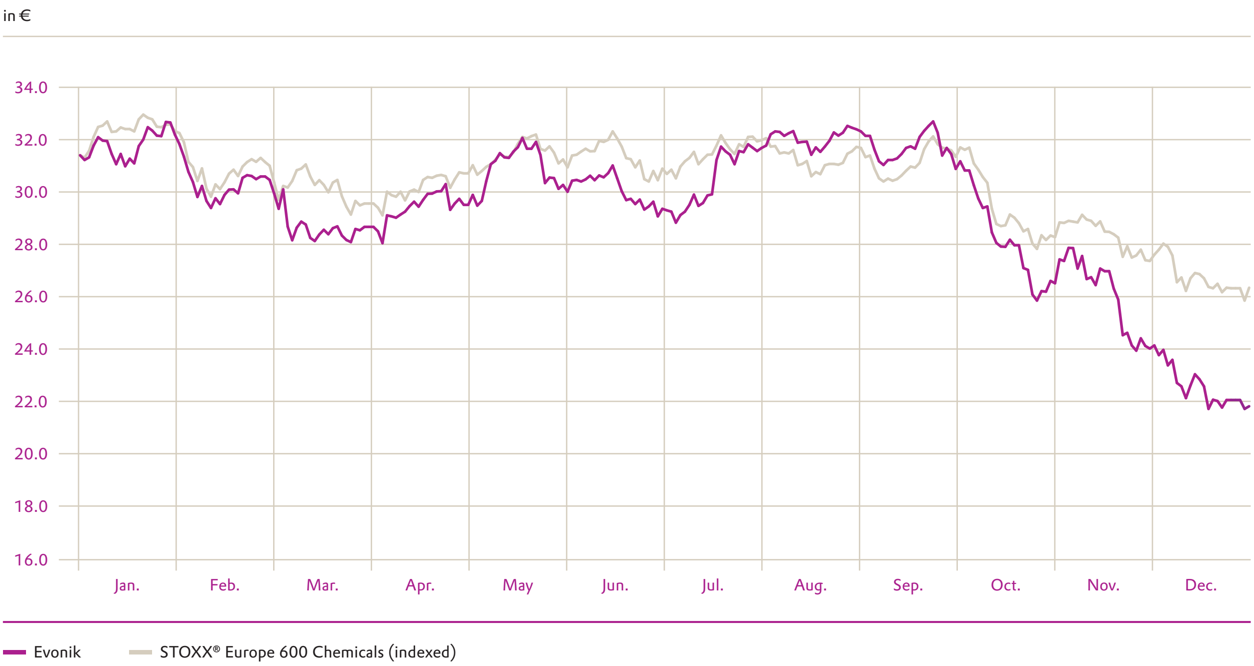
DR. HARALD SCHWAGER
Deputy Chairman of the Executive Board

Evonik on the capital markets

Performance of Evonik shares

Evonik shares started 2018 at around €31. As a result of concern about rising interest rates and repeated threats of potentially punitive US customs tariffs, both Evonik shares and the market as a whole were very volatile in the first half of the year. Publication of the interim reports on the first and second quarters in May and August proved positive for Evonik shares. In both cases, the company exceeded earnings expectations. In particular, the upward revision of its outlook in July boosted the share price, which rose to a high of €32.66 on September 21. This was followed by a continual downtrend, both for Evonik shares and for the benchmark indices, with performance increasingly dominated by mounting fears of an economic downswing. The specter of a weakening Chinese economy, the negative development of the automotive industry, and profit warnings in the chemical sector led to a sharp drop in prices in the fourth quarter. Until the end of the year, sentiment on the capital markets was clearly affected by fears of a significant economic downturn in 2019. That also influenced analysts' estimates and price targets. Earnings estimates were revised sharply downwards, putting further pressure on chemical stocks. In light of this uncertainty, Evonik's shares closed 2018 at €21.80, a drop of nearly 30 percent during the year. That was roughly in line with the decline at other chemical companies. The STOXX® Europe 600 Chemicals dropped by a good 16 percent in the same period, while the more broadly based MDAX index fell by around 20 percent.

Performance of Evonik shares January 1–December 31, 2018 C03



Dividend payment

Evonik has a long-term dividend policy aligned to continuity and reliability. At the annual shareholders' meeting on May 28, 2019, the executive board and supervisory board will propose payment of another attractive dividend of €1.15 per share for 2018. The total dividend payment would be €536 million, giving a payout ratio of 41 percent based on adjusted net income. With a dividend yield of around 5.3 percent, Evonik would remain among the leaders in the chemical industry.

Key data T02

	Jan. 1– Dec. 31, 2018
Highest share price[a] in €	32.66
Lowest share price[a] in €	21.70
Closing price[a] on December 28, 2018 in €	21.80
Market capitalization[a] on December 28, 2018 in € billion	10.16

[a] Xetra trading.

Higher free float

Evonik's majority shareholder, RAG-Stiftung, sold around 3 percent of its shares in Evonik in September 2018. This contributed to further diversification of the shareholder structure. RAG-Stiftung remains Evonik's largest shareholder with a stake of 64 percent of the capital stock. The free float is just under 36 percent.

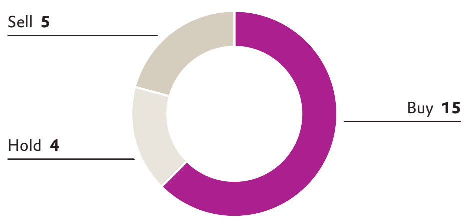
Dialogue with the capital markets

Evonik continued its intensive capital markets communication in 2018. 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 2018, Evonik was covered by 24 analysts. Fifteen of them rated the share as a buy, five 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 €19 to €40, giving a median of €32.

Analysts' ratings C04



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 (DJSI) Europe, DJSI World, FTSE4Good, STOXX® Global ESG Leaders, Vigeo Eiris Euronext Index

Solid investment grade rating confirmed

Both Moody's and Standard & Poor's (S&P) confirmed their credit ratings for Evonik Industries AG in the first half of 2018. 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.

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 Indices (DJSI) World and DJSI 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

MANAGEMENT REPORT

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

Combined management report for 2018

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 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 is available in the internet at www.evonik.com/nonfinancial-report and is also 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 culture, and sustainable business activities

- Corporate structure: three chemical segments that are close to their markets and customers
- Concentration on a balanced portfolio with four growth engines: Specialty Additives, Animal Nutrition, Smart Materials, and Health & Care
- Deep knowledge of our customers' business, coupled with active innovation management, drives profitable growth
- Balanced management of economic, ecological, and social factors

None of our end-markets accounts for more than

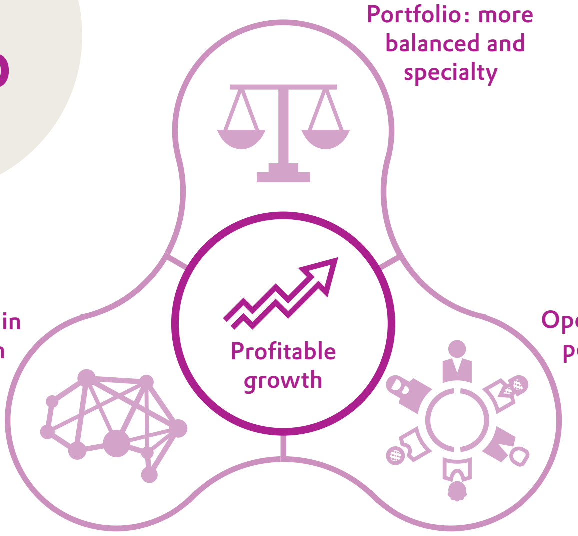
20%

of sales

Operations in more than

100

countries



240

new patent applications submitted

36,043

employees worldwide

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

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, our high innovative capability, and our 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 close 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 view of this, we defined our sustainability strategy in more detail in 2018, especially as regards foresighted resource management and integrating sustainability into strategic management processes.

A decentralized corporate structure

Our specialty chemicals operations are divided into three chemical manufacturing segments, which 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. The aim for these segments is 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 our good market positions.

Corporate structure **C05**

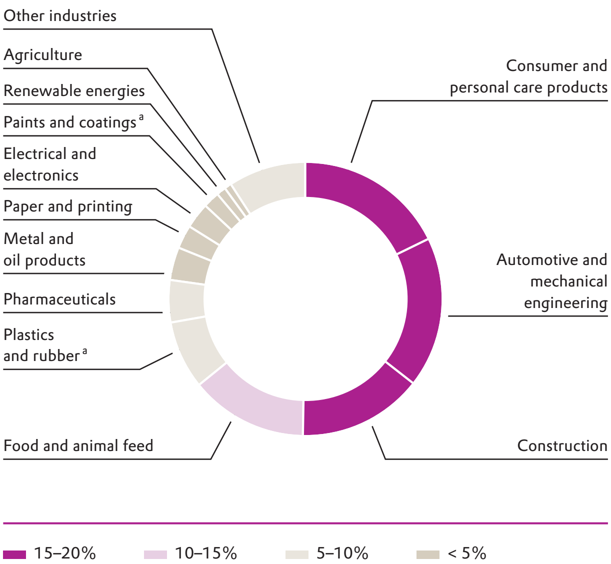
	Evonik			
Segments	Nutrition & Care	Resource Efficiency	Performance Materials	Services
	Specialty chemicals for consumer goods for daily needs, animal nutrition, and healthcare products	High-performance materials and specialty additives for environment-friendly and energy-efficient system solutions for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

[1] We define these as ranking 1st, 2nd, or 3rd in the relevant markets.

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.

Evonik's end-markets C06



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

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 28 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.

Making good progress with the digital transformation

Digitalization includes fundamental changes to processes in the chemical industry. That starts with the use of artificial intelligence in research and development and continues through the procurement of raw materials, and planning and operating production facilities, to marketing and sales.

Evonik is driving forward digitalization throughout the Group. We want to explore new business models, solutions, and services for our customers, and to empower our employees for the digital world. Evonik also sees digitalization as an opportunity to raise efficiency. To extend our position in the digital world in the long term, we are entering into strategic partnerships with technology companies, universities, and cross-business networks.

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 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 characteristics. To ensure an even better balance within our **portfolio** and to grow where Evonik is already strong but there are especially promising prospects, our strategy concentrates on four **growth engines:**

- Specialty Additives
- Animal Nutrition
- Smart Materials
- Health & Care.

Capital allocation for new developments and enhancements, investment, 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. That means more land is required for farming and also increases emissions of methane gases by cattle. 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.

Smart Materials

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

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.

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 specific 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 percent and 20 percent
Free cash flow	Significantly above the dividend
ROCE	Above the cost of capital
Rating	A solid investment grade rating
Dividend	Attractive and reliable

As a responsible specialty chemicals company, we are also continuing to pursue our ambitious **non-financial targets**[2]**.**

Non-financial targets for the Evonik Group T05

Accident frequency[a] in 2019	Below upper limit of 1.30
Incident frequency[b] in 2019	Below upper limit of 1.10
Specific greenhouse gas emissions in 2020	Reduction of 12 percent[c]
Specific water intake in 2020	Reduction of 10 percent[c]

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

[1] See section on research and development.
[2] See section on safety and environment.

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 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 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, i.e., the company's internal financing capacity.

Most important non-financial key performance indicators

Evonik also uses a wide variety of non-financial performance indicators. For example, our annual sustainability report[1] provides information on ecological and societal issues to supplement our economic reporting.

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 on safety are binding for staff at all levels and were reinforced in 2015 by a global safety culture initiative. In accordance with corporate policy, all operational 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.[2]

1 This is based on the Global Reporting Initiative (GRI) Standards 2016.
2 See section on safety and environment.

2. Business review

Progress in delivering our corporate strategy

Strengthening the growth engines

- Successful integration of the businesses acquired in 2017
- Focused capital expenditures
- Bundling oleochemical activities
- Agreement to acquire PeroxyChem signed
- Examining options for the future development of the methacrylates business

Reducing selling and administrative expenses

- Savings of around €50 million in 2018
- Measures defined for further savings of €150 million

Cultural change underway to strengthen performance orientation

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Forecast for 2018 achieved

✓ Sales **€15.0 billion**
✓ Adjusted EBITDA **€2.6 billion**
✓ ROCE **12 %**
✓ Capital expenditures **€1.05 billion**
✓ Free cash flow **€672 million**

All segments generated higher earnings

Solid investment grade rating

Adjusted EBITDA margin **17.3%**

Record adjusted net income **€1,294 million**

Adjusted earnings per share **€2.78**

Dividend **€1.15** per share

2.1 Overall assessment of the economic situation

Strategically, in 2018 we made good progress in strengthening our four defined growth engines: Specialty Additives, Animal Nutrition, Smart Materials, and Health & Care, which are characterized by above-average growth and low cyclical exposure.

Major **investments** such as the construction of the methionine complex in Singapore were driven forward purposefully and new projects were initiated. These include the planned construction of a production complex for the specialty polymer polyamide 12 in Marl (Germany)—the biggest investment in Evonik's history in this country—and the proposed acquisition of the US company PeroxyChem[1], Philadelphia (Pennsylvania, USA), which is an excellent complement to our hydrogen peroxide activities. Integration of the businesses acquired in 2017 from Air Products and Chemicals, Inc., Allentown (Pennsylvania, USA) and J. M. Huber Corporation, Atlanta (Georgia, USA) took place very successfully. The **Oleo 2020**[2] program introduced in 2018 is bundling our oleochemical activities to raise efficiency, leverage synergies, and reduce complexity.

The **methacrylates business** does not form part of our growth engines; it comprises large-volume monomers such as methylmethacrylate (MMA), various specialty monomers, and the PLEXIGLAS® brand of PMMA molding compounds and semi-finished products. In March 2018, we therefore decided to examine all options for the future development of this business, including potential partnerships and complete separation. Similarly, the precursors for agrochemicals manufactured at the **Jayhawk** site in Galena (Kansas, USA) are not part of our growth business. This site belonging to the Performance Materials segment was divested in November 2018.

We have made good headway with the **SG&A 2020** program[3] introduced at the end of 2017, which is geared to global optimization of processes and a lasting reduction in selling and administrative expenses. We expect further impetus to come from the cultural change towards a more open, performance-oriented **corporate culture.**

Operationally, our business developed successfully. Global demand for our products was high and we achieved organic sales growth of 5 percent. This was principally attributable to higher selling prices. The development of volume sales varied. While volume growth in the Nutrition & Care segment was well above global economic growth (3.2 percent, expected), the volume trend in the Performance Materials segment was held back by the impact of the low water level in the river Rhine. Overall, sales grew 4 percent to €15,024 million.

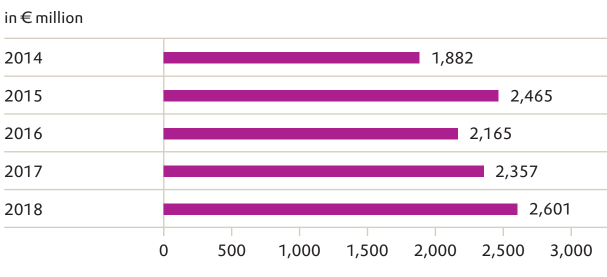
Adjusted EBITDA rose 10 percent to €2,601 million. All segments contributed to the earnings increase.

The adjusted EBITDA margin improved to 17.3 percent (2017: 16.4 percent), but was nevertheless below the target mid-term range of 18–20 percent. ROCE was 12.1 percent, above both the cost of capital and the prior-year level (11.2 percent).

Net income rose 31 percent to €932 million. Net income after adjustment for special items increased 29 percent to a new record of €1,294 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 €672 million. That was €161 million higher than in the previous year and well above the dividend payment of €536 million for 2017. Our financial profile is still very good: Evonik has a solid investment grade rating. We were able to reduce net financial debt slightly thanks to the free cash flow.

Development of adjusted EBITDA in the Evonik Group C07



Prior-year figures restated.

2.2 Economic background

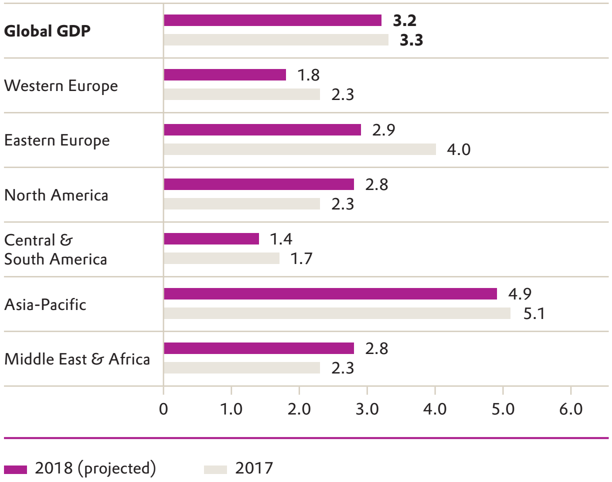
Lower global economic momentum

Global economic conditions developed in line with our expectations in 2018. We estimate that the global economy as a whole grew by around 3.2 percent in 2018. However, growth was weaker than in the previous year (3.3 percent). Economic sentiment deteriorated considerably during the year. Alongside the uncertainty caused by mounting trade policy conflicts, this was due to the tightening of monetary policy in the United States, leading to a reversal of international capital flows, which dampened economic growth in the emerging markets.

1 See section on major events.
2 See section on segment performance.
3 See section on business conditions and performance.

Development of GDP 2017/2018 C08

in %



Overall, regional differences in economic momentum have increased.

The pace of economic growth has recently dropped in Western Europe. The automotive industry's problems with the certification of vehicles under the new emissions testing procedure led to lower industrial output. Exports suffered from weaker demand worldwide, and especially from China. In addition, economic activity was dampened by the heightened political uncertainty caused by the prospect of Brexit and the change of government in Italy.

Weaker growth in Eastern Europe was largely due to the slowdown in Turkey. The Russian economy continued its modest growth path. While the economy was supported by private consumption, it was held back by the downturn in manufacturing industry.

The strong growth in North America was driven principally by the US economy, which benefited from extensive tax cuts and an increase in state investment. Higher employment and pay rises boosted domestic consumption. In view of the good economic situation, the Federal Reserve continued to tighten monetary policy, raising its key interest rate by a total of 1.0 percentage points in four steps to 2.5 percent.

Growth in Central & South America was relatively low. Political uncertainty, high levels of unemployment and private debt, together with structural problems, again prevented a significant improvement in the economic situation. Argentina slipped back into recession after two years of economic growth.

The Asia-Pacific region posted slightly slower growth than in the previous year. Economic momentum in Japan fell as a result of lower industrial output and weaker export trade. The trade dispute with the USA, the reduction in debt, and reforms resulted in lower growth in China.

Weaker development of end-customer industries

Worldwide, the development of Evonik's **end-customer industries** differed by region and by sector in 2018. We anticipate that overall industrial growth was lower than in the previous year.

Compared with the previous year, demand for consumer and care products was higher in North America, driven by an improvement in consumer sentiment and falling unemployment, and remained high in the Asia-Pacific region. Growth in the food and feed sectors gained pace in North America but weakened in Central & South America. Automotive and mechanical engineering output declined year-on-year in Europe, North America, and Asia-Pacific. In Europe, growth momentum in the construction sector was higher than in 2017 thanks to an increase in capital spending, while growth rates in the Asia-Pacific region stabilized.

As a result of the significant rise in the price of crude oil between January and October 2018, the price of Evonik's petrochemical feedstocks increased steadily over this period, but fell again in November and December 2018 thanks to the sharp drop in the oil price. In addition, strong demand without any expansion of supply resulted in further price rises for other raw materials. Overall, there was a year-on-year increase Evonik's raw material price index in 2018.

The average annual exchange rate for the euro against Evonik's most important currency—the US dollar—increased to US$1.18, compared to the average exchange rate in the previous year (US$1.13).

2.3 Major events

On November 7, 2018, we signed an agreement with One Equity Partners, Chicago (Illinois, USA) to acquire the US company **PeroxyChem,** Philadelphia (Pennsylvania, USA) for US$625 million. PeroxyChem is a manufacturer of hydrogen peroxide and peracetic acid and is well positioned in high-margin specialty applications. This acquisition expands our portfolio of environmentally friendly and high-growth specialty applications in the Resource Efficiency segment. Furthermore, it gives us an attractive business characterized by above-average growth, moderate capital intensity, and low cyclicality. The transaction should be closed in mid-2019. It is subject to the approval of the relevant authorities.

2.4 Business conditions and performance

Organic sales growth

The Evonik Group grew **sales** 4 percent to €15,024 million. The 5 percent organic sales growth was driven by higher selling prices, resulting in some cases from passing on higher raw material costs. Overall, volumes were on the same level as in the previous year, partly due to the restrictions on the transportation of goods in fall 2018 caused by low water levels in the river Rhine. 1 percentage point of the rise in sales came from the initial consolidation of the silica business acquired from J. M. Huber Corporation, Atlanta (Georgia, USA) effective September 1, 2017 (contained in portfolio/other effects). Negative exchange rate movements had a counter-effect.

Change in sales 2018 versus 2017 T06

in %	
Volumes	–
Prices	5
Organic sales growth	**5**
Exchange rates	–3
Portfolio/other effects	2
Total	**4**

Adjusted EBITDA up considerably year-on-year

Adjusted EBITDA rose 10 percent to €2,601 million, driven by higher earnings in all segments and the initial success of the program to reduce selling and administrative expenses. The adjusted EBITDA margin improved to 17.3 percent, up from 16.4 percent in 2017.

Adjusted EBITDA by segment T07

in € million	2018	2017	Change in %
Nutrition & Care	810	747	8
Resource Efficiency	1,288	1,173	10
Performance Materials	670	658	2
Services	146	133	10
Corporate, other operations, consolidation	–313	–354	12
Evonik	**2,601**	**2,357**	**10**

Prior-year figures restated.

The increase in adjusted EBITDA in the Nutrition & Care segment resulted principally from higher volumes and selling prices. In view of the sustained high level of demand, the rise in the Resource Efficiency segment's adjusted EBITDA was mainly driven by prices. The Performance Materials segment posted slightly higher earnings, and earnings in the Services segment were considerably higher. The adjusted EBITDA reported by corporate, other operations, including consolidation, was higher than in the prior year, partly due to cost-saving measures. Among other things, it includes expenses for the corporate center and strategic research.

Sales and reconciliation from adjusted EBITDA to net income T08

in € million	2018	2017	Change in %
Sales	**15,024**	**14,383**	**4**
Adjusted EBITDA	**2,601**	**2,357**	**10**
Adjusted depreciation, amortization, and impairment losses	–877	–871	
Adjusted EBIT	**1,724**	**1,486**	**16**
Adjustments	–357	–261	
thereof attributable to			
Restructuring	–208	–25	
Impairment losses/reversals of impairment losses	7	–82	
Acquisition/divestment of shareholdings	–31	–89	
Other	–125	–65	
Income before financial result and income taxes (EBIT)	**1,367**	**1,225**	**12**
Financial result	–165	–203	
Income before income taxes, continuing operations	**1,202**	**1,022**	**18**
Income taxes	–250	–292	
Income after taxes, continuing operations	**952**	**730**	**30**
Income after taxes, discontinued operations	2	–	
Income after taxes	**954**	**730**	**31**
thereof attributable to non-controlling interests	22	17	
Net income	**932**	**713**	**31**
Earnings per share	**2.00**	**1.53**	

Prior-year figures restated.

The **adjustments** totaled –€357 million, compared with –€261 million in 2017. The considerable increase in restructuring expenses was mainly due to the SG&A 2020 program to reduce administrative and selling expenses, the Oleo 2020 program to raise the efficiency of the oleochemicals business in the Nutrition & Care segment, and shutdown of a production site in Hungary. The adjustment category purchase/sale of investments contains expenses of €31 million, mainly for integration of the businesses acquired in 2017 and the planned acquisition of PeroxyChem. The category others includes expenses for examining the options for the future development of the methacrylates business and a project to optimize the procurement of outsourced services. The previous year's figure of –€261 million mainly comprised expenses in connection with the acquisitions made in 2017 and impairment losses on assets in the Resource Efficiency and Nutrition & Care segments.

The **financial result** improved to –€165 million. It contains special items of –€3 million for interest expense in connection with the establishment of provisions. The prior-year figure of –€203 million contained special items of –€27 million, principally for impairment losses on loans to an equity investment (–€13 million) and currency hedging of the purchase price of the Huber silica business (–€9 million). The adjusted financial result improved by €14 million to –€162 million. **Income before income taxes, continuing operations** rose 18 percent to €1,202 million. The income tax rate of 21 percent was mainly attributable to lower foreign tax rates and positive effects from the remeasurement of deferred taxes. The income tax rate after factoring out taxes on special items was 23 percent.

Net income improved 31 percent to €932 million, mainly as a result of the higher operating result.

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 2018, adjusted net income improved 29 percent to a new record of €1,294 million as a result of the good operating performance.

Reconciliation to adjusted net income T09

in € million	2018	2017	Change in %
Adjusted EBITDA	**2,601**	**2,357**	**10**
Adjusted depreciation, amortization, and impairment losses	–877	–871	
Adjusted EBIT	**1,724**	**1,486**	**16**
Adjusted financial result	–162	–176	
Amortization and impairment losses on intangible assets	145	129	
Adjusted income before income taxes[a]	**1,707**	**1,439**	**19**
Adjusted income taxes	–391	–415	
Adjusted income after taxes[a]	**1,316**	**1,024**	**29**
thereof adjusted income attributable to non-controlling interests	22	17	
Adjusted net income[a]	**1,294**	**1,007**	**29**
Adjusted earnings per share[a] in €	**2.78**	**2.16**	

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

Program to reduce costs is making good progress

To support our financial targets, especially the goal of improving 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 first €50 million savings were made in 2018. By year-end 2018, measures had been identified for savings of a further €150 million.

[1] See section on business management systems.

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.

The principal factors in 2018 were restricted availability of raw materials and rising raw material prices. Production problems at some key suppliers, the persistently low level of water in the river Rhine, and the escalating trade dispute between the USA and China were major influences. Other contributory factors were multiple plant closures in China as a consequence of a more restrictive environmental policy. Because of our sustainability strategy, we were not directly affected by this, but it nevertheless caused an additional tightening of supply on raw material markets.

In 2018, we drove forward the use of new digital procurement solutions to automate further operational tasks and increase the value created by strategic activities. For instance, the procurement function is working on an application to use artificial intelligence to gain a competitive advantage in the procurement of raw materials by speeding up the response to events affecting the market, reducing the time required to obtain information, and improving our negotiating position. In addition, we are actively examining the use of new methods such as machine learning to automate and improve forecasting of raw material prices.

Indirect procurement (procurement of general and technical goods and services) focused on the global introduction of a new cloud-based IT solution for catalogue orders, which brought a further increase in the automation rate. Optimization continued in 2018 in the procurement of construction and technical services to deal with the challenges resulting from the skills shortage and the construction boom in Germany. Here, significant progress was made in validating new suppliers and extending long-term supply relationships.

As well as participating in procurement alliances with other companies and validating new suppliers, we are working intensively to extend strategic relationships with suppliers. Here we are looking for additional opportunities to reduce risk, optimize costs, and enhance cooperation and innovation with the suppliers that are currently of the greatest strategic importance. We are aware of our responsibility within the supply chain. Issues such as safety, health, environmental protection, corporate responsibility, and quality play an integral part in our procurement strategy. These sustainability aspects are also supported by standardized global audits and assessments through the Together for Sustainability (TfS) sector initiative, which was co-founded by Evonik. An audit or assessment has already been performed on Evonik's principal suppliers and 83 percent of suppliers of critical raw materials[1].

In 2018, Evonik spent around €9.9 billion on raw materials and supplies, technical goods, services, energy, and other operating supplies. Raw materials make up around 60 percent of procurement volume. Spending on petrochemical feedstocks is around €4.0 billion and accounts for 67 percent of our raw material base.

Using renewable resources remains important to Evonik. In 2018, around 8 percent of raw materials were from renewable resources. The main applications for these raw materials are amino acids and starting products for the cosmetics industry.

Another good return on capital employed

Within our value-oriented management approach, our success is measured principally by **ROCE,** which was 12.1 percent in 2018 and therefore above our cost of capital. In our regular review in 2018, the cost of capital was confirmed as being 10.0 percent before taxes, unchanged from the previous year.

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

in € million	2018	2017
Intangible assets	6,105	5,476
+ Property, plant and equipment	6,590	6,300
+ Investments	47	46
+ Inventories	2,204	1,952
+ Trade accounts receivable	1,819	1,815
+ Other interest-free assets	461	490
- Interest-free provisions	−934	−915
- Trade accounts payable	−1,535	−1,371
- Other interest-free liabilities	−462	−536
= Capital employed[a]	**14,295**	**13,257**
Adjusted EBIT	**1,724**	**1,486**
ROCE (adjusted EBIT/capital employed) in %	**12.1**	**11.2**
Cost of capital (capital employed ∗ WACC)	1,430	1,325
EVA® (adjusted EBIT − cost of capital)	**294**	**161**

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

[1] We define these as raw materials whose availability is vital for our production processes.

The average **capital employed** increased by €1.0 billion to €14.3 billion. The acquisition of the Air Products specialty additives business and the Huber silica business in 2017 made a substantial contribution to this. Due to the use of an average, these additions had a full impact on average capital employed for the first time in 2018. In particular, this increased intangible assets, property plant and equipment, and net working capital.

Thanks to the good development of adjusted EBIT, the Evonik Group's ROCE increased in 2018 even though average capital employed was higher.

In the three chemical segments, ROCE was above the cost of capital. In the Resource Efficiency and Performance Materials segments, ROCE was well above average. The Nutrition & Care segment increased ROCE slightly year-on-year.

ROCE by segment **T11**

in %	2018	2017
Nutrition & Care	11.2	10.9
Resource Efficiency	20.5	20.8
Performance Materials	42.5	41.3
Services	1.3	1.5
Evonik (including corporate, other operations)	**12.1**	**11.2**

Prior-year figures restated.

Clear value creation

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). If EVA® is positive, the Group creates value (value spread approach). In 2018, we generated EVA® of €294 million. The improvement of €133 million compared with the previous year was attributable to the rise in the operating result.

2.5 Comparison of forecast and actual performance

We met our forecasts in full, and actually exceeded them for some performance indicators.

Comparison of forecast and actual performance **T12**

Forecast performance indicators	2017	Forecast for 2018	Adjusted forecast for 2018[a]	2018	Forecast for 2019
Group sales	€14.4 billion	Slight increase		€15.0 billion	Slightly[b] lower to stable
Adjusted EBITDA	€2.36 billion	Between €2.4 billion and €2.6 billion	Between €2.60 billion and €2.65 billion	€2.60 billion	Slightly[b] lower to stable
ROCE	11.2%	Above the cost of capital, about level with the prior year		12.1%	Above the cost of capital; slightly lower than in the prior year
Capital expenditures[c]	€1.08 billion	Around €1.0 billion		€1.05 billion	Around €1.0 billion
Free cash flow	€0.51 billion	Slightly above the prior year	Perceptibly above the prior year	€0.67 billion	Significantly higher than in the prior year
Accident frequency	1.16	Stable and below upper limit of 1.30		0.87	Below the upper limit of 1.30
Incident frequency	1.11	Below upper limit of 1.10		1.08	Better and below the upper limit of 1.10

Prior-year figures restated.

[a] In the half-year financial report 2018.
[b] In the context of the outlook, slightly indicates a change of between 1 percent and 5 percent when it refers to sales, and between 1 percent and 10 percent when it refers to adjusted EBITDA.
[c] Capital expenditures for intangible assets, property, plant and equipment.

2.6 Segment performance

Nutrition & Care segment

Key data for the Nutrition & Care segment T13

in € million	2018	2017	Change in %
External sales	4,646	4,507	3
Adjusted EBITDA	810	747	8
Adjusted EBITDA margin in %	17.4	16.6	–
Adjusted EBIT	535	463	16
Capital expenditures[a]	486	391	24
Depreciation and amortization	263	262	–
Capital employed (annual average)	4,774	4,259	12
ROCE in %	11.2	10.9	–
No. of employees as of December 31	8,224	8,257	–

Prior-year figures restated.

[a] Capital expenditures for intangible assets, property, plant and equipment.

Perceptible volume growth

In the Nutrition & Care segment, sales advanced 3 percent to €4,646 million, driven by high global demand. A perceptible rise in volumes and higher selling prices contributed to this. Negative currency movements had a counter-effect.

In the healthcare business, a very successful performance was posted by functional polymers for smart drug delivery systems for oral and parenteral pharmaceutical applications and by exclusive synthesis for the pharmaceutical industry. Personal care products posted clear sales growth thanks to higher volumes and selling prices. Sales of additives for polymer foam, which are used, for example, in mattresses and in insulating materials, were around the prior-year level. Growth in the market for essential amino acids for animal nutrition, especially methionine, remained robust. Sales were around the previous year's level, while volumes increased. Selling prices were lower than in the previous year as a result of the improved availability of products. A wide range of measures were successfully implemented to safeguard earnings by raising efficiency and cutting costs.

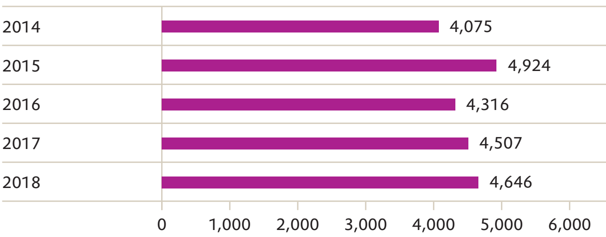
The **Oleo 2020** program introduced in 2018 is bundling our oleochemical activities. We combined our personal care and household care products businesses and the related oleochemical technology platform at the start of 2019. The new Care Solutions unit will concentrate on specialties with high product differentiation. The aim is to achieve greater efficiency in customer relationship management and leverage synergies in production. In addition, two sites in the UK and Spain are to be closed.

Perceptible improvement in adjusted EBITDA

Adjusted EBITDA in the Nutrition & Care segment rose 8 percent to €810 million. This was due to volume growth, the systematic focus on higher-margin products, and successful cost savings. The adjusted EBITDA margin improved to 17.4 percent, up from 16.6 percent in 2017.

Development of sales in the Nutrition & Care segment C09

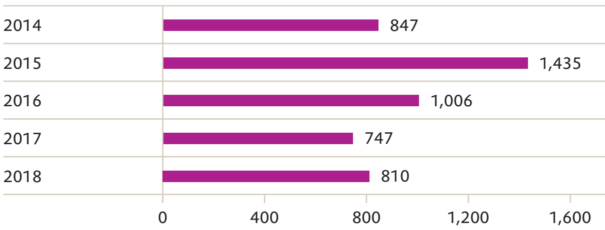
in € million



Prior-year figures restated.

Development of adjusted EBITDA in the Nutrition & Care segment C10

in € million



Prior-year figures restated.

Higher capital expenditures

Capital expenditures in the Nutrition & Care segment increased 24 percent to €486 million. The increase was attributable to major investment in another world-scale production complex for methionine in Singapore. Capital expenditures were therefore well above depreciation and amortization, which was €263 million. The average capital employed increased to €4,774 million, principally due to capital expenditures. ROCE rose to 11.2 percent as a result of the increase in earnings.

Investment projects to drive growth

In view of the strong growth in the market for methionine, Nutrition & Care is currently building a further world-scale production complex in Singapore. It will be located alongside the facility on Jurong Island that came into service in November 2014, and will be fully backwardly integrated, including production of all precursors and intermediates. Start-up is scheduled for mid-2019.

The Veramaris joint venture established by Evonik and Royal DSM, Heerlen (Netherlands) is currently building a plant to produce omega-3 fatty acids from natural sea algae. Together, the two partners are investing around US$200 million in this new plant at Evonik's site in Blair (Nebraska, USA), where it will have access to decades of experience of industrial fermentation technology. Start-up is scheduled for mid-2019. The highly concentrated algal oil produced by Veramaris will enable the animal feed industry to keep pace with rising demand for these essential omega-3 fatty acids for the first time without having to rely on fish oil from stocks of wild fish.

Both investments strengthen the Animal Nutrition growth engine.

Resource Efficiency segment

Key data for the Resource Efficiency segment **T14**

in € million	2018	2017	Change in %
External sales	5,709	5,393	6
Adjusted EBITDA	1,288	1,173	10
Adjusted EBITDA margin in %	22.6	21.8	–
Adjusted EBIT	985	885	11
Capital expenditures[a]	289	340	−15
Depreciation and amortization	290	281	3
Capital employed (annual average)	4,815	4,256	13
ROCE in %	20.5	20.8	–
No. of employees as of December 31	10,268	10,260	–

Prior-year figures restated.

[a] Capital expenditures for intangible assets, property, plant and equipment.

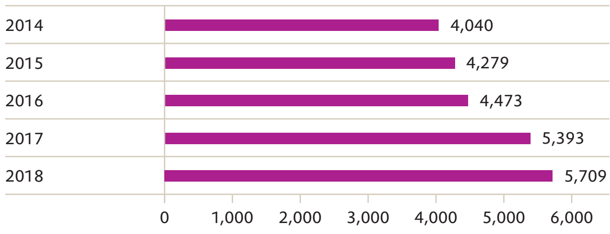
Higher sales

The Resource Efficiency segment's successful performance continued in 2018. Sales rose 6 percent to €5,709 million, driven principally by higher selling prices, partly because increased raw material prices were passed on, and by the consolidation of the silica business acquired from Huber as of September 1, 2017. This was countered by slightly lower volumes and negative currency effects.

The silica business contributed significantly higher sales. Alongside eight months including the first-time consolidation of the Huber business, a very pleasing performance came from products for the tire industry. Coating additives, which mainly offer applications solutions for coating technologies, also generated significantly higher sales. In the business with high-performance polymers, there was especially high demand for polyamide 12 products, for example, from the automotive industry and 3D printing. An improved product mix and higher prices lifted sales. Crosslinkers, which are mainly used in environment-friendly paint systems/coatings, high-performance composites, and specialty plastics, posted a good performance worldwide and were able to grow sales thanks to volumes and prices. Oil additives for the automotive, construction, and transportation industries reported sales on the prior-year level.

Development of sales in the Resource Efficiency segment **C11**

in € million



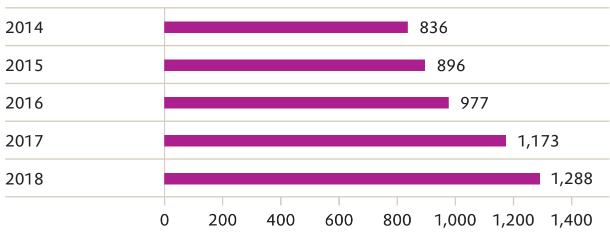
Prior-year figures restated.

Further rise in earnings

Adjusted EBITDA in the Resource Efficiency segment climbed 10 percent to €1,288 million thanks to higher capacity utilization and the additional earnings contributions from the activities acquired from Huber. The adjusted EBITDA margin improved from 21.8 percent to 22.6 percent.

Development of adjusted EBITDA in the Resource Efficiency segment **C12**

in € million



Prior-year figures restated.

Attractive return on capital

Capital expenditures declined 15 percent in the Resource Efficiency segment to €289 million and were on a level with depreciation and amortization. The average capital employed increased to €4,815 million. ROCE was at a very good level of 20.5 percent.

Investment projects to expand market positions

A new production facility for high-molecular polyester was completed at our site in Witten (Germany). As binders for paints, specialty copolyesters are used in coil coatings and, increasingly, in food can coatings.

By raising global capacity for precipitated silica, the Resource Efficiency segment is supporting the growth of its global customers in the tire and construction industries and in attractive specialty markets. In North America, a new production facility for precipitated silica has been erected in Charleston (South Carolina, USA), close to almost all major customers in the tire industry. This involves investment in the low triple-digit million euro range. We are also increasing production capacity for precipitated silica in Adapazari (Turkey) by 2020. Precipitated silica is a fast-growing product that is mainly used in high-quality tires with low rolling resistance. Other areas of application are the food, feed, and agriculture industries.

In Antwerp (Belgium), the Resource Efficiency segment is investing a sum in the high double-digit million euro range to extend capacity for fumed silica. This production complex is scheduled to come into service in summer 2019. 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. Precipitated and fumed silicas belong to the Smart Materials growth engine.

In response to rapidly rising demand, we are planning a new production complex for the specialty polymer polyamide 12 (PA 12) in Marl (Germany), which is scheduled to start operating in early 2021. 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: in automotive and lightweight engineering, and in oil and gas pipelines. In addition, it is used medical applications and in 3D printing. This investment also strengthens the Smart Materials growth engine.

In addition, on November 7, 2018, we signed an agreement to acquire the US company PeroxyChem[1] as an extension to our specialty products for the active oxygen business.

[1] See section on major events.

Performance Materials segment

Key data for the Performance Materials segment T15

in € million	2018	2017	Change in %
External sales	3,976	3,751	6
Adjusted EBITDA	670	658	2
Adjusted EBITDA margin in %	16.9	17.5	–
Adjusted EBIT	534	507	5
Capital expenditures[a]	114	163	–30
Depreciation and amortization	133	139	–4
Capital employed (annual average)	1,256	1,227	2
ROCE in %	42.5	41.3	–
No. of employees as of December 31	4,132	4,364	–5

Prior-year figures restated.

[a] Capital expenditures for intangible assets, property, plant and equipment.

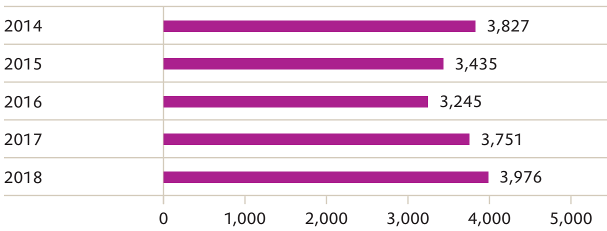
Higher sales

Sales grew 6 percent to €3,976 million in the Performance Materials segment. This was attributable to a significant rise in selling prices, primarily as a consequence of higher raw material costs. The increase in sales was held back by negative currency effects. Transportation restrictions caused by the low water level in the river Rhine resulted in a drop in volumes.

Methacrylates once again posted a good performance and sales were significantly higher. Demand remained high, especially from the coatings and automotive sectors, while supply on the market was tight. We registered pleasing growth in attractive specialty applications, e.g., for medical technology and the automotive sector. In this market environment, business focused specifically on attractive applications. Sales of performance intermediates were higher as a result of the rise in selling prices resulting from higher raw material costs. However, the reduction in volumes caused by transportation restrictions had a significant counter-effect.

Development of sales in the Performance Materials segment C13

in € million



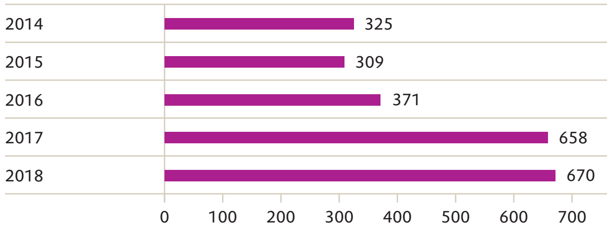
Prior-year figures restated.

High level of adjusted EBITDA

Adjusted EBITDA rose 2 percent to €670 million, driven principally by prices, but was held back by higher logistics costs resulting from the low water level in the river Rhine. The adjusted EBITDA margin dropped from 17.5 percent to 16.9 percent.

Development of adjusted EBITDA in the Performance Materials segment C14

in € million



Prior-year figures restated.

Excellent return on capital

Investment in the Performance Materials segment aims to secure its leading market positions, raise efficiency, and broaden the technology base. Capital expenditures dropped to €114 million. The average capital employed increased slightly, by 2 percent, to €1,256 million. The rise in ROCE to 42.5 percent was mainly due to higher earnings and the fact that most production facilities have been fully depreciated.

Focused investment

Performance Materials started up a new production facility for high-quality flat films made from multi-layer polymethylmethacrylate (PMMA) in Weiterstadt (Germany). Multilayer PLEXIGLAS® and EUROPLEX® films are used in medical technology, window and façade construction, and in the graphics industry.

Services segment

Key data for the Services segment **T16**

in € million	2018	2017	Change in %
External sales	677	717	–6
Adjusted EBITDA	146	133	10
Adjusted EBITDA margin in %	21.6	18.5	–
Adjusted EBIT	9	10	–10
Capital expenditures[a]	148	162	–9
Depreciation and amortization	127	124	2
Capital employed (annual average)	675	652	4
ROCE in %	1.3	1.5	–
No. of employees as of December 31	12,913	13,021	–1

Prior-year figures restated.

[a] Capital expenditures for intangible assets, property, plant and equipment.

The Services segment generates sales both internally, with the specialty chemicals segments and the corporate center (2018: €2,247 million), and with external customers. External sales fell 6 percent to €677 million. This was mainly due to lower revenues from procurement for external customers at our sites. Adjusted EBITDA rose 10 percent to €146 million. This was principally due to higher earnings from utilities, waste management, and site management.

Capital expenditures in this segment decreased by 9 percent to €148 million and therefore exceeded depreciation and amortization, which amounted to €127 million.

2.7 Regional development

A global presence

We increased sales in all regions in 2018. 83 percent of our sales were generated outside Germany.

Sales in Western Europe rose 3 percent year-on-year to €6,397 million, driven principally by our Nutrition & Care and Resource Efficiency growth segments, but the Performance Materials also posted higher sales. Western Europe accounted for 43 percent of Group sales.

Investment was once again concentrated on Western Europe. Nevertheless, capital expenditures in this region were below the previous year's high level at €480 million compared with €576 million. A new production facility for high-quality flat films made from multi-layer polymethylmethacrylate (PMMA) came on stream at our site in Weiterstadt (Germany). A production plant for high-molecular polyester was completed in Witten (Germany). Capacity for fumed silicas will be increased in Antwerp (Belgium) by summer 2019. In Marl (Germany), we are planning a new production complex for the specialty polymer polyamide 12. This is scheduled to start operating in early 2021.

In Eastern Europe, sales increased 13 percent to €947 million. The Nutrition & Care and Resource Efficiency segments both reported above-average sales rises. This region's share of Group sales was unchanged at 6 percent.

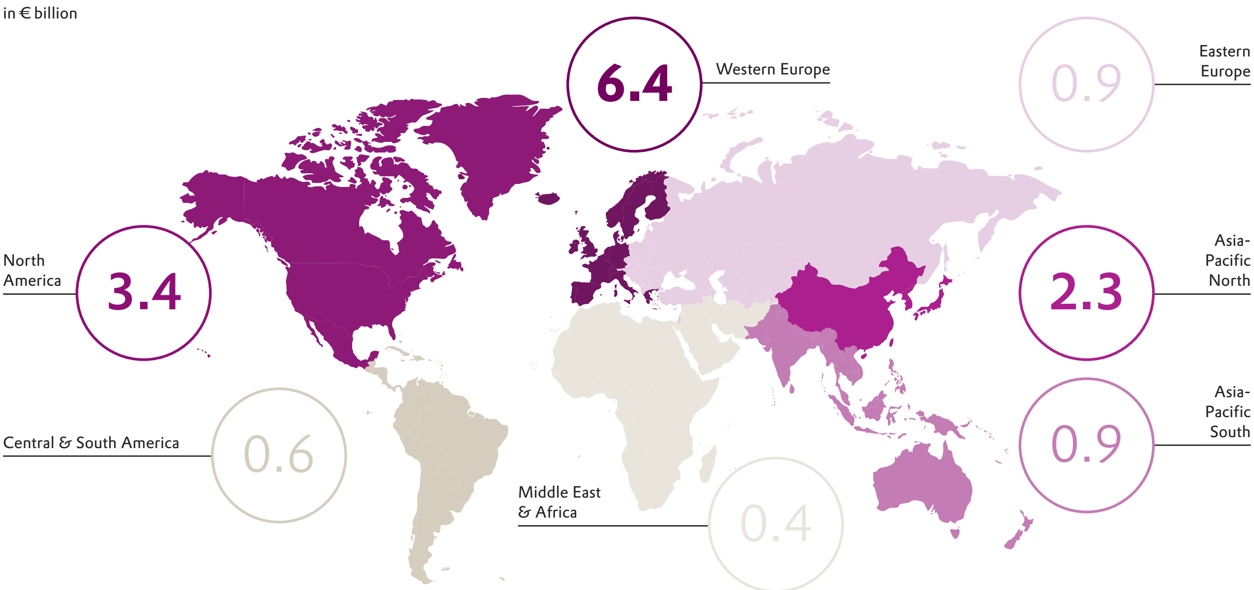
In the Middle East & Africa region, sales rose 3 percent to €435 million, which was 3 percent of Group sales.

Higher sales in the Americas

Sales in North America were 3 percent higher at €3,409 million. In addition to the first-time consolidation of sales from the Huber silica business, which was acquired on September 1, 2017, this was driven primarily by the good development of the Performance Materials segment. This region's share of total sales was unchanged at 23 percent. Capital expenditures were €213 million, which was below the previous year's level (€254 million). We completed a new production facility for precipitated silicas in Charleston (South Carolina, USA) and converted capacity in Chester (Pennsylvania, USA) for these products.

Sales declined 13 percent in Central & South America to €624 million. This region accounted for 4 percent of Group sales.

Sales by region C15



Higher investment in the Asia-Pacific region

Sales rose 6 percent to €2,276 million in the Asia-Pacific North region, with pleasing sales growth coming from the Resource Efficiency and Performance Materials segments. This region again accounted for 15 percent of Group sales. Capital expenditures totaled €40 million.

Sales in Asia-Pacific South rose 5 percent to €936 million, which was 6 percent of Group sales. Capital expenditures increased to €303 million (2017: €173 million). A further world-scale production complex for methionine is under construction in Singapore and is scheduled to come on stream in mid-2019.

2.8 Earnings position

Considerable year-on-year rise in income before income taxes, continuing operations

Sales grew 4 percent to €15.0 billion, principally as a result of higher selling prices and initial consolidation of the silica business acquired from Huber effective September 1, 2017. Negative exchange rate movements had a counter-effect. The rise in the cost of sales was driven mainly by consolidation of the new businesses and the increase in raw material costs. The higher selling expenses were mainly due to the expansion of our business. Research and development expenses declined, partly as a result of more targeted alignment of R&D activities. General administrative expenses were lower, mainly as a result of successful measures to reduce costs. In 2017, other operating income contained income in connection with the dissolution of a joint operation. The other operating expenses contained higher restructuring expenses but lower expenses for the purchase of equity investments. Income before financial result and income taxes was 12 percent higher at €1,367 million, principally because of the better operating performance.

Income statement for the Evonik Group **T17**

in € million	2018	2017	Change in %
Sales	15,024	14,383	4
Cost of sales	−10,399	−9,905	5
Gross profit on sales	**4,625**	**4,478**	**3**
Selling expenses	−1,752	−1,695	3
Research and development expenses	−459	−476	−4
General administrative expenses	−656	−714	−8
Other operating income	238	311	−23
Other operating expense	−637	−689	−8
Result from investments recognized at equity	8	10	−20
Income before financial result and income taxes, continuing operations	**1,367**	**1,225**	**12**
Financial result	−165	−203	−19
Income before income taxes, continuing operations	**1,202**	**1,022**	**18**
Income taxes	−250	−292	−14
Income after taxes, continuing operations	**952**	**730**	**30**
Income after taxes, discontinued operations	2	–	–
Income after taxes	**954**	**730**	**31**
thereof attributable to non-controlling interests	22	17	29
Shareholders of Evonik Industries AG (net income)	**932**	**713**	**31**

Prior-year figures restated.

Higher net income

The financial result includes special items totaling −€3 million, compared with −€27 million in the previous year. Income before income taxes, continuing operations increased 18 percent to €1,202 million. Income taxes declined, mainly due to non-period tax income and the remeasurement of deferred taxes. 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 was 31 percent higher at €932 million, mainly because of the better operating performance.

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 2018. 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.

Good free cash flow

The free cash flow rose by €161 million to €672 million. It includes cash outflows of around €15 million in connection with the current restructuring programs.

The increase in the free cash flow mainly resulted from the higher cash flow from operating activities, which was €1,704 million, exceeding the prior-year level by €153 million. The main influence here was the better operating result, while the increase in net working capital had a negative effect.

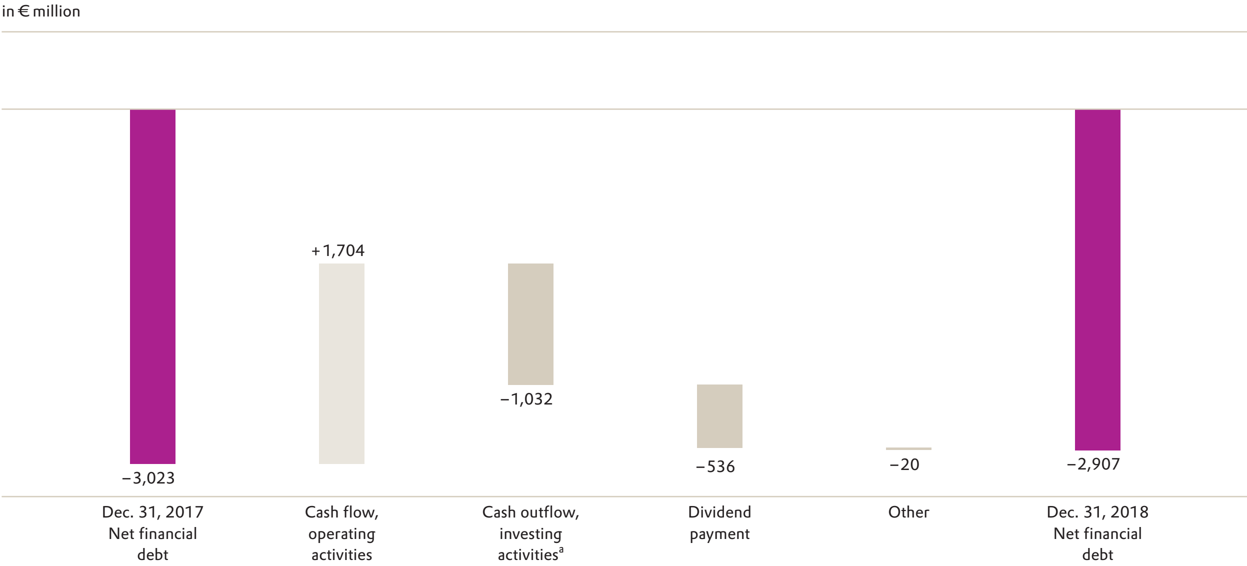
The cash flow from other investing activities comprised an outflow of €10 million. The prior-year outflow of €4,141 million mainly related to outflows for the purchase of subsidiaries.

The cash outflow of €676 million for financing activities was principally due to the dividend payment of €536 million for 2017.

Cash flow statement (excerpt) **T18**

in € million	2018	2017
Cash flow from operating activities	1,704	1,551
Cash outflows for investments in intangible assets, property, plant and equipment	−1,032	−1,040
Free cash flow	**672**	**511**
Cash flow from other investing activities	−10	−4,141
Cash flow from financing activities	−676	23
Change in cash and cash equivalents	−14	−3,607

Change in net financial debt C16



[a] Cash outflows for capital expenditures for intangible assets, property, plant and equipment.

Slight reduction in net financial debt

The dividend payment for 2017 was fully financed out of the free cash flow of €672 million. Net financial debt was reduced to €2,907 million, €116 million lower than on December 31, 2017.

Net financial debt T19

in € million	Dec. 31, 2018	Dec. 31, 2017
Non-current financial liabilities[a]	−3,683	−3,694
Current financial liabilities[a]	−230	−351
Financial debt	**−3,913**	**−4,045**
Cash and cash equivalents	988	1,004
Current securities	8	9
Other financial investments	10	9
Financial assets	**1,006**	**1,022**
Net financial debt as stated on the balance sheet	**−2,907**	**−3,023**

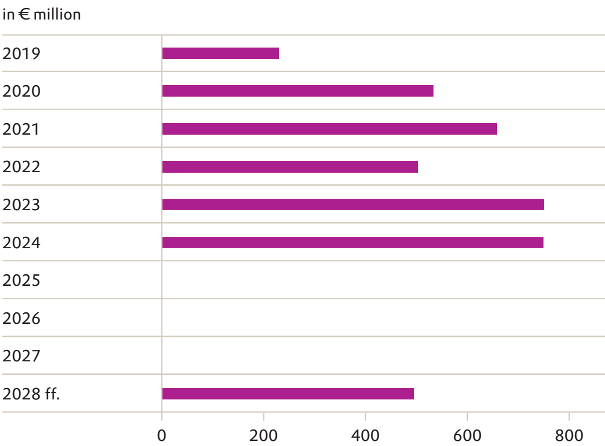
[a] Excluding derivatives, excluding the refund liability for rebate and bonus agreements, and excluding liabilities from exchange-type transactions with competitors.

Corporate bonds as a central financing instrument

At year-end 2018, the financial debt of €3,913 million comprised six bonds with a total carrying amount of €3,632 million, bank loans totaling €214 million, and other financial liabilities of €67 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 97 percent of the Evonik Group's non-derivative financial liabilities are denominated in euros (2017: 94 percent). The use of currency derivatives aims to ensure that Evonik's global operating activities are financed in the corresponding currencies. Including these currency derivatives, around 42 percent of financial liabilities are denominated in euros, 33 percent in US dollars, 12 percent in Singapore dollars (SGD), 11 percent in Chinese renminbi (CNY), and 2 percent in other currencies.

Maturity profile of financial liabilities C17



As of December 31, 2018.
The hybrid bond is included in 2022 (when Evonik has its first right of redemption).

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	April 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	Sept. 7, 2024	0.375	99.490
Fixed-interest bond 2016/2028[a]	500	BBB+/Baa1	Sept. 7, 2028	0.750	98.830

[a] Issued through the debt issuance program.

Liquidity position remains strong

As of December 31, 2018, Evonik had cash and cash equivalents amounting to €988 million. Alongside cash and cash equivalents and investments in current securities, Evonik's central source of liquidity is a €1.75 billion revolving credit facility. Following exercise of the first extension option in June 2018, the credit facility agreed in June 2017 now runs until June 2023, with a further option to extend it by one year to June 2024 at the latest. This credit facility was not utilized in 2018 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, 2018, €495 million of the total amount had not been drawn.

Solid funding of pension obligations

Pension provisions account for about half of our total debt. They are non-current and depend on the discount rate. Applying a constant discount rate, pension provisions declined by €85 million compared with year-end 2017 to €3,732 million. The funding of pension obligations[1] was 69 percent as of the reporting date, a solid level in line with the industry norm.

Slightly 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 strategic and economic analyses. All projects have to meet our minimum return requirement, which is set at our 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.

Capital expenditures[2] were slightly lower than in the previous year at €1,050 million (2017: €1,078 million).[3] The highest proportion of capital expenditures went to the Nutrition & Care and Resource Efficiency segments (46 percent and 28 percent, respectively). A further 14 percent was allocated to the Performance Materials segment and the Services segment received 11 percent. The regional focus of capital expenditures was Western Europe, which accounted for 46 percent of the total, followed by Asia-Pacific South (29 percent), North America (20 percent), and Asia-Pacific North (4 percent).

Major projects completed or virtually completed in 2018 T21

Segment	Location	Project
Resource Efficiency	Witten (Germany)	Expansion of capacity for high-molecular polyester
	Charleston (South Carolina, USA)	New production facility for precipitated silica
	Chester (Pennsylvania, USA)	Conversion of capacity for precipitated silica
Performance Materials	Weiterstadt (Germany)	Expansion of capacity for film extrusion

For further information on current capital expenditure projects, see section on segment performance.

Financial investments amounted to €30 million. The prior-year figure of €4,322 million was dominated by the acquisition of the Air Products specialty additives business and the Huber silica business.

[1] Ratio of plan assets to pension obligations. | [2] Capital expenditures for intangible assets, property, plant and equipment. | [3] In principle, there is a slight timing difference in outflows for property, plant and equipment due to payment terms.

2.10 Asset structure

Slight increase in total assets

As of December 31, 2018, total assets were €0.3 billion higher at €20.3 billion. Non-current assets increased by €0.2 billion to €14.7 billion, mainly as a consequence of investments. In all, non-current assets made up 72 percent of total assets (2017: 73 percent). They are financed by liabilities with the same maturity structure.

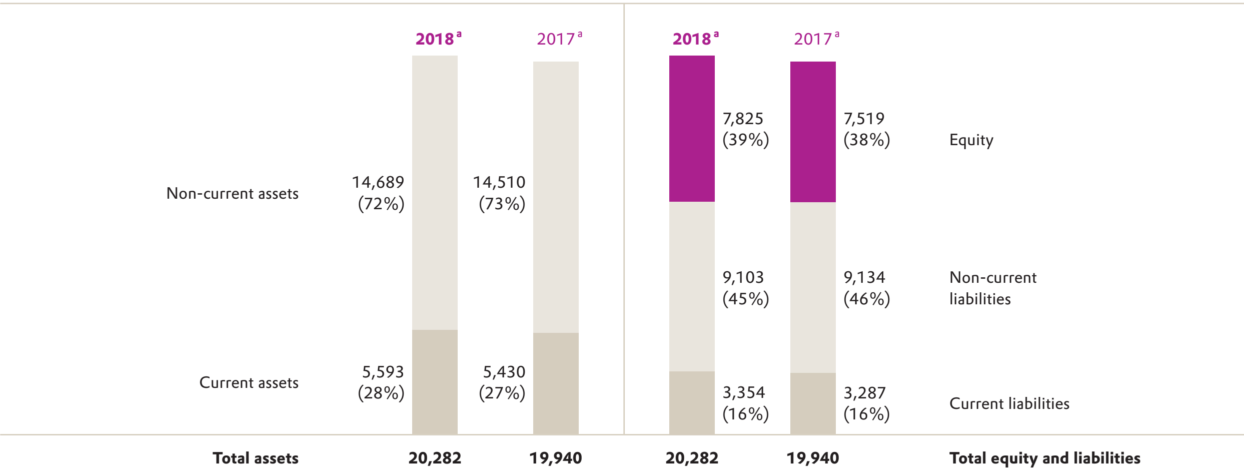
Current assets increased by €0.1 billion to €5.6 billion. Higher raw material prices increased inventories by €0.3 billion to €2.3 billion. By contrast, trade accounts receivable declined by €0.1 billion to €1.7 billion. Current assets therefore increased slightly to 28 percent of total assets (2017: 27 percent).

Equity[1] rose by €0.3 billion, to €7.8 billion. The equity ratio increased from 38 percent to 39 percent.

Non-current liabilities were unchanged at €9.1 billion. Non-current liabilities decreased slightly from 46 percent to 45 percent of total equity and liabilities.

Balance sheet structure of the Evonik Group C18

in € million



[a] As of December 31.

[1] See disclosures pursuant to section 160 paragraph 1 no. 2 German Stock Corporation Act (AktG), note 6.8 (d) to the consolidated financial statements.

3. Performance of Evonik Industries AG

Holding company for the Evonik Group

Financial assets
comprise direct and indirect stakes in all subsidiaries in the Evonik Group

Cash pool
for all Group companies

Coordination of
opportunity and risk management
for the entire Group

Fiscal entity
for income taxes in Germany

Financing function
for the Group

Free float increased to
35.7%

Annual shareholders' meeting
May 28, 2019

Dividends

in € million

Evonik Industries AG, Essen (Germany) is the parent company of the Evonik Group. Its registered office is in Essen (Germany) and 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.

Income statement for Evonik Industries AG T22

in € million	2018	2017
Sales	705	667
Change in finished goods and work in progress	–	–5
Other own work capitalized	2	5
Other operating income	484	971
Cost of materials	–263	–246
Personnel expense	–415	–366
Depreciation and amortization of intangible assets, property, plant and equipment	–24	–20
Other operating expense	–855	–1,356
Operating result	**–366**	**–350**
Income from investments	564	834
Write-downs of financial assets and current securities	–15	–49
Write-ups of financial assets and current securities	11	149
Net interest expense	–136	–43
Income before income taxes	**58**	**541**
Income taxes	–121	–166
Income after taxes	**–63**	**375**
Net income	**–63**	**375**
Profit carried forward from the previous year	234	400
Withdrawals from (+)/allocations to (–) retained earnings	365	–5
Distributable profit	**536**	**770**

The 6 percent rise in sales to €705 million was principally attributable to higher selling prices as increases in raw material prices were passed on. Accordingly, the cost of materials rose 7 percent to €263 million. Personnel expense was €415 million, an increase of €49 million compared with the prior year. This increase was mainly attributable to the establishment of provisions in connection with the SG&A 2020 program to reduce administrative and selling expenses. Other operating income declined to €484 million, mainly due to the income from currency translation gains. In the gross presentation, currency translation gains of €420 million (2017: €910 million) are shown in other operating income, while the corresponding currency translation losses of €419 million (2017: €914 million) are shown separately in other operating expense. The net effect was a gain of €1 million (2017: loss of €4 million).

Income from investments fell 32 percent to €564 million. This decline was mainly due to lower income from profit-and-loss transfer agreements, which was caused primarily by negative effects from the measurement of pension assets at the subsidiaries concerned. The write-downs of financial assets and current securities totaling €15 million and write-ups of financial assets and current securities totaling €11 million related to affiliated companies. In the previous year, write-ups on financial assets amounted to €149 million.

Net interest expense was €136 million, well below the previous year's net interest expense of €43 million. This was mainly caused by interest expense in connection with the valuation of pension assets, and the interest effect of the valuation of provisions for pensions and similar commitments based on the 2018 revision of the biometric data in the 2018 G mortality tables published by Klaus Heubeck. In 2017, the valuation of pension assets resulted in interest income. This item also contains interest income and expense from the group-wide cash pool, which is concentrated at Evonik Industries AG.

Income before income taxes declined to €58 million, principally as a result of lower income from profit-and-loss transfer agreements and higher interest expense. Income tax expense was €121 million, compared with €166 million in 2017.

By contrast, the net income of Evonik Industries AG calculated on the basis of German Commercial Code was €438 million lower than in the previous year, resulting in a **net loss** of €63 million.

This was due, among other things, to the factors outlined above, which only affect the commercial accounting regulations applied in the separate financial statements of Evonik Industries AG, and do not affect the consolidated financial statements prepared in accordance with IFRS. Following withdrawal of €365,064,677.09 from retained earnings and taking into account the profit of €234,100,000.00 carried forward from the previous year, the distributable profit was €535,900,000.00. A proposal will be put to the annual shareholders' meeting that the entire distributable profit should be paid out, giving a **dividend** of €1.15 per share.

Balance sheet for Evonik Industries AG **T23**

in € million	Dec. 31, 2018	Dec. 31, 2017
Assets		
Intangible assets, property, plant and equipment	69	68
Financial assets	8,998	9,430
Non-current assets	**9,067**	**9,498**
Inventories	6	6
Receivables and other assets	3,884	3,327
Cash and cash equivalents	604	637
Current assets	**4,494**	**3,970**
Deferred income	15	16
Total assets	**13,576**	**13,484**
Equity and liabilities		
Issued capital	466	466
Capital reserve	721	721
Retained earnings	4,246	4,611
Distributable profit	536	770
Equity	**5,969**	**6,568**
Provisions	777	610
Payables	6,830	6,305
Deferred income	–	1
Total equity and liabilities	**13,576**	**13,484**

The total assets of Evonik Industries AG increased from €13.5 billion in the previous year to €13.6 billion. Financial assets mainly comprise shares in subsidiaries. The receivables are mainly financial receivables of €3.6 billion (2017: €3.0 billion), principally in connection with loans and cash pooling activities.

Equity decreased by €0.6 billion to €6.0 billion, mainly as a consequence of the dividend payment for 2017 and the net loss. The equity ratio declined from 48.7 percent in 2017 to 44.0 percent. Provisions increased from €0.6 billion to €0.8 billion, mainly as a consequence of interest effects on provisions for pensions and an increase in other provisions. The receivables and payables reflect the financing activities of Evonik Industries AG in its role as the holding company for the Evonik Group. Payables include financial liabilities of €6.6 billion (2017: €6.1 billion). €4.8 billion (2017: €4.2 billion) of this amount comprises liabilities to affiliated companies, principally in connection with cash pooling activities. A further €1.8 billion (2017: €1.8 billion) relates to corporate bonds.

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.

Outlook[1] for 2019

We anticipate that in 2019 Evonik Industries AG will report slightly higher earnings than in 2018, and anticipate that net income will be positive. This is based on the assumption of attractive income from investments. By contrast, given the low interest rates, effects relating to pension provisions could have a negative impact.

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 the section on expected developments.

4. Research and development

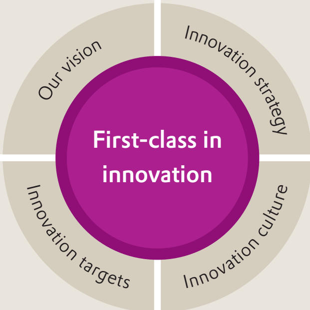
Our aspiration: leading in innovation

Leading in innovation

Focus on growth fields

Push transformational innovation

Open collaboration



Increase the value of the innovation pipeline

New products, applications, and processes must make a substantial contribution to sales and profit

Enhance risk-taking

Trust, openness, and transparency

Improve knowledge sharing

Approx. **240** new patent applications

Total patents held/applications filed approx. **26,000**

R&D expenses **€459 million**

Approx. **2,780** R&D employees

R&D ratio **3.1%**

Registered/pending trademarks approx. **7,600**

Products/applications introduced in the past five years **12%** of sales

Approx. **40** R&D locations

Patent-driven sales approx. **50%**

Our vision for Evonik: leading in innovation

The link between innovative capacity and closeness 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, Smart Materials, and Health & Care—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 skin care products
- **Additive Manufacturing:** developing products and technologies for additive manufacturing

A pleasing example from the Cosmetic Solutions innovation growth field is the good market development of new products with sustainability features. We received awards for RHEANCE® One: a novel ingredient developed by our Personal Care business. This glycolipid cleansing agent for skin and hair is produced from sugar using a fermentation process without tropical oils.

An example from the Sustainable Nutrition innovation growth field is the Veramaris joint venture, which grew out of the successful research collaboration between the Nutrition & Care segment and DMS, and is examining the production of omega-3 fatty acids from algae.

Other strategic investments in this innovation growth field were made in the precision livestock farming program. The acquisition of Porphyrio NV, a spin-off of KU Leuven based in Herent (Belgium), was completed in October 2018. Porphyrio is a leading supplier of big data solutions for livestock farming. Through our venture capital unit, we invested in the start-up OPTIFARM Ltd., Great Chesterford (UK), and the biotechnology start-up In Ovo, Leiden (Netherlands). Both investments enable us to help customers improve their performance and sustainability, and strengthen our Animal Nutrition growth engine.

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 2018, we submitted around 240 new patent applications. Patent-driven sales[1] accounted for around 50 percent of our total sales. In 2018, products and applications introduced in the past five years accounted for 12 percent of Evonik's consolidated sales. The significant increase compared with 2017 (10 percent) is attributable to innovations from the businesses acquired and to initial market successes from our innovation growth fields. R&D expenses declined by 4 percent to €459 million in 2018 as a result of 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** addresses completely new business options as well as activities to secure and enhance the prospects of existing business operations. Alongside product and process innovations, the focus includes innovative business models and product and process innovations. Our project portfolio is aligned to the differing strategies of the various business entities.

R&D expenses **C19**

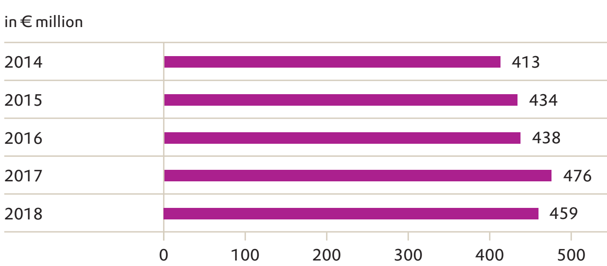


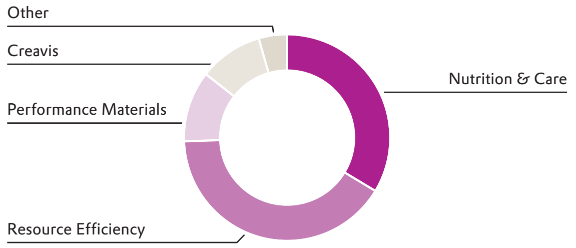
Figure for 2017 restated. See note 3.5 to the consolidated financial statements.

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

Targeted research and development

Around 90 percent of our R&D is performed by our **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 C20



Creavis concentrates on mid- and long-term innovation 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. Work on innovation projects of a cross-organizational nature is organized in project houses. Experts from the organizational units involved in a project house normally work together for a period of three years on the project house's development topics. Since April 2018, the Medical Devices project house has been driving forward seven promising projects as a competence center within the Health Care business line. The newly established Tissue Engineering project house located at the R&D hub in Singapore is currently working on new solutions to grow living cells on a scaffold material. Its work supports the Healthcare Solutions innovation growth field. The aim is to develop materials for biological implants for medical applications.

Since the start of 2018, Evonik and Siemens have been working together on artificial photosynthesis through the "Rheticus" project funded by the Federal Ministry of Education and Science. The aim is to use electricity from renewable resources and bacteria to convert carbon dioxide into specialty chemicals. A first pilot plant is under construction at our site in Marl (Germany).

Evonik also obtains access to innovative technologies and new business options through its **corporate venture capital activities.** We invest specifically in specialized technology funds and start-ups of strategic relevance to Evonik. In this way, we gain insights into innovative developments at a very early stage. We have made more than 24 investments since 2012. In addition to investments to strengthen the Sustainable Nutrition growth field, in 2018 Evonik invested, among others, in Velox Puredigital Ltd, Rosh Ha'Ayin (Israel). Velox has new digital printing technology that allows top-quality printing of metal, plastic, or glass packaging, either in extremely small series or on an industrial scale. This opens up opportunities for the Coating Additives business line to partner with Velox on the development of customized additive solutions for the growing packaging industry market.

Evonik aims to be the **digitalization** leader in the chemical industry. With this in mind, in 2018 we invested in the US high-tech start-up mySkin Inc., Jersey City (New Jersey, USA), which is facilitating a breakthrough in how consumers can determine and improve their skin properties. The company has developed a mobile device that analyzes skin properties and recommends care products.

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.

5. Sustainability

We take responsibility for our business, our employees, and the environment

- Safety has top priority
- Our products help our customers achieve their sustainability goals
- Evonik offers an attractive working environment so employees like working for us and fulfill their potential
- Protecting the climate and the environment is important to us

Safety indicators at a very good level

✓ **Accident frequency rate:** 0.87, well below the upper limit of 1.30

✓ **Incident frequency rate:** 1.08, slightly below the upper limit of 1.10

Low staff turnover rate of **6.2%**

Our employees come from **104** nations

23.8% of managers are female

New environmental targets support the Paris climate agreement

11% of our shares are held by sustainability-oriented investors

We invest around **€500** per employee in training

44 ESHQ audits worldwide

Accolades:

Diversity Champions: Top 10 von 100

Diversity Champions: Evonik again in the Top 10 out of 100

Top Employer in China

Leading Employer in Germany 1st place in the chemical sector

Sustainable procurement Gold rating from EcoVadis

Responsible corporate management

Sustainability is part of Evonik's market proposition. Our products and solutions are used in many areas that help to improve people's lives and minimize the use of scarce resources. In this way, we also aim to play our part in the United Nations' 17 Sustainable Development Goals, to be achieved by 2030. In the reporting period, we examined the SDGs and their relevance for the Evonik Group on various levels.

Evonik is committed to observing internationally recognized standards and its own more far-reaching guidelines and principles of conduct. That includes, for example, the ten principles of the UN Global Compact. In addition, we are guided by the International Labour Standards issued by the International Labour Organization (ILO) and the Guidelines for Multinational Enterprises published by the Organisation for Economic Cooperation and Development (OECD). Evonik is involved in many networks such as the Chemie[3] 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 (GSP) and our environment, safety, health, and quality (ESHQ) values provide a framework for responsible corporate management.

Sustainability strategy defined in more detail

We are convinced that sustainable and responsible business activities are vital for the future of companies. In view of this, we defined our sustainability strategy in more detail in 2018, especially as regards foresighted resource management and integrating sustainability into strategic management processes.

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 timely identification of upcoming market developments, trends, opportunities, and risks. 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 2018, that included, for example, an exchange of experience on the future of Europe with selected representatives of science, business, and non-governmental organizations. The motto for the Evonik Perspectives forum, which was attended by around 150 stakeholders, was "The two-degree goal—How industry can help meet climate targets."

Extensive review of the materiality analysis

Feedback from our dialogue with stakeholders was also used in the review of our materiality analysis. Based on the opinions of more than 400 stakeholders and internal experts, the most important sustainability topics for Evonik are more sustainable products/solutions for our customers, climate change and emissions into the air, and more efficient use of scarce resources/circular economy. We will be stepping up our focus on these topics in the future.

Further development of sustainability analysis methodology

Sustainability is an important criterion in many of our markets and is increasingly becoming a growth driver. Our sustainability analysis makes the contribution made by corresponding products and services to our business performance measurable. In 2018, we continued to develop the method used for this analysis and had it validated externally. We now analyze our business activities using the WBCSD method at the level of PARCs[1]. Each PARC comprises a product used for a defined application in a specific region.

Continuous improvement of sustainability reporting

Our reporting is focused on measurability and transparency and we have brought forward the publication date of our sustainability report[2] to coincide with publication of the financial report and the separate non-financial report[3]. Evonik has a good position in leading ratings and is included in major sustainability-oriented index families.

1 A PARC comprises a product used for a defined application in a specific region.
2 The sustainability report is not part of the management report. It is available at www.evonik.com/responsibility
3 The separate non-financial report is a non-audited component of the management report and is available at www.evonik.com/nonfinancial-report

5.1 Employees

Employees are the foundations of our success

Skilled and motivated employees are the key to Evonik's success. By providing an attractive working environment, we want to ensure that our employees like to work for Evonik and can develop their talents. We foster the creativity of our employees and offer them space to take their own route to innovative solutions. We want to create an atmosphere based on trust, respect, and openness. We reward performance and readiness to take risks and we develop our own managers.

This is reflected in our human resources strategy, which is divided into the following areas of action: attract, develop, perform, retain, and lead.

Attract

Employer branding—Positioning as an attractive employer

We seek out creative and competent employees with high potential and offer them a working environment that fosters ideas, offers creative freedom, and supports the combinability of work and private life. We also use these employer qualities in the competition to attract the best employees and managers to Evonik.

In our employer branding campaign, #HumanChemistry, employees from various regions share their experience and perspectives of working at Evonik. A sharp rise in the number of visitors to our careers site shows that reaching out to the target groups in this way achieves a good response. Evonik received the Leading Employer 2018 award in Germany and is the best employer in the chemical sector. In the overall ranking of over 70,000 companies, Evonik is ranked 22nd.

Develop

Further training to secure the future

We want to ensure timely identification of the potential of our employees and talents and to foster, develop, and stretch employees accordingly. Our learning and personnel development strategy is aligned to future business requirements. Digitalization is the central focus of our strategic objectives. An important new feature was the development of a learning strategy in collaboration with our employees. This resulted in 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. Our learning strategy and offerings were honored with the Gold Excellence Award 2018 for learning and development in Asia.

We invested around €17 million in the continuing professional development of our employees in 2018.

Vocational training for present and future specialists

We want to continue to recruit specialists specifically from young people within the company, and are committed to their development. All employees hired on unlimited contracts following successful completion of their vocational training are offered a clear perspective for the future.

In 2018, Evonik trained around 1,800 young people, including about 400 on behalf of other companies. Our training covered 33 recognized vocational training courses and combined vocational training and study programs at 16 sites. In 2018, 90 places for young people who were not yet ready for an apprenticeship were taken up on the "Start in den Beruf" pre-apprenticeship program. That figure includes the training initiative of the Evonik Foundation, which financed 40 places, including 20 for young refugees. In connection with the MATCHING 2020 internship program, for which RAG-Stiftung is providing funding of €1.35 million, Evonik will be creating 1,500 additional internships by 2020 to support young people in their career choices.

Apprentices accounted for around 6.8 percent of our workforce in Germany, which is still well above the national average of around 5 percent.[1] In all, we invested €63 million in vocational training of employees. In 2018, we were once again singled out as one of the best vocational training companies in Germany for the quality of our training.

Talent management—Developing tomorrow's executives and experts

Key positions are filled predominantly by talented employees from within the company. To this end, we develop employees with potential across hierarchical levels, functions, and organizational units. Important objectives for talent development at Evonik are personal responsibility, diversity, internationality, flexibility/mobility, and a business mindset.

The development of future senior executives is organized as a structured process at Evonik. Job rotation, evaluation of potential, and succession scenarios are discussed and analyzed in detail at regular personnel conferences attended by members of the executive board. Alongside ongoing development, Evonik works with the International Institute for Management Development in Lausanne (Switzerland). Together, we run programs for various groups of talents. The focus is on content of direct relevance to the business and on day-to-day management requirements. We support the personal development of executives using formats that center on personal motivation, attitudes, and the assumption of social responsibility.

Progressive digitalization of working processes

Flexibilization and individualization, digitalization and networking are bringing massive changes to how we work. In order to utilize the resultant opportunities, Evonik systematically taps into employees' ideas and experience.

[1] Source: BiBB Datenreport 2018 (BiBB = Federal Institute for Vocational Education and Training).

People are at the heart of the digital transformation at Evonik. #HumanWork provides cross-unit support, e.g., for the digitalization initiatives of the segments, regions, and service units, including New Work Labs to test new forms of working. Here, employees can try out alternative forms of working and collaboration on a voluntary basis for a limited period. When the lab phase ends, a decision will be taken on whether the working model can be rolled out either group-wide or for specific parts of the Evonik organization. In addition, #HumanWork provides access to new working and learning formats such as the agile method, design thinking, and working out loud. It also promotes use of collaborative in-house tools.

Perform

We regard a healthy performance culture as the basis for the company's success and the personal motivation of every individual employee. Fair, performance-related remuneration plays a central role in this, together with employees' annual performance and development review with their manager.

Remuneration—Performance-related pay around the world

When shaping remuneration systems, Evonik believes it is very important to offer specialists and executives market-oriented and performance-related salaries. The remuneration of almost all members of our workforce includes bonus payments that are based on the company's business performance and/or their personal performance. In 2018, Evonik's bonus system was aligned more clearly to our strategic financial targets, e.g., profitability, growth, and liquidity.

In addition, in 2019 we plan to revise our global performance management for employees in management functions. The new approach should be more flexible and less bureaucratic for both managers and their employees. Regular feedback discussions and clear evaluation of individual performance will support the cultural change at Evonik and the establishment of our new corporate values. In addition, we offer 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 39 percent in 2018.

Retain

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. That makes diversity a key to Evonik's economic success because it enhances our creativity, innovative capability, and proximity to customers.

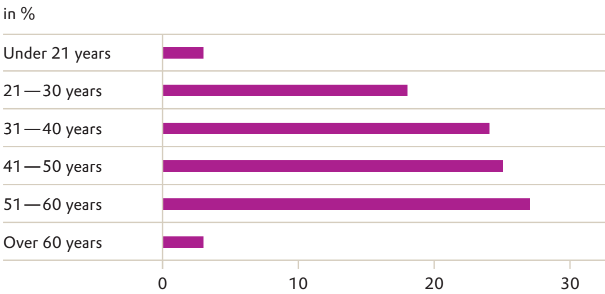
Fostering diversity is a central requirement for every management function at Evonik. Our diversity strategy contains clear targets. We want to increase the proportion of women in our company at all levels worldwide. In the recruitment process for management functions, we are guided by the gender distribution of the academic disciplines with relevance for us. In accordance with German law on equal participation of women and men in management positions, at Evonik Industries AG we have set a target of 20 percent female managers for the top two management levels below the executive board.

As a global company, it is particularly important to us to ensure that our workforce includes a broad spectrum of different nationalities. Around 42 percent of employees in management functions come from countries other than Germany. Group-wide, the proportion in mid-management is 23.2 percent.

Key data on diversity **T24**

	2018	2017
Women as a proportion of the total workforce in %	24.9	24.9
Female managers as a proportion of total managers in %	23.8	23.2
Average age in years	42.0	41.9
Nationalities	104	110

Age structure in the Evonik Group **C21**



Work-life balance

Evonik's HR policy is family-friendly and geared to different phases in people's lives. Therefore, it is important to us that our employees find a balance between work and their private lives. We offer corresponding initiatives for more than 93 percent of our employees worldwide. These include flexible worktime models, support for people caring for close relatives, and assistance with childcare. We also have wide-ranging offers to foster the physical and mental fitness of our employees. Many of our sites around the world offer a variety of sports activities.

Employee satisfaction at a good level

We conducted our fifth group-wide employee survey in November 2018. The participation rate was over 85 percent, which was above the participation rate in the previous survey in 2015. The commitment index, which is an indicator of both commitment to the company and personal engagement, was lower than in the 2015 survey, but only slightly below the benchmark comprising a sample of other companies. Reasons include a sense of uncertainty felt by individual employees as a result of far more active portfolio management across the Evonik Group and further optimization of administration. In addition, the results highlight possible scope for improvement in group-wide collaboration. Following a detailed analysis of the results of the survey, we intend to work out specific measures in the first half of 2019.

Key data on employee retention **T25**

	2018	2017
Fluctuation rate in %	6.2	5.8
Average length of service in years	14.7	14.6

Culture and leadership

Focus on an earnings-oriented corporate culture

The heart of our leadership culture is a trustful relationship between employees and managers. Here we focus on three dimensions: clear instructions, consistent action, and a cooperative approach to our employees.

One central task for Evonik's executives is cultural change in the company. Based on our four new corporate values—performance, trust, openness, and speed—which were positioned by the top management at an executive conference in 2018, the responsibility lies with executives. The top-down rollout started in 2018 and executives will start the dialogue with employees in 2019. The results of the employee survey will be used in this process.

Headcount hardly changed

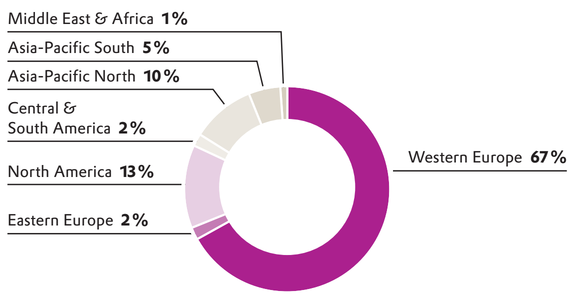
At year-end 2018, the Evonik Group had 36,043 employees, a slight drop of 480 compared with year-end 2017. This was principally due to implementation of the program to optimize administrative functions and some smaller optimization efforts in our chemical segments. At the same time, the reduction was countered by investment in growth projects in the Nutrition & Care and Resource Efficiency segments.

Employees by segment **T26**

	Dec. 31, 2018	Dec. 31, 2017
Nutrition & Care	8,224	8,257
Resource Efficiency	10,268	10,260
Performance Materials	4,132	4,364
Services	12,913	13,021
Other operations	506	621
Evonik	**36,043**	**36,523**

Personnel expenses, including social security contributions and pension expense, rose 7 percent to €3,595 million in 2018. Personnel expenses were therefore 23.9 percent of sales (2017: 23.4 percent).

Employees by region **C22**



5.2 Safety and environment

Safety as a management task

We take our responsibility in the field of safety particularly seriously—during production and while shipping products to our customers. Our objective is to protect our employees and local residents as well as the environment from any potential negative impact of our activities. The group-wide Safety at Evonik initiative has become firmly established as an ongoing process to develop our safety culture and as a fundamental management approach to all aspects of occupational and traffic safety. Our guiding principles for safety and our safety culture provide a structure and guidance for our corporate targets and activities. Binding principles are applicable for all employees, from local personnel to our management, and provide clear and measurable guidance for their personal conduct and leadership.

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

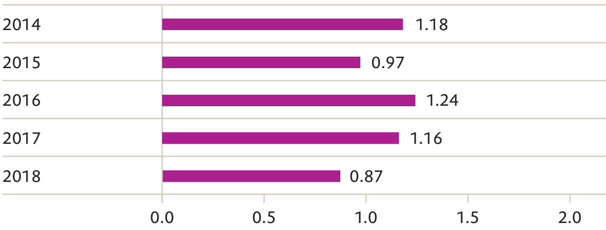
For 2019 these are unchanged:
- The accident frequency rate should not exceed 1.30.
- The incident frequency rate should not exceed 1.10.

Incident frequency indicator improved considerably and was within the defined limit

A special focus of our initiative is the safety of our employees—both at work and on the way to and from work—and the safety of contractors working at our sites. In 2018, the **accident frequency indicator**[1] for our employees was 0.87, which was within our defined maximum limit of 1.30. That was a slight improvement compared with the previous year (1.16). Discussing the accidents provided valuable pointers for future accident prevention, and these have been communicated to our employees.

Accident frequency indicator C23

Number of accidents per 1 million working hours



There were no fatal accidents at work involving our employees or contractors' employees in the reporting period, nor were there any fatal traffic accidents involving employees on the way to or from work or on business trips.

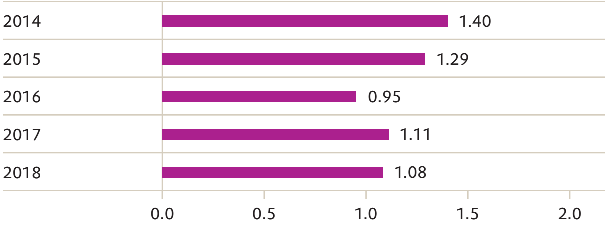
The accident frequency rate for contractors' employees was 2.77, which was considerably lower than in 2017 (3.52).[2]

Incident frequency indicator at a very good level

Process safety at our plants is another focus of our initiative. The concepts to prevent fire and the release of hazardous substances are regularly analyzed in detail. The aim is timely identification of risks so we can develop appropriate measures that reliably prevent these risks. We monitor and evaluate plant safety using the **incident frequency indicator**[3]. The incident frequency indicator improved slightly to 1.08 in 2018 and therefore remained below the upper limit we defined. The development of the incident frequency indicator over the past three years shows that the measures introduced are having a long-term effect.

Incident frequency indicator C24

Number of incidents per 1 million working hours



Ambitious environmental targets

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 steadily reducing emissions and continuously improving the efficient use of materials and resources.

As a specialty chemicals company, we are aware that our production impacts the environment. Our materiality analysis confirms the issues of relevance for the environment area of action, especially climate change and emissions into the air, water management, waste management, and biodiversity.

We also develop products that contribute to forging a clear link between economic success and ecological progress.

We have set demanding environmental targets for the period 2013–2020 (reference base: 2012):
- Reduce specific greenhouse gas emissions[4] by 12 percent.
- Reduce specific water intake[5] by 10 percent.

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

Status of our environmental targets[a] T27

	2018	2017
Reduction in specific greenhouse gas emissions	−17	−17
Reduction in specific water intake	−6	−5

[a] Compared with the reference year (2012).

[1] All work-related accidents (excluding traffic accidents) resulting in absences of at least one full shift, per 1 million working hours. | [2] Calculation based on assumptions and estimates. | [3] Number of incidents per 1 million working hours. | [4] 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. | [5] Excluding site-specific factors in the use of surface water or groundwater.

The 17 percent reduction in greenhouse gas emissions compared with the reference base (2012) was in line with the very good level achieved in the previous year.

The water required for our production operations is principally for once-through cooling at established plants. The amount of surface water required for this in 2018 increased as a result of the long period of hot, dry weather in Germany and Belgium. At the same time, water requirements in China decreased due to some production stoppages. Taking 2012 as the basis, our total specific water intake was 1 percentage point lower than in 2017.

Total hazardous and non-hazardous production waste declined by 1 percent to 393,000 metric tons in 2018. This was due, among other things, to a reduction in sewage sludge in Antwerp (Belgium) and higher availability of the sulfuric acid cracking plant in Marl (Germany).

Evonik's present environmental targets end in 2020. We therefore defined new environmental targets in the reporting period. We are aiming for a 50 percent reduction in absolute scope 1 and 2 emissions by 2025, compared with the level in 2008 (status of implementation in 2018: 30 percent). That affirms our commitment to the Paris Agreement on Climate Change. The relatively short target period up to 2025 reflects our view that it is not currently possible to predict technological and regulatory developments beyond this period with sufficient certainty.

We are continuing to pursue our goal of a group-wide reduction in specific water intake, but we are replacing the central indicator by introducing a global water management system and driving forward the related site-specific action plans.

Slight increase in greenhouse gas emissions due to acquisitions

Production output was 11.0 million metric tons, the same as in the previous year. The 1 percent increase in scope 1 greenhouse gas emissions to 5.69 million metric tons CO_2 equivalents was mainly due to the increase in natural gas resulting from first-time inclusion[1] of the Huber silica business. The sum of scope 1 and net scope 2 (market-based) greenhouse gas emissions also increased by 1 percent to 6.57 million metric tons CO_2 equivalents in 2018. 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.

The 30 facilities operated by Evonik that fall within the scope of the EU Emissions Trading System (EU ETS) emitted 3.9 million metric tons of CO_2 in 2018 (2017: 3.8 million metric tons CO_2).

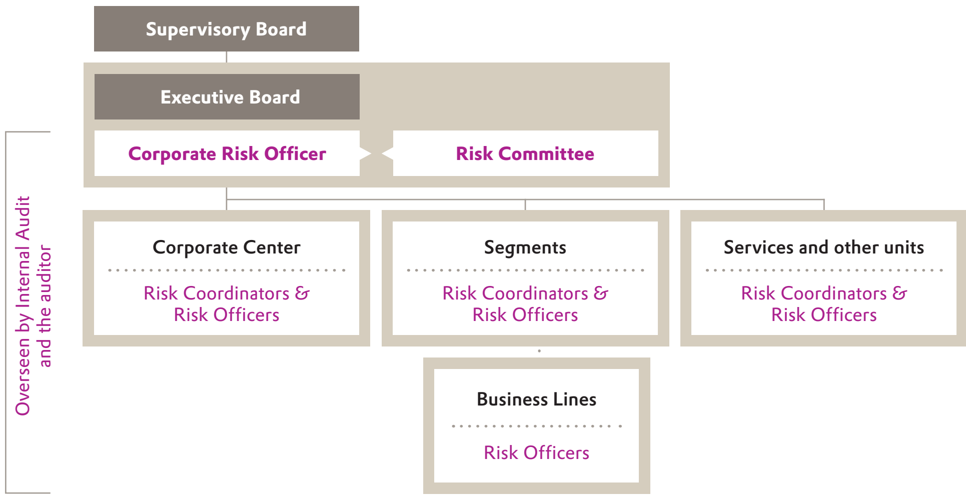
[1] The silica business acquired from Huber was only included in the environmental data from January 1, 2018.

6. Opportunity and risk report

Objectives of opportunity and risk management

- Timely identification of risks
- Action to minimize and counter risks
- Optimal utilization of opportunities

Structure of risk management



Our risk management systems are based on:

COSO Enterprise Management

Banking-specific minimum requirements for risk management (MaRisk)

German legislation on corporate control and transparency (KonTraG)

Material risks

(Expected value > €100 million)

- Changes in exchange rates
- Development of margins for C_4 chemicals
- Overall business performance
- Threat of cyber attacks

Material opportunities

(Expected value > €100 million)

- Changes in exchange rates
- Development of margins for C_4 chemicals

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 an early 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 if we are convinced that in this way 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 organizing 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.

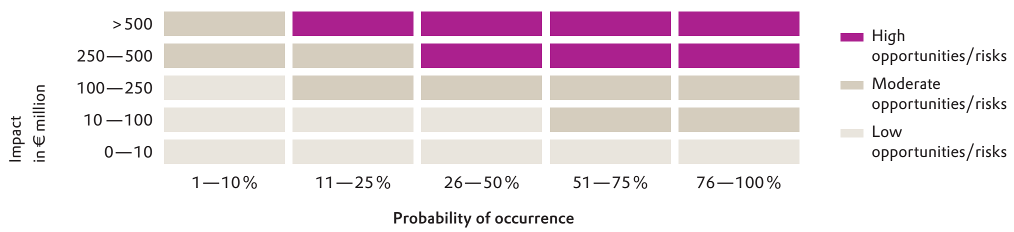
In 2018, risk management again included all consolidated companies in the Evonik Group. At companies where we do not exert a controlling influence, we implement our risk management requirements primarily through our presence in management and supervisory bodies.

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). 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.

Opportunity/risk matrix C25



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, 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 Evonik Group.

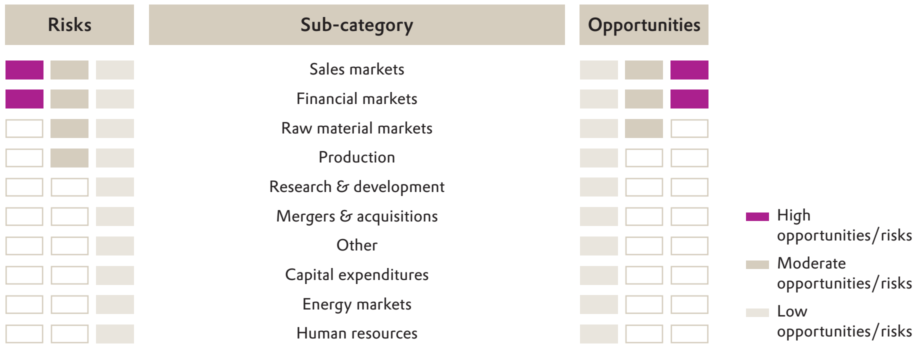
For 2018, we expected more risks than opportunities. Pleasingly, we were able to realize more opportunities than risks during the year. In the Performance Materials segment, in particular, we were able to successfully utilize market opportunities. In the Nutrition & Care and Resource Efficiency segments, the opportunities and risks that materialized were essentially balanced. 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 competition situations. From the present standpoint, the risks for 2019 again outweigh the potential opportunities. Compared with 2018, there has been a slight increase in the risks to which Evonik is exposed, while the opportunities remain constant.

Material individual risks and opportunities for the Evonik Group are changes in exchange rates and the development of margins for C_4 chemicals. Further material risks relate to the overall economic development and the increasing threat of cyber attacks. 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 and 6.4 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. The chart 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. Where two sub-categories have the same profile in the chart, they are ranked first on the basis of opportunities, then listed in descending order, based on their expected value.

Opportunity and risk classes within the market and competition category **C26**



1. Sales markets

The development of the global economy entails both opportunities and significant risks for Evonik. If economic growth strengthens or weakens, for example, due to political developments, changes in interest rate and exchange rate policy, or the development of key sectors of the economy (e.g., the banking and real estate sectors), this can have an impact on demand in market segments of relevance to Evonik.

An escalation of the trade disputes and a further increase in the already elevated political risks in the European Union, including the future economic relations between the European Union and the United Kingdom after Brexit, could dampen economic momentum. Furthermore, the monetary policy tightening by the Federal Reserve in the US could result in a further reversal of capital flows, which would affect the emerging markets in particular. Such developments can already be seen in Argentina, Turkey, and South Africa.

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 from 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 for our amino business and, to a significant extent, for 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.

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 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. One potential risk factor for our amino acids business, for example in Asia, is the possible impact of substandard food quality and food safety, especially due to bird flu. We utilize opportunities for profitable future growth by gaining access to new markets as part of our strategic development. One attractive market for our amino acids business is aquaculture, for which we have developed innovative products. As a result of global population growth, rising affluence in emerging markets, and overfishing of the world's oceans, the global aquaculture market is growing faster than other areas of livestock farming.

Customer concentration is basically low in our chemicals 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 and Resource Efficiency segments, and the Services segment 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. The increasing volatility of exchange rates can be seen in particular in emerging markets, for instance, in Argentina, which is a hyperinflationary economy, and in Turkey. 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 relationship and uses interest rate swaps for further optimization where appropriate. Through the use of fixed-interest loans and interest rate hedging instruments, 79 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[2]. 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[3]. 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 plants.

[1] Further details of the financial derivatives used and their recognition and measurement can be found in note 9.2 to the consolidated financial statements. | [2] A detailed overview of liquidity risks and their management can be found in note 9.2 to the consolidated financial statements. Details of the financing of the Evonik Group and action to protect liquidity can be found in the section on financial condition. | [3] See note 6.9 to the consolidated financial statements.

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.

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. 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.

5. 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 innovation growth fields. 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 opportunities arising from the introduction of new products that go beyond our present planning in our six innovation growth fields.

6. Mergers & 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 before they are acquired. This involves systematic identification of all major 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.

In the integration of the Air Products specialty additives business and the Huber silica business, which were acquired in 2017, Evonik is paying special attention to appropriate measures to realize the identified opportunities and mitigate the risks.

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.

7. Other

A steady improvement in our cost position is necessary to make us more competitive. Our goal is to achieve a lasting reduction of €200 million in selling and administrative expenses by 2021. Beside the potential to raise strategic flexibility and strengthen the operating units as a result of this program 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.

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 a 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. For example, socioeconomic megatrends are driving the development of our amino acids business. Following the successful start-up of a world-scale facility for DL-methionine in Singapore in fall 2014, we are planning to bring another facility into service here in 2019. Global population growth means that demand for animal protein will continue to rise steadily in the future. Moreover, environmentally compatible, resource-saving manufacture of products for animal and human nutrition is becoming increasingly important worldwide for ecological reasons.

Resource efficiency is the basis for a large number of energy-efficient and environment-friendly products from Evonik. One example is precipitated silica, where we are a market leader. Combining precipitated silica with silanes allows the manufacture of tires with considerably lower rolling resistance than conventional auto tires, resulting in fuel savings of up to 8 percent. Here, future growth will be supported, among other factors, by the introduction of tire labeling regulations in further countries. To utilize the resultant opportunities, we are selectively increasing our capacity for silica. For example, we brought a new production facility into service in the USA at the end of 2018 and production capacity for precipitated silica in Turkey is to be raised by 2020.

Our specialty polymer polyamide 12 (PA 12) is also a market leader. In view of 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 in automotive and lightweight engineering and in oil and gas pipelines. In addition, it is used in medical applications and 3D printing. To meet the sharp rise in demand, we are planning a new production complex for PA 12 in Marl (Germany), which is scheduled to come on stream in 2021.

The investments described above are included in our mid-term planning.

9. 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 coal. At several sites, our power and steam requirements are fully or partially met by resource-efficient co-generation plants. In 2018, we continued our constant monitoring of 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 Evonik facilities within the scope of the European emissions trading system, adverse effects could arise from the structure of the fourth trading period (2021 to 2030), especially the possibility of a more stringent benchmark for the allocation of free CO_2 allowances. 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, especially in view of the legal framework in Europe. That said, in principle we assume that captive generation will continue to contribute to the competitiveness of our German sites in the future. Possible costs could arise from the increase in grid feed 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.

10. 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 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.

[1] See section on employees.

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 e.g., 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 damage that may nevertheless 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.

Evonik is currently involved in two ongoing appraisal proceedings in connection with the squeeze-out of non-controlling interests pursuant to section 327a et seq of the German Stock Corporation Act (AktG): the squeeze-out of non-controlling interests in RÜTGERS AG (now RÜTGERS GmbH) in 2003, and the squeeze-out of non-controlling interests in Degussa AG (now Evonik Degussa GmbH) in 2006. The appraisal proceedings comprise a court review of the appropriateness of cash settlements.

In connection with the divestment of the former carbon black activities, the purchaser has requested indemnification from environmental guarantees, for example, relating to alleged infringement of the US Clean Air Act. Evonik is currently engaged in a dispute with the purchaser on this.

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.

Furthermore, following completion of administrative proceedings outside Germany, it is not improbable that individual customers could file claims for compensation.

With regard to employment law, there are risks relating, for example, to 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.

[1] See declaration on corporate governance.

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 transferred 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 cyber criminality (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 Computer Emergency Response Team (CERT) 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.

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.

[1] Especially water shortages.

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. Corresponding improvement measures have 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 EMEA[1] countries 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 & Africa.

7. Report on expected developments

Basis for our forecast:

- Global growth of 2.9 percent
- Euro/US dollar exchange rate: US$1.15
- Internal raw material cost index slightly lower than in the prior year

Outlook 2019

Adjusted EBITDA
expected to be
slightly lower to stable

Sales
expected to be
slightly lower to stable

ROCE
expected to be
above the cost of capital

Accident frequency
expected to be below the upper limit of 1.30

Free cash flow
expected to be
significantly higher

Capital expenditures
should be around
€1.0 billion

Incident frequency
should improve and remain below the upper limit of 1.10

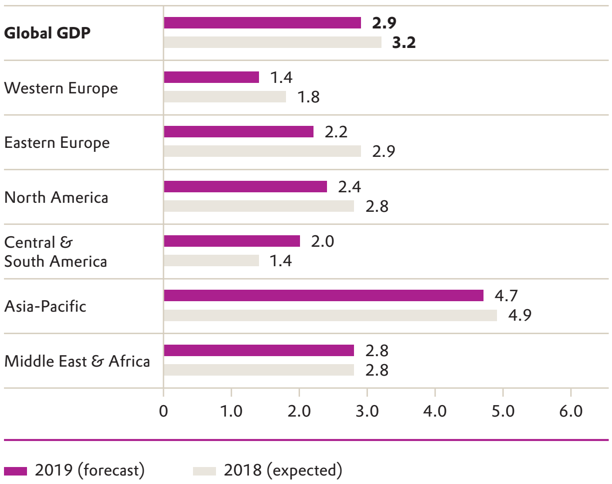
7.1 Economic background

Global economy expected to grow more slowly in 2019

We expect **global economic conditions** in 2019 to be slightly weaker than in 2018. The US government’s protectionist measures will presumably impair global trade further in 2019 and also affect industrial output and thus the global economy via global value chains. Moreover, the deterioration in financing conditions resulting from the expected continuation of the US Federal Reserve’s policy of monetary tightening will again hold back growth, especially in the highly indebted emerging markets. Overall, we anticipate weaker global momentum, with a growth rate of 2.9 percent in 2019, compared with 3.2 percent in 2018.

GDP forecast for 2019 C27

in %



We assume that the pace of growth in Europe will gradually slow, principally because of the weakness of manufacturing industry in Germany, France, and Italy. In addition, the headwind from foreign trade will probably increase. This will be countered, however, by ongoing monetary policy stimulation and robust consumer spending. There is likely to be further uncertainty with regard to the future economic relations between the European Union and the UK in 2019, which will hold back the economy, especially in the UK.

We assume further robust growth in the USA. However, the pace will be slightly more modest, because the effects of fiscal measures such as tax relief and higher state spending will be lower than in the previous year. Growth will also be supported by buoyant consumer demand and solid investment spending. Monetary policy will be less expansionary.

Thanks to the economic upturn in Brazil, growth should pick up further in Central & South America. However, political uncertainty in some countries, high unemployment, and private debt are holding back a significant improvement in the economic prospects for this region.

Growth will remain high in the Asia-Pacific region. The Japanese economy will be supported by expansionary monetary and fiscal policy but will probably weaken slightly compared with the previous year. We assume that growth will slow further in China. However, since the government is prepared to introduce economic measures to alleviate the impact of punitive US customs tariffs, we do not anticipate a drastic slowdown in growth momentum in 2019.

The projection for the global economy is affected by increasing uncertainty. For example, we see a risk that an escalation of the trade disputes could perceptibly dampen global economic activity. If the economic slowdown in China gains momentum, this could greatly reduce global growth. Moreover, an increase in the already elevated political risks in the European Union, including the uncertainty about the future economic relations between the European Union and the UK, could dampen economic momentum. Finally, there are initial signs that both the normalization of the US monetary policy and the risks associated with the ongoing trade disputes could unsettle the capital markets, leading to correction phases on the financial markets or an intensified reversal of capital flows. This would adversely affect the emerging markets, in particular, and hold back the global economy.

Given the anticipated slower global economic momentum and relatively stable raw material price trend, we only expect to see a moderate rise in global inflation.

In view of the sharp drop in the price of crude oil at the end of 2018, we assume that Evonik's petroleum-based feedstock prices will decline in the first quarter of 2019. Prices should then stabilize, despite the present heightened uncertainty on global markets. Overall, we expect that in 2019 prices of Evonik-specific raw materials will be slightly lower than in 2018.

We assume that in 2019 the average euro exchange rate will be around the 2018 level as a result of the growth differential and interest rate spread between the euro zone and the USA.

7.2 Outlook

Basis for our forecast:

- Global growth of 2.9 percent
- Euro/US dollar exchange rate: US$1.15 (2018: US$1.18)
- Internal raw material cost index slightly lower than in the prior year

Sales and earnings

The following outlook still includes the methacrylates business. It also takes into account the effects of first-time application of IFRS 16 Leases in 2019. The earnings from the planned acquisition of the US company PeroxyChem are not yet included.

The anticipated reduction in global growth momentum outlined in the economic background section will affect our business performance in 2019.

We therefore expect sales to be slightly[1] lower to stable in 2019 (2018: €15.0 billion).

We also expect adjusted EBITDA to be slightly lower[1] to stable (2018: €2.061 billion). This includes the negative normalization effects of the previously very favorable supply/demand situation in the methacrylates business.

Adjusted EBITDA should be supported by further synergies from the integration of the businesses acquired in 2017 from Air Products and Huber, as well as cost-savings from our efficiency program for sales and administration (SG&A 2020).

We assume a continuation of the volume growth and positive earnings trend in the majority of businesses in the Nutrition & Care segment. With new production capacities coming on stream, we expect the annual average prices for essential amino acids for animal nutrition to be lower than in the previous year. To offset the impact on our earnings, in 2018 we embarked on a program to raise the efficiency of our animal nutrition business. In addition, earnings will be adversely affected by expenses for the planned start-up of our new methionine facility in Singapore. Overall, earnings in the Nutrition & Care Segment are expected to be slightly lower than in the previous year.

In 2019, the Resource Efficiency segment will continue to benefit from its good positioning in the respective markets and from the trend to resource-efficient solutions. Although growth is expected to slow in some end-markets and regions, we expect earnings to be slightly higher than in the previous year.

In the Performance Materials segment, the recent very favorable demand/supply situation in the methacrylates business is expected to normalize. As a result, this segment will not be able to repeat the very high level of earnings seen in 2018; earnings will be perceptibly lower than in 2018.

The earnings impact of the anticipated slight reduction in raw material prices may affect the various businesses differently, but should balance out across the portfolio as a whole.

In 2019, the return on capital employed **(ROCE)** should remain above the cost of capital (10.0 percent before taxes). Partly due to the increase in capital employed resulting from the initial application of IFRS 16 in 2019, ROCE will be slightly lower than in the previous year (2018: 12.1 percent).

Financing and investments

We expect **capital expenditures** to be around the prior-year level at about €1 billion in 2019 (2018: €1.05 billion). The budget for maintenance and growth investments is around €850 million. As a temporary effect in 2019, there will be additional capital expenditure for the construction of a fully backwardly integrated polyamide 12 plant in Marl (Germany).

[1] In the context of sales, slightly refers to a change of between 1 and 5 percent. In the context of adjusted EBITDA, slightly refers to a change of between 1 and 10 percent.

We expect the **free cash flow** to improve significantly year-on-year in 2019 (2018: €672 million). Positive effects will come from the first reimbursement of pensions payments by the CTA[1], which will bring a substantial and lasting improvement in the free cash flow, and from lower cash outflows from net working capital than in 2018. Negative factors will be a normalization of tax payments, cash outflows for the SG&A 2020 efficiency enhancement program, and higher bonus payments as a result of the successful business performance in 2018.

Occupational and plant safety

We assume that the accident frequency rate will remain below the upper limit of 1.30 defined for 2019. We anticipate that we can achieve a slight improvement in our plant safety indicator, incident frequency (2018: 1.08), and that it will remain below the upper limit of 1.10.

[1] Contractual trust arrangement.

CORPORATE GOVERNANCE

Report of the supervisory board

BERND TÖNJES
Chairman of the Supervisory Board

Ladies and Gentlemen,

In 2018, 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 seven meetings, on March 5, May 23 (two meetings), June 27, September 25, November 7, and December 12, 2018.

The work of the supervisory board was again supported and prepared by its committees in 2018. The committees and their members in the year under review were as follows:

- Executive Committee: Bernd Tönjes (since May 23, 2018; chairman), Dr. Werner Müller (until May 23, 2018; chairman), Edeltraud Glänzer (deputy chairwoman), Martin Albers (since May 23, 2018), Ralf Hermann (until May 23, 2018), 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), Prof. Barbara Grunewald, Michael Hofmann (since May 23, 2018), Norbert Pohlmann (until March 31, 2018), Dr. Wilfried Robers (until May 23, 2018), Dr. Thomas Sauer (since May 23, 2018), Angela Titzrath.
- Finance and Investment Committee: Michael Rüdiger (chairman), Edeltraud Glänzer (since May 23, 2018 also deputy chairwoman), Ralf Hermann (until May 23, 2018; deputy chairman), Martin Albers, Prof. Aldo Belloni, Frank Löllgen, Dr. Werner Müller (until May 23, 2018), Anke Strüber-Hummelt (since May 23, 2018), Bernd Tönjes (since May 23, 2018), Ulrich Weber.
- Innovation and Research Committee: Prof. Barbara Albert (chairwoman), Frank Löllgen (deputy chairman), Jens Barnhusen (since May 23, 2018), Carmen Fuchs, Dr. Werner Müller (until May 23, 2018), Anke Strüber-Hummelt (until May 23, 2018), Bernd Tönjes (since May 23, 2018), Dr. Volker Trautz.
- Nomination Committee: Bernd Tönjes (since May 23, 2018; chairman), Dr. Werner Müller (until May 23, 2018; chairman), Dr. Volker Trautz, Ulrich Weber.

- Mediation Committee: Bernd Tönjes (since May 23, 2018; chairman), Dr. Werner Müller (until May 23, 2018; chairman), Edeltraud Glänzer (deputy chairwoman), Martin Albers (since May 23, 2018), Ralf Hermann (until May 23, 2018), Dr. Volker Trautz.

The tasks allocated to these committees are described in detail in subsection 2.3 of the corporate governance report.

The executive committee held eight meetings in 2018. In addition, it adopted two resolutions via a written circulation procedure. The audit committee held four meetings and the finance and investment committee held five meetings. The innovation and research committee met twice. The nomination committee met twice in the reporting period. There was no need for the mediation committee to meet during the reporting period. 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. Other topics were preparations for the annual shareholders' meeting, the corporate governance report, the declaration on corporate governance, the bonus payments to the executive board members for the preceding fiscal year, the executive board's objectives for fiscal 2018, and the investment policy of Evonik Pensionstreuhand e. V. The first of the two meetings on May 23, 2018 was dedicated to supplementary information directly before the annual shareholders' meeting. Following the annual shareholders' meeting, the newly elected supervisory board met at a second, constitutive meeting, at which the membership of the committees was also decided. At its meetings in June and September, the supervisory board discussed the executive board's reports and the reports of the committees. In addition, in June it considered Evonik's corporate strategy. At the extraordinary meeting in November, the supervisory board discussed the acquisition of the shares in PeroxyChem Holding LLC. At its meeting in December, the supervisory board adopted the budget for 2019, the mid-term planning up to 2021, and with regard to the remuneration of the executive board, an adjustment of the conditions for long-term remuneration of the executive board. The declaration of conformity in accordance with section 161 AktG was adopted. Furthermore, on the basis of intensive preliminary discussions, at its meeting in December the supervisory board approved a change of strategy for the investment concept of Evonik Pensionstreuhand e. V. and the possible sale of part of the stake in Vivawest GmbH by Evonik Pensionstreuhand e. V. to RAG-Stiftung.

The executive committee dealt with the following issues during the year under review: the examination of all options for the future development of the methacrylates business; the agenda and proposed resolutions for the annual shareholders' meeting; the bonus payments to members of the executive board for 2017 and their targets for 2018; adjustment of the remuneration of the executive board as of January 1, 2019; Evonik's business situation, current projects, and the share price; optimization of the company's cost structures and reduction of overheads; acquisition of all shares in PeroxyChem Holding LLC.

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. In addition, the audit committee examined the proposal for the selection of the auditor for fiscal 2018 and the appointment of the auditor in detail. The meeting in May concentrated on the quarterly financial statement as of March 31, 2018. At the meeting in August, the audit committee discussed the business performance in the first six months of 2018 and the half-year financial report as of June 30, 2018. The discussions at the meeting in November centered on the business performance in the third quarter of 2018, the quarterly financial statements as of September 30, 2018, and the focus of the audit of 2018.

In the reporting period, the finance and investment committee concentrated principally on growth projects and on monitoring the integration of the acquisitions into the Evonik Group (see "Investments and acquisitions").

The nomination committee prepared for the 2018 supervisory board elections at its meeting on November 4, 2017. Further to this, at its meeting in February, it agreed that Bernd Tönjes should be nominated for election to the supervisory board since Dr. Werner Müller had by then declared that he would not be standing for a further term of office. On May 23, 2018, after the end of the annual shareholders' meeting and the constitutive meeting of the supervisory board, the nomination committee elected Bernd Tönjes as its chairman.

At its meeting in May, the innovation and research committee discussed the key performance indicators for research and development and the mid-term innovation targets. The focus at the meeting of this committee in November was on the internationalization strategy for Evonik's research and development.

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's operating business developed particularly successfully in 2018. Global demand for our products was high and sales rose 4 percent to €15,024 million. This rise was mainly attributable to higher selling prices, resulting in some cases from passing on higher raw material costs. Overall, volumes were on the same level as in the previous year, partly due to the restrictions on the transportation of goods in fall 2018 caused by low water levels in the river Rhine. Adjusted EBITDA improved 10 percent to €2,601 million. Adjusted net income rose 29 percent year-on-year to a record €1,294 million.

By contrast, the net income of Evonik Industries AG calculated on the basis of German Commercial Code (HGB) was €438 million lower than in the previous year, resulting in a net loss of €63 million. This was principally due to factors that only had an impact on the separate financial statements of Evonik Industries AG prepared in accordance with the German Commercial Code (HGB) and did not affect the consolidated financial statements prepared in accordance with IFRS. For tax and financing reasons, it did not make sense to offset these effects through distributions from foreign subsidiaries to Evonik Industries AG.

Investments and acquisitions

Our discussions also covered major growth projects, including investment controlling of ongoing projects. The projects considered in particular detail by the supervisory board and the finance and investment committee were:
- The construction of new production capacity for polyamide 12 in Marl (Germany)
- Examination of all options for the future development of the methacrylates business
- Expansion of capacity for high-molecular polyesters in Witten (Germany)
- Divestment of Evonik Jayhawk Fine Chemicals Corporation (USA)
- Acquisition of PeroxyChem, a global producer of hydrogen peroxide and peracetic acid, from One Equity Partners
- Revision of the investment guidelines of Evonik Pensionstreuhand e. V.
- Possible sale of part of the stake in Vivawest GmbH, Essen (Germany)

In addition, the finance and investment committee discussed the post-completion audits of the following projects:
- Construction of a production facility for hydroxyl-terminated polybutadiene at the site in Marl (Germany)
- The CyPlus Idesa joint venture for the construction and operation of a sodium cyanide facility (Mexico)
- Acquisition of Transferra Nanosciences, Inc. (Canada)
- Review of the acquisition of L-methionine technology from Metabolic Explorer (France)
- ACA production and co-location of Bayer CropScience (USA)
- Acquisition of Dr. Straetmans GmbH in Hamburg (Germany)
- Expansion of the silicone platform (China)

In 2018, the supervisory board and its committees continued their close monitoring of the integration of the acquired specialty additives and silica businesses into the Evonik Group.

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 2018 were:
- Proposals for resolutions at the annual shareholders' meeting in May 2018, especially the supervisory board's proposals for the elections to the supervisory board and on the creation of authorized and conditional capital
- Reducing the Evonik Group's annual overheads
- Capital markets' view of Evonik
- Digitalization and innovation
- Nomination of Dr. Werner Müller as honorary chairman of the supervisory board (for further information, see "Personnel issues on the supervisory board")
- 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
- Resolution on the credit authorization framework for 2019
- Resolution on the employee share program for 2019

Individual disclosure of the attendance at meetings of the supervisory board and its committees **T28**

	Supervisory Board		Executive Committee		Finance and Investment Committee		Audit Committee		Nomination Committee		Mediation Committee		Innovation and Research Committee	
Supervisory board member	Presence	in %	Presence	in %	Presence	in %	Presence	in %	Presence	in %	Presence	in %	Presence	in %
Bernd Tönjes (since May 23, 2018; chairman)	5/5	100	6/6	100	3/4	75			1/1	100	0/0		2/2	100
Dr. Werner Müller (until May 23, 2018; chairman)	2/2	100	2/2	100	0/1	0			1/1	100	0/0		0/0	
Edeltraud Glänzer (deputy chairwoman)	7/7	100	8/8	100	5/5	100					0/0			
Martin Albers	7/7	100	6/6	100	5/5	100					0/0			
Prof. Barbara Albert	7/7	100											2/2	100
Jens Barnhusen (since May 23, 2018)	5/5	100											2/2	100
Prof. Aldo Belloni	6/7	86			3/5	60								
Karin Erhard	7/7	100					3/4	75						
Carmen Fuchs	7/7	100											2/2	100
Prof. Barbara Grunewald	7/7	100					4/4	100						
Ralf Hermann (until May 23, 2018)	2/2	100	2/2	100	1/1	100					0/0			
Prof. Wolfgang A. Herrmann (until May 23, 2018)	2/2	100												
Michael Hofmann (since May 23, 2018)	5/5	100					2/2	100						
Martin Kubessa (since May 23, 2018)	5/5	100												
Frank Löllgen	6/7	86			5/5	100							1/2	50
Dr. Siegfried Luther	7/7	100					4/4	100						
Norbert Pohlmann (until March 31, 2018)	1/1	100					1/1	100						
Dr. Wilfried Robers (until May 23, 2018)	2/2	100					2/2	100						
Michael Rüdiger	6/7	86			5/5	100								
Dr. Thomas Sauer (since May 23, 2018)	5/5	100					2/2	100						
Peter Spuhler (since May 23, 2018)	3/5	60												
Anke Strüber-Hummelt	7/7	100			4/4	100							0/0	
Ulrich Terbrack (until May 23, 2018)	2/2	100												
Angela Titzrath	5/7	71					3/4	75						
Dr. Volker Trautz	7/7	100	8/8	100					2/2	100	0/0		2/2	100
Ulrich Weber	7/7	100			4/5	80			2/2	100				

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 in the present version of February 7, 2017. 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 2018, 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, which follows this 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. As in its previous term of office, the supervisory board currently meets all targets for its composition.

The supervisory board 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.

At least five members of the supervisory board should be independent within the meaning of section 5.4.2 of the German Corporate Governance Code. To ensure this, a supervisory board member should not have any personal or business relations with the company, its executive bodies, a controlling shareholder, or an enterprise associated with the latter, which may cause a substantial and not merely temporary conflict of interests. The supervisory board considers all current members to be independent specifically because, in its view, election as an employee representative does not conflict with such independence.

Further details of the diversity requirements and the list of objectives are set out in subsection 2.4 of the corporate governance report.

The members of the supervisory board received attendance fees and purely fixed remuneration for their work on the supervisory board in the reporting period and any membership of committees (see subsection 2 of the remuneration report).

In 2018, there was a potential conflict of interest for the chairman of the supervisory board when the supervisory board discussed the possible sale of part of the stake in Vivawest GmbH to RAG-Stiftung as he is also chairman of the executive board of RAG-Stiftung. To avoid this conflict of interest, Bernd Tönjes did not take part in the discussion of this item on the agenda and abstained from voting.

There were no consultancy, service, or similar contracts with any members of the company's supervisory board in 2018. 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), Düsseldorf (Germany) has audited the financial statements of Evonik Industries AG as of December 31, 2018 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 23, 2018. 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 4, 2019. At its meeting on February 26, 2019, 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, including the reasons for the net loss shown on the income statement, the consolidated financial statements for the Evonik Group, the combined management report for fiscal 2018, 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 4, 2019. The auditor was also present at this meeting and reported on the main findings of the audit. The auditor 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 4, 2019, the supervisory board therefore endorsed the annual financial statements of Evonik Industries AG and the consolidated annual financial statements. The annual financial statements for 2018 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 2018 (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 4, 2019 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 2018. 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
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 4, 2019.

The audit committee conducted a thorough examination of these documents at its meeting on February 26, 2019 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 4, 2019. 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

At its meeting on March 5, 2018, the supervisory board appointed Dr. Werner Müller as honorary chairman of the supervisory board with effect from May 23, 2018, when he stepped down from the supervisory board. In this way, the supervisory board honored Dr. Werner Müller's work both in shaping Evonik and beyond the company. Without him, Evonik would not exist in its present form. His major achievements include ensuring that Germany's withdrawal from hard coal mining at the end of 2018 was both socially compatible and financially viable. Last but not least, the foundation model to finance the perpetual costs resulting from hard coal mining in Germany was his work and is inseparably linked to his name.

The regular change in the composition of the supervisory board took place following the end of the shareholders' meeting on May 23, 2018.

As the first step, the employee representatives were elected by the delegates' assembly on February 20, 2018. The following members were elected as representatives of the workforce (excluding executive staff): Martin Albers, Jens Barnhusen, Carmen Fuchs, Michael Hofmann, Martin Kubessa and Anke Strüber-Hummelt. Dr. Thomas Sauer was elected to represent the executive staff. The following members were elected to represent the industrial unions: Edeltraud Glänzer, Karin Erhard and Frank Löllgen. Their term of office started at the end of the shareholders' meeting on May 23, 2018.

At the shareholders' meeting on May 23, 2018, the following shareholders' representatives were elected to the supervisory board: 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.

At the subsequent constitutive meeting on May 23, 2018, the supervisory board elected Bernd Tönjes as chairman and Edeltraud Glänzer as deputy chairwoman.

In connection with the elections on May 23, 2018, the shareholder representatives Dr. Werner Müller and Prof. Wolfgang A. Herrmann stepped down from the supervisory board; the employee representatives Ralf Hermann, Dr. Wilfried Robers, and Ulrich Terbrack also left the supervisory board. Norbert Pohlmann resigned as an employee representative on the supervisory board on March 31, 2018 due to his retirement. The supervisory board would like to thank the members who have left the board for their commitment to the interests of the company and its employees over many years.

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 4, 2019, in accordance with section 171 paragraph 2 of the German Stock Corporation Act (AktG).

Essen, March 4, 2019

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:

Since submitting its last declaration of conformity in December 2017, 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:

[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 4 of the German Commercial Code (HGB), it is not included in the audit by the external auditors.

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 2018

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.[1]

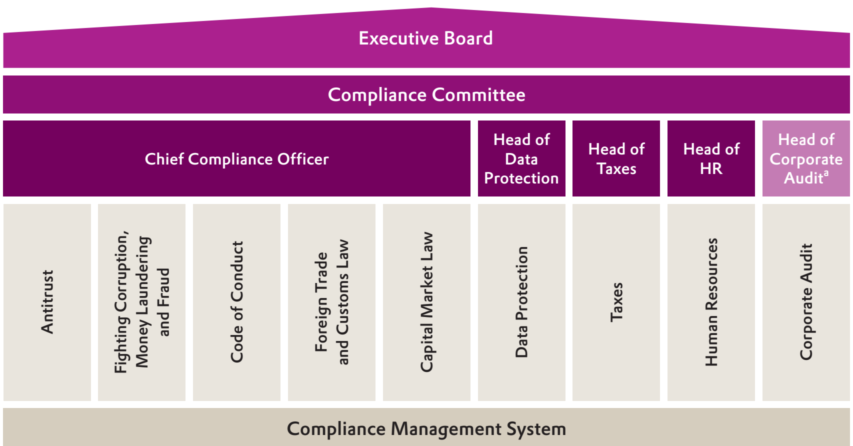
Compliance

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.

The compliance areas identified as being of specific relevance to our company are bundled in a House of Compliance. They include antitrust law, prevention of 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.

House of Compliance C12

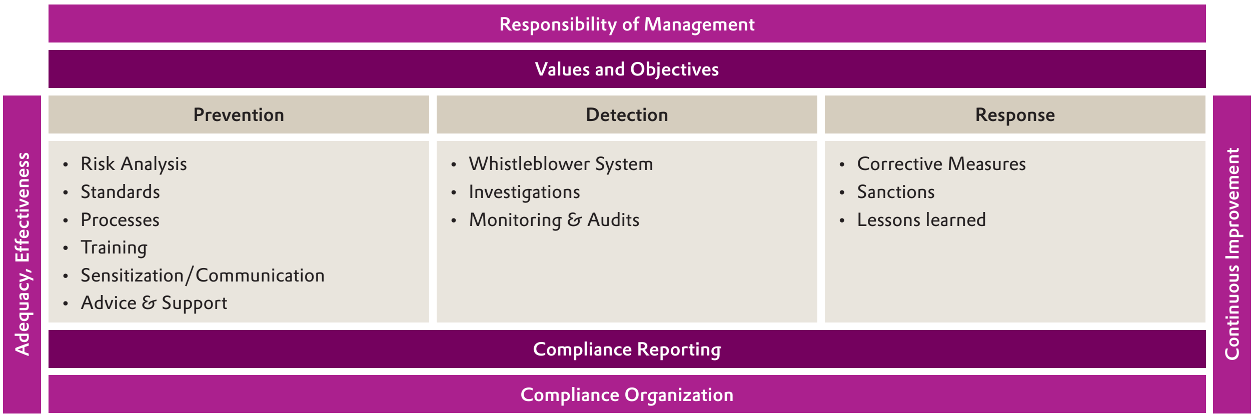


[a] Advisory function.

[1] See subsection 2.1 for details.

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.

Evonik: Compliance Management System (CMS) C29



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.

Corporate Responsibility

The executive board and supervisory board examine sustainability topics, especially aspects of the environment, safety, and society, several times a year. 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 management report, the sustainability report[1], and the separate combined non-financial report[2].

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.[3]

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.[4]

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.[5]

1 The sustainability report is not part of the audited combined management report; www.evonik.com/responsibility
2 www.evonik.com/nonfinancial-report
3 www.evonik.com/investor-relations
4 www.evonik.com/investor-relations, News & Reports/Ad-hoc announcements, Share/Voting rights, and Corporate Governance/Directors' Dealings.
5 www.evonik.com/investor-relations, Sustainable Investment (SRI) and Corporate Governance.

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.[1]

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 therefor.

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 for 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 Evonik's 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 2018, 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. No such transactions took place 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.

[1] See subsection 2.1.

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:
- 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 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) 1976. 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. 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 three seats on the supervisory boards of listed companies outside their group of companies or supervisory boards of companies where comparable demands are made on them.

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 2018.

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 that 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 of 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 five members of the supervisory board should be independent within the meaning of section 5.4.2 of the German Corporate Governance Code.

These targets were last revised in December 2017.

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.

To ensure independence within the meaning of section 5.4.2 of the German Corporate Governance Code, a supervisory board member should not have any personal or business relations with the company, its executive bodies, a controlling shareholder, or an enterprise associated with the latter which may cause a substantial and not merely temporary conflict of interest. The supervisory board considers all current members to be independent specifically because, in its view, election as an employee representative does not conflict with such 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 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.

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, 15 members of the supervisory board have experience of human resources and social issues.
- **Scientific knowledge (especially a knowledge of the chemical sector)**
  Such knowledge many have been acquired through vocational training, a course of study, or professional activity in a scientific context. Nine 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

[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).

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.

The **audit committee** has six members and is familiar as a whole with the chemical sector. The 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, and 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. 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. The audit committee also 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.

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.

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.

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.

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.

It 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. The report of the supervisory board also outlines the composition of the various committees and the meetings attended by members of 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.

The supervisory board regularly examines the efficiency of its work. Further details can be found in the report of the supervisory board.

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.

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 German Corporate Governance Code apply.

The statutory ratio of at least 30 percent women and at least 30 percent men applies 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 has set a target of 20 percent female managers for both the first and the second management level below the executive board. The proportion of female managers is currently 27.3 percent at the first management level and 20 percent at 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. 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 which 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. This was the case in the elections to the supervisory board in 2018. The composition of the new supervisory board fully meets the requirements set by the diversity concept.

Alongside the target of 25 percent female members outlined above, the diversity concept for the executive board includes 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 (AkG). 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 23, 2018 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 2018. 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 (annual 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 23, 2018, PwC conducted a review of the interim financial statements for the first half of 2018.

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 management report.

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.

Further information on corporate officers

Supervisory Board of Evonik Industries AG

Bernd Tönjes, Marl
Chairman of the Supervisory Board
(since May 23, 2018)
Chairman of the Executive Board of RAG-Stiftung
(since May 24, 2018)
a) RAG Aktiengesellschaft (Chair)
(since May 24, 2018)
RAG Deutsche Steinkohle AG (Chair)
(since May 24, 2018)
b) DEKRA e.V.

Edeltraud Glänzer, Hanover
Deputy Chairwoman of the Supervisory Board
Deputy Chairwoman of the German Mining, Chemical and Energy Industrial Union (IG BCE)
a) B. Braun Melsungen AG
Merck KGaA

Martin Albers, Dorsten
Chairman of the General Works Council of Evonik Industries AG
Chairman of the Works Council of the jointly operated Essen campus
a) Pensionskasse Degussa VVaG
(until July 6, 2018)
b) PEAG Holding GmbH
(until June 20, 2018)

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
(since May 23, 2018)
Chairman of the Works Council for Evonik's Goldschmidtstrasse facilities
a) Pensionskasse Degussa VVaG
(since July 6, 2018)

Prof. Aldo Belloni, Munich
Chairman of the Executive Board of Linde Aktiengesellschaft
b) TÜV Süd e.V.

Karin Erhard, Hanover
Legal advisor of the German Mining, Chemical and Energy Industrial Union (IG BCE)
a) INEOS Deutschland GmbH (until December 5, 2018)
INEOS Köln GmbH (until September 10, 2018)

Carmen Fuchs, Alzenau
Deputy Chairwoman of the General Works Council of Evonik Industries AG
Chairwoman of the Works Council of the jointly operated Hanau site
a) Pensionskasse Degussa VVaG
(until July 6, 2018)

Prof. Barbara Grunewald, Bonn
Professor and Chair for Civil Law and Commercial Law at the University of Cologne

Michael Hofmann, Griesheim
(since May 23, 2018)
Member of the Works Councils for the Darmstadt/Weiterstadt/Wörth facilities
(Chairman until December 31, 2018)

Martin Kubessa, Velbert
(since May 23, 2018)
Member of the Works Council for Evonik's Marl facilities
a) Evonik Technology & Infrastructure GmbH

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 CFO of Bertelsmann AG
(now Bertelsmann SE & Co. KGaA)
a) Schaeffler AG
Sparkasse Gütersloh-Rietberg

Michael Rüdiger, Utting am Ammersee
Chairman of the Executive Board of DekaBank Deutsche Girozentrale
a) Deka Immobilien GmbH
Deka Investment GmbH (Chair)
Deka Vermögensmanagement GmbH
(Chair since January 15, 2018)
(formerly: Landesbank Berlin Investment GmbH)
Liquiditäts-Konsortialbank GmbH in liquidation (Chair)
(until July 23, 2018)

Dr. Thomas Sauer, Bad Homburg
(since May 23, 2018)
Chairman of the Executive Staff Council of the Evonik Group

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).

Peter Spuhler, Weiningen (Switzerland)
(since May 23, 2018)
Chairman of the Board of Directors of Stadler Rail AG, Bussnang (Switzerland) and of PCS Holding AG, Frauenfeld (Switzerland)
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) (since June 25, 2018)
Gleisag Gleis- und Tiefbau AG, Goldach (Switzerland) (Chair)
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)
Walo Bertschinger AG, Zurich (Switzerland)
Wohnpark Promenade AG, Frauenfeld (Switzerland)
ZLE Betriebs AG, Zurich (Switzerland)

Until September 19, 2018:
Stadler Altenrhein AG, Altenrhein (Switzerland) (Chair)
Stadler Bussnang AG, Bussnang (Switzerland) (Chair)
Stadler Stahlguss AG, Biel (Switzerland)
Stadler Winterthur AG, Winterthur (Switzerland) (Chair)

Anke Strüber-Hummelt, Marl
Deputy Chairwoman of the General Works Council of Evonik Industries AG
Chairwoman of the Works Council for Evonik's Marl facilities

Angela Titzrath, Hamburg
Chairwoman of the Executive Board of Hamburger Hafen und Logistik Aktiengesellschaft
a) AXA Konzern Aktiengesellschaft (until April 30, 2018)
Talanx AG (since May 8, 2018)

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

Until May 30, 2018:
DEVK Deutsche Eisenbahn Versicherung-Lebensversicherungsverein AG
Betriebliche Sozialeinrichtung der Deutschen Bahn
DEVK Deutsche Eisenbahn Versicherung-Lebensversicherungsverein AG
Sach- und HUK-Versicherungsverein AG

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).

The following members left the supervisory board in 2018:

Dr. Werner Müller, Mülheim an der Ruhr
Chairman of the Supervisory Board
(until May 23, 2018)
Chairman of the Executive Board of RAG-Stiftung
(until May 23, 2018)
a) Borussia Dortmund GmbH & Co. KGaA
RAG Aktiengesellschaft (Chair)
RAG Deutsche Steinkohle AG (Chair)
b) Contilia GmbH
Stadler Rail AG, Bussnang (Switzerland)

Ralf Hermann, Herten
(until May 23, 2018)
Member of the Works Council for Evonik's Marl facilities
(until April 23, 2018)
a) Pensionskasse Degussa VVaG
b) RAG-Stiftung

Prof. Wolfgang A. Herrmann, Freising
(until May 23, 2018)
President of Munich Technical University
b) Bayerische Forschungsallianz GmbH (Chair)

Norbert Pohlmann, Essen
(until March 31, 2018)
Member of the Works Council for Evonik's Goldschmidtstrasse facilities
(until March 31, 2018)
a) BKK Novitas

Dr. Wilfried Robers, Gescher
(until May 23, 2018)
Chairman of the Executive Staff Council of the Evonik Group
(until April 25, 2018)

Ulrich Terbrack, Reinheim
(until May 23, 2018)
Member of the Works Council for Evonik's Darmstadt site
(until March 22, 2018)

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) Deutsche Asset Management Investment GmbH (until March 21, 2018)
DWS Group GmbH & Co. KGaA (since March 22, 2018)
Evonik Nutrition & Care GmbH
Evonik Resource Efficiency GmbH
Evonik Performance Materials GmbH
Klöckner & Co. SE
Pensionskasse Degussa VVaG
b) Borussia Dortmund Geschäftsführungs-GmbH (since November 25, 2018)

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).

Heads of the management boards of the main management companies within the Evonik Group

Dr. Reiner Beste
Head of the management board of
Evonik Nutrition & Care GmbH

Dr. Claus Rettig
Head of the management board of
Evonik Resource Efficiency GmbH

Caspar Gammelin
Head of the management board of
Evonik Performance Materials GmbH

Gregor Hetzke
Head of the management board of
Evonik Technology & Infrastructure GmbH

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 of the executive board

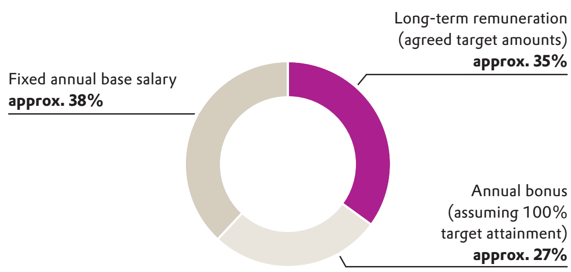
Principles and objectives

The remuneration system for the executive board is designed to ensure that members receive adequate 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, and a variable short-term component comprising an annual bonus, which is dependent on the attainment of annual performance targets. This is supplemented by a long-term component linked directly to the increase in the value of the company as an incentive for sustained commitment to the company and the customary fringe benefits.

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. 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. The last external review of the appropriateness of the remuneration system was in 2017. As a result, it was decided to raise the target for variable short-term remuneration effective 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 target for long-term remuneration of all members of the executive board. This target was increased by €400 thousand for the chairman, €200 thousand for the deputy chairman, and €150 thousand for all other members of the executive board.

The chart shows the breakdown of the main remuneration components in 2018, i.e., excluding benefits in kind, other fringe benefits, and company pension plans.

Structure of remuneration of members of the executive board[a] **C30**



[a] Excluding fringe benefits and retirement pensions.

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.

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

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. The adjusted EBITDA margin and free cash flow are measured against strategic objectives, while the target for adjusted EBITDA was derived from corporate planning. 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.

If the qualitative and business objectives are achieved in full, the contractually agreed 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.

The supervisory board redesigned the plans in 2013 as a result of the stock exchange listing of Evonik Industries AG. Since then, performance has been 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. Since there was no share price at the start of the performance period, as an exception, the virtual shares for the 2013 tranche were calculated from the share price in the first 60 trading days following admission to the stock exchange (April 25, 2013). 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, including any dividends per share actually paid in this period. This is compared with the performance of the benchmark index (total shareholder return).

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.

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. 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.

The fair values of the LTI tranches 2013 through 2018 as of the date of the legally binding commitment are shown in the next table:

LTI tranches[a] **T29**

	2013		2014		2015		2016		2017		**2018**	
	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
Dr. Harald Schwager	–	–	–	–	–	–	–	–	12,090	299	31,959	814
Thomas Wessel	25,880	617	27,125	614	28,506	893	23,637	505	27,203	672	23,969	611
Ute Wolf	6,470	154	27,125	614	28,506	893	23,637	505	27,203	672	23,969	611
Total	**32,350**	**771**	**67,812**	**1,535**	**85,518**	**2,679**	**76,077**	**1,626**	**108,283**	**2,676**	**119,846**	**3,054**

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

In 2018, the total expense for all LTI tranches for the executive board was €566 thousand. The breakdown of the expense was as follows: €187 thousand for Mr. Kullmann, €135 thousand for Dr. Schwager, €122 thousand for Mr. Wessel, and €122 thousand for Ms. Wolf.

Company pension plan

A defined-contribution system is applicable for Christian Kullmann, Thomas Wessel, and Ute Wolf. This is a capital-based system funded by provisions. The company credits a fixed annual amount to their pension account. This comprises 15 percent of their target remuneration, i.e., 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 disbursement of part of the capital (maximum 50 percent) in six to ten installments. Pension entitlements accrued prior to appointment to the executive board 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 age of 60 or 62 (depending on their individual pension arrangements) 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 2018, the service cost for members of the executive board totaled €1,860 thousand (2017: €1,311 thousand) based on the German Commercial Code (HGB) and €2,431 thousand (2017: €1,482 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 (HGB) 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 €13,662 thousand (2017: €10,191 thousand) based on the German Commercial Code (HGB) and €17,671 thousand (2017: €14,713) based on IFRS.

Provisions for pension obligations to former members of the executive board and their surviving dependents as of the reporting date were €61,985 thousand (2017: €57,714 thousand) based on the German Commercial Code (HGB) and €79,549 thousand (2017: €79,626 thousand) based on IFRS.

Service cost and present value of pension obligations **T30**

	HGB				IFRS			
	Service cost		Settlement amount of pension obligations as of Dec. 31		Service cost		Present value of the defined benefit obligation as of Dec. 31	
in €'000	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
Christian Kullmann	568	505	5,410	4,142	785	642	7,213	6,225
Dr. Harald Schwager (from September 1, 2017)	651	208	951	220	824	–	1,175	297
Thomas Wessel	339	318	4,964	4,082	428	435	6,217	5,620
Ute Wolf	302	280	2,337	1,747	394	405	3,066	2,571
Total	**1,860**	**1,311**	**13,662**	**10,191**	**2,431**	**1,482**	**17,671**	**14,713**

Rules on termination of service on the executive board

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.

Change-of-control clause

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 executive board members is calculated immediately and paid with their next regular salary payment. From the 2013 tranche, the payment is calculated pro rata based on the period between the grant date and the change of control and the four-year performance period.

Remuneration of the executive board in fiscal 2018

The total remuneration paid to the members of the executive board for their work in 2018, including remuneration for the performance of other offices, was €11,969 thousand (2017: €11,296 thousand, including two members who left the executive board). Provisions for bonus payments to executive board members for 2017 amounting to €100 thousand were reversed in 2018.

Based on the principles outlined, the breakdown of remuneration for each executive board member in 2018 was as follows:

Remuneration of the executive board **T31**

	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**	2017	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
Christian Kullmann	1,400	1,141	67	86	1,607	1,431	1,018	1,033	4,092	3,691
Dr. Harald Schwager [b]	1,130	327	99	21	1,169	390	814	299	3,212	1,037
Thomas Wessel	800	700	232	230	698	698	611	672	2,341	2,300
Ute Wolf	800	700	112	118	801	774	611	672	2,324	2,264
Total	**4,130**	**2,868**	**510**	**455**	**4,275**	**3,293**	**3,054**	**2,676**	**11,969**	**9,292**

[a] Fair value as of the legally binding commitment or grant date.
[b] 2017: pro rata from September 1, 2017.

In 2018, 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, 2018 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.

Benefits granted T32

	Christian Kullmann[a] Chairman of the Executive Board				**Dr. Harald Schwager** Deputy Chairman of the Executive Board (from September 1, 2017)			
in €'000	2017	**2018**	**2018 (min.)**	**2018 (max.)**	2017	**2018**	**2018 (min.)**	**2018 (max.)**
Fixed remuneration	1,141	1,400	1,400	1,400	327	1,130	1,130	1,130
Fringe benefits	86	67	67	67	21	99	99	99
Total	**1,227**	**1,467**	**1,467**	**1,467**	**348**	**1,229**	**1,229**	**1,229**
One-year variable remuneration	1,052	1,000	–	2,000	300	750	–	1,500
Multi-year variable remuneration	1,033	1,018	–	3,750	299	814	–	3,000
LTI 2017 through 2020	*1,033*	–	–	–	*299*	–	–	–
LTI 2018 through 2021	–	*1,018*	–	*3,750*	–	*814*	–	*3,000*
Total	**3,312**	**3,485**	**1,467**	**7,217**	**947**	**2,793**	**1,229**	**5,729**
Pension expense (service cost)	642	785	785	785	–	824	824	824
Total remuneration	**3,954**	**4,270**	**2,252**	**8,002**	**947**	**3,617**	**2,053**	**6,553**

	Thomas Wessel Chief Human Resources Officer				**Ute Wolf** Chief Financial Officer			
in €'000	2017	**2018**	**2018 (min.)**	**2018 (max.)**	2017	**2018**	**2018 (min.)**	**2018 (max.)**
Fixed remuneration	700	800	800	800	700	800	800	800
Fringe benefits	230	232	232	232	118	112	112	112
Total	**930**	**1,032**	**1,032**	**1,032**	**818**	**912**	**912**	**912**
One-year variable remuneration	650	550	–	1,100	650	550	–	1,100
Multi-year variable remuneration	672	611	–	2,250	672	611	–	2,250
LTI 2017 through 2020	*672*	–	–	–	*672*	–	–	–
LTI 2018 through 2021	–	*611*	–	*2,250*	–	*611*	–	*2,250*
Total	**2,252**	**2,193**	**1,032**	**4,382**	**2,140**	**2,073**	**912**	**4,262**
Pension expense (service cost)	435	428	428	428	405	394	394	394
Total remuneration	**2,687**	**2,621**	**1,460**	**4,810**	**2,545**	**2,467**	**1,306**	**4,656**

[a] Appointed chairman of the executive board effective May 24, 2017; his annual base salary, targets for one-year variable remuneration, and the allocation of multi-year variable remuneration were adjusted as of this date.

Allocation T33

	Christian Kullmann[a] Chairman of the Executive Board		Dr. Harald Schwager Deputy Chairman of the Executive Board (from September 1, 2017)		Thomas Wessel Chief Human Resources Officer		Ute Wolf Chief Financial Officer	
in €'000	2017	**2018**	2017	**2018**	2017	**2018**	2017	**2018**
Fixed remuneration	1,141	1,400	327	1,130	700	800	700	800
Fringe benefits	86	67	21	99	230	232	118	112
Total	**1,227**	**1,467**	**348**	**1,229**	**930**	**1,032**	**818**	**912**
One-year variable remuneration[b, c, d]	1,295	1,637	379	1,180	636	728	738	818
Multi-year variable remuneration	–	306	–	–	571	611	143	611
LTI 2013 through 2016	–	–	–	–	*571*	–	*143*	–
LTI 2014 through 2017	–	*306*	–	–	–	*611*	–	*611*
Total	**2,522**	**3,410**	**727**	**2,409**	**2,137**	**2,371**	**1,699**	**2,341**
Pension expense (service cost)	642	785	–	824	435	428	405	394
Total remuneration	**3,164**	**4,195**	**727**	**3,233**	**2,572**	**2,799**	**2,104**	**2,735**

[a] Appointed chairman of the executive board effective May 24, 2017; his annual base salary, targets for one-year variable remuneration, and the allocation of multi-year variable remuneration were adjusted as of this date.
[b] In some cases, fees for other offices held are offset against variable remuneration contained in fringe benefits; 2017: Kullmann €30 thousand, Wessel €180 thousand, Wolf €90 thousand. 2018: Schwager €58 thousand, Wessel €180 thousand, Wolf €90 thousand.
[c] The one-year variable remuneration for 2017 corresponds to the actual payments made in 2018 for 2017 (a correction has been made for any discrepancies between the actual payments and the estimates made in the remuneration report in 2017).
[d] The one-year variable remuneration for 2018 has not yet been finalized; estimate based on assumptions made for provisions.

Former executive board members, including members who left the executive board in the fiscal year

Total remuneration for former members of the executive board and their surviving dependents was €1,872 thousand in 2018 (2017: €11,492 thousand, including two members who left the executive board during the year).

2. Remuneration of 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. 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.

Different levels of fixed annual remuneration are paid to the chairman (€250 thousand), deputy chairwoman (€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 chairwoman €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 €20,000 each, the deputy chairpersons receive €10,000 each, and the other members €10,000 each. Entitlement to the additional remuneration for work on the mediation committee only applies if the committee is actually convened during the fiscal year.

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 of or chairing a committee.

Remuneration of the supervisory board T34

	Fixed remuneration		Remuneration for membership of a committee		Attendance fees		**Total**	
in €'000	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
Martin Albers	100	100	58	30	12	9	170	139
Prof. Barbara Albert	100	100	30	–	7	5	137	105
Jens Barnhusen (from May 23, 2018)	67	–	10	–	6	–	83	–
Prof. Aldo Belloni (from May 24, 2017)	100	67	35	20	7	6	142	93
Karin Erhard	100	100	60	50	9	9	169	159
Carmen Fuchs	100	100	15	–	7	5	122	105
Stephan Gemkow (until May 23, 2017)	–	42	–	13	–	2	–	57
Edeltraud Glänzer	175	175	87	75	13	10	275	260
Prof. Barbara Grunewald	100	100	50	40	10	9	160	149
Ralf Hermann (until May 23, 2018)	42	100	33	75	4	10	79	185
Prof. Wolfgang A. Herrmann (until May 23, 2018)	42	100	–	–	2	5	44	105
Michael Hofmann (from May 23, 2018)	67	–	33	–	7	–	107	–
Martin Kubessa (from May 23, 2018)	67	–	–	–	5	–	72	–
Frank Löllgen	100	100	55	30	9	8	164	138
Dr. Siegfried Luther	100	100	90	75	10	8	200	183
Dr. Werner Müller (until May 23, 2018)	104	250	54	110	3	15	161	375
Norbert Pohlmann (until March 31, 2018)	25	100	13	40	2	9	40	149
Dr. Wilfried Robers (until May 23, 218)	42	100	21	40	4	9	67	149
Michael Rüdiger	100	100	60	50	9	9	169	159
Dr. Thomas Sauer (from May 23, 2018)	67	–	33	–	7	–	107	–
Peter Spuhler (from May 23 2018)	67	–	–	–	3	–	70	–
Anke Strüber-Hummelt	100	100	30	–	9	5	139	105
Ulrich Terbrack (until May 23, 2018)	42	100	–	–	2	5	44	105
Angela Titzrath	100	100	50	40	8	9	158	149
Bernd Tönjes (from May 23, 2018)	167	–	87	–	11	–	265	–
Dr. Volker Trautz	100	100	60	45	10	9	170	154
Ulrich Weber	100	100	45	40	10	7	155	147
Total	**2,274**	**2,234**	**1,009**	**773**	**186**	**163**	**3,469**	**3,170**

The remuneration and attendance fees paid to the supervisory board in 2017 and 2018 are presented on a cost basis. For members who joined or left the supervisory board during 2017 and 2018, the amounts are calculated on a pro rata basis.

As of December 31, 2018, there were no loans or advances to members of the supervisory board. In 2018, 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[2], 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 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, 2018, 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. 59,915 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.

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

[1] This report is part of the audited management report. | [2] Section 33 paragraph 1 of German Securities Trading Act (WpHG) in the version effective from January 3, 2018.

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, 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 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, 2018. 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, 2018, 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

Income statement for the Evonik Group T35

in € million	Notes	2018	2017
Sales	5.1	15,024	14,383
Cost of sales	5.2	−10,399	−9,905
Gross profit on sales		**4,625**	**4,478**
Selling expenses	5.2	−1,752	−1,695
Research and development expenses	5.2	−459	−476
General administrative expenses	5.2	−656	−714
Other operating income	5.3	238	311
Other operating expense	5.4	−637	−689
Result from investments recognized at equity	5.6	8	10
Income before financial result and income taxes, continuing operations		**1,367**	**1,225**
Interest income		49	73
Interest expense		−210	−243
Other financial income/expense		−4	−33
Financial result	5.5	**−165**	**−203**
Income before income taxes, continuing operations		**1,202**	**1,022**
Income taxes	5.7	−250	−292
Income after taxes, continuing operations		**952**	**730**
Income after taxes, discontinued operations		2	–
Income after taxes		**954**	**730**
thereof attributable to			
Non-controlling interests		22	17
Shareholders of Evonik Industries AG (net income)		932	713
Earnings per share in € (basic and diluted)	5.8	**2.00**	**1.53**

Prior-year figures restated.

Statement of comprehensive income

Statement of comprehensive income for the Evonik Group T36

in € million	2018	2017
Income after taxes	**954**	**730**
Other comprehensive income from available-for-sale securities (IAS 39)	–	11
Other comprehensive income from financial instruments in hedging relationships (IAS 39)	–	34
Other comprehensive income from hedging instruments: designated risk components (IFRS 9)	–126	–
Other comprehensive income from hedging instruments: cost of hedging (IFRS 9)	–17	–
Other comprehensive income from currency translation	160	–554
Other comprehensive income from investments recognized at equity (after income taxes)	2	–
Deferred taxes	44	–17
Other comprehensive income that can be reclassified	**63**	**–526**
Other comprehensive income from the remeasurement of the net defined benefit liability for defined benefit pension plans	–300	102
Other comprehensive income from equity instruments (IFRS 9)	29	–
Other comprehensive income from investments recognized at equity (after income taxes)	–	–
Deferred taxes from the remeasurement of the net defined benefit liability for defined benefit pension plans	106	21
Other comprehensive income that cannot be reclassified	**–165**	**123**
Other comprehensive income after taxes	**–102**	**–403**
Total comprehensive income	**852**	**327**
thereof attributable to		
Non-controlling interests	22	12
Shareholders of Evonik Industries AG	830	315
Total comprehensive income attributable to shareholders of Evonik Industries AG	**830**	**315**
thereof attributable to		
Continuing operations	828	315
Discontinued operations	2	–

Prior-year figures restated.

Balance sheet

Balance sheet for the Evonik Group T37

in € million	Notes	Dec. 31, 2018	Dec. 31, 2017	Jan. 1, 2017
Intangible assets	6.1 & 6.4	6,134	6,105	3,312
Property, plant and equipment	6.2 & 6.4	6,785	6,495	6,041
Investments recognized at equity	6.3 & 6.4	46	47	43
Other financial assets	6.5	233	327	213
Deferred taxes	6.13	1,419	1,226	1,163
Other income tax assets	6.13	16	14	8
Other assets	6.7	56	296	58
Non-current assets		**14,689**	**14,510**	**10,838**
Inventories	6.6	2,304	2,038	1,690
Trade accounts receivable	6.5	1,686	1,755	1,643
Other financial assets	6.5	140	166	317
Other income tax assets	6.13	180	154	228
Other assets	6.7	295	313	302
Cash and cash equivalents	6.5 & 7.3	988	1,004	4,623
Current assets		**5,593**	**5,430**	**8,803**
Total assets		**20,282**	**19,940**	**19,641**

Prior-year figures restated.

in € million	Notes	Dec. 31, 2018	Dec. 31, 2017	Jan. 1, 2017
Issued capital		466	466	466
Capital reserve		1,167	1,167	1,166
Retained earnings including distributable profit		6,237	6,012	5,712
Other equity components		−141	−214	310
Equity attributable to shareholders of Evonik Industries AG		**7,729**	**7,431**	**7,654**
Equity attributable to non-controlling interests		96	88	91
Equity	6.8	**7,825**	**7,519**	**7,745**
Provisions for pensions and other post-employment benefits	6.9	3,732	3,817	3,852
Other provisions	6.10	855	788	817
Other financial liabilities	6.11	3,689	3,706	3,334
Deferred taxes	6.13	557	541	452
Other income tax liabilities	6.13	223	225	173
Other payables	6.12	47	57	72
Non-current liabilities		**9,103**	**9,134**	**8,700**
Other provisions	6.10	1,047	968	969
Trade accounts payable	6.11	1,493	1,449	1,212
Other financial liabilities	6.11	395	438	467
Other income tax liabilities	6.13	64	50	83
Other payables	6.12	355	382	465
Current liabilities		**3,354**	**3,287**	**3,196**
Total equity and liabilities		**20,282**	**19,940**	**19,641**

Prior-year figures restated.

Statement of changes in equity

Statement of changes in equity for the Evonik Group Note 6.8 T38

in € million	Issued capital	Capital reserve	Treasury shares	Retained earnings/ distributable profit	Other equity components	Equity attributable to shareholders of Evonik Industries AG	Non-controlling interests	Total equity
As of December 31, 2016	**466**	**1,166**	**–**	**5,716**	**310**	**7,658**	**92**	**7,750**
Changes pursuant to IAS 8	–	–	–	–4	–	–4	–1	–5
As of January 1, 2017	**466**	**1,166**	**–**	**5,712**	**310**	**7,654**	**91**	**7,745**
Capital increases/decreases	–	–	–		–	–	–	–
Dividend distribution	–	–		–536	–	–536	–14	–550
Purchase of treasury shares	–	–	–19	–	–	–19	–	–19
Share-based payment	–	5	–	–	–	5	–	5
Sale of treasury shares	–	–4	19	–	–	15	–	15
Income after taxes	–	–	–	713	–	713	17	730
Other comprehensive income after taxes	–	–	–	123	–521	–398	–5	–403
Total comprehensive income	–	–	–	836	–521	315	12	327
Other changes	–	–	–	–	–3	–3	–1	–4
As of December 31, 2017	**466**	**1,167**	**–**	**6,012**	**–214**	**7,431**	**88**	**7,519**
Changes pursuant to IAS 8				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**

Prior-year figures restated.

Cash flow statement

Cash flow statement for the Evonik Group T39

in € million	Notes	2018	2017
Income before financial result and income taxes, continuing operations		1,367	1,225
Depreciation, amortization, impairment losses/reversal of impairment losses on non-current assets		875	923
Result from investments recognized at equity		−8	−10
Gains/losses on the disposal of non-current assets		3	−73
Change in inventories		−272	−97
Change in trade accounts receivable		74	−56
Change in trade accounts payable		18	192
Change in provisions for pensions and other post-employment benefits		−212	−202
Change in other provisions		157	−6
Change in miscellaneous assets/liabilities		35	22
Cash outflows for interest		−121	−127
Cash inflows from interest		43	62
Cash inflows from dividends		12	11
Cash inflows/outflows for income taxes		−267	−313
Cash flow from operating activities	7.1	**1,704**	**1,551**
Cash outflows for investments in intangible assets, property, plant and equipment		−1,032	−1,040
Cash outflows for investments in subsidiaries		−21	−4,121
Cash outflows for investments in other shareholdings		−18	−16
Cash inflows from divestments of intangible assets, property, plant and equipment		18	12
Cash inflows/outflows from divestment of shareholdings		68	−10
Cash inflows/outflows relating to securities, deposits, and loans		−31	17
Transfers to the pension trust fund (CTA)		−26	−23
Cash flow from investing activities	7.2	**−1,042**	**−5,181**
Cash inflows/outflows relating to capital contributions		2	–
Cash outflows for dividends to shareholders of Evonik Industries AG		−536	−536
Cash outflows for dividends to non-controlling interests		−16	−14
Cash outflows for the purchase of treasury shares		−17	−19
Cash inflows from the sale of treasury shares		17	20
Cash inflows from the addition of financial liabilities		61	700
Cash outflows for repayment of financial liabilities		−195	−201
Cash inflows/outflows in connection with financial transactions		8	73
Cash flow from financing activities		**−676**	**23**
Change in cash and cash equivalents		**−14**	**−3,607**
Cash and cash equivalents as of January 1		**1,004**	**4,623**
Change in cash and cash equivalents		−14	−3,607
Changes in exchange rates and other changes in cash and cash equivalents		−2	−12
Cash and cash equivalents as on the balance sheet as of December 31	7.3	**988**	**1,004**

Prior-year figures restated.

Notes to the consolidated financial statements

1. Segment report

Segment report by operating segments Note 8.1

	Nutrition & Care		Resource Efficiency		Performance Materials	
in € million	**2018**	2017	**2018**	2017	**2018**	2017
External sales	4,646	4,507	5,709	5,393	3,976	3,751
Internal sales	34	32	50	46	170	177
Total sales	4,680	4,539	5,759	5,439	4,146	3,928
Result from investments recognized at equity	1	4	3	3	−2	−3
Adjusted EBITDA	810	747	1,288	1,173	670	658
Adjusted EBITDA margin in %	17.4	16.6	22.6	21.8	16.9	17.5
Adjusted EBIT	535	463	985	885	534	507
Capital employed (annual average)	4,774	4,259	4,815	4,256	1,256	1,227
ROCE in %	11.2	10.9	20.5	20.8	42.5	41.3
Depreciation and amortization[a]	−263	−262	−290	−281	−133	−139
Capital expenditures[a]	486	391	289	340	114	163
Financial investments	12	1,966	–	2,341	5	3
No. of employees as of December 31	8,224	8,257	10,268	10,260	4,132	4,364

Prior-year figures restated.

For details of the segmentation of impairments and reversals of impairments pursuant to IAS 36, see note 6.4.

[a] For intangible assets, property, plant and equipment.

Segment report by regions Note 8.2

	Western Europe		Eastern Europe		North America	
in € million	**2018**	2017	**2018**	2017	**2018**	2017
External sales[a]	6,397	6,219	947	837	3,409	3,301
Goodwill as of December 31[b]	2,413	2,403	54	54	1,934	1,847
Other intangible assets, property, plant and equipment as of December 31[b]	4,219	4,244	28	27	1,951	1,879
Capital expenditures	480	576	7	5	213	254
No. of employees as of December 31	24,340	24,488	569	643	4,753	4,982

Prior-year figures restated.

[a] External sales Western Europe: thereof Germany €2,626 million (2017: €2,607 million).
[b] Non-current assets according to IFRS 8.33 b.

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	Services		Other operations		Corporate, consolidation		**Total Group (continuing operations)**	
	2018	2017	**2018**	2017	**2018**	2017	**2018**	2017
	677	717	15	15	1	–	15,024	14,383
	2,247	2,080	27	25	−2,528	−2,360	–	–
	2,924	2,797	42	40	−2,527	−2,360	15,024	14,383
	6	6	–	–	–	–	8	10
	146	133	−86	−100	−227	−254	2,601	2,357
	21.6	18.5	–	–	–	–	17.3	16.4
	9	10	−102	−114	−237	−265	1,724	1,486
	675	652	−42	−10	2,817	2,873	14,295	13,257
	1.3	1.5	–	–	–	–	12.1	11.2
	−127	−124	−14	−14	−10	−9	−837	−829
	148	162	11	15	2	7	1,050	1,078
	1	2	–	–	12	10	30	4,322
	12,913	13,021	217	249	289	372	36,043	36,523

T41

	Central & South America		Asia-Pacific North		Asia-Pacific South		Middle East & Africa		**Total Group (continuing operations)**	
	2018	2017	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
	624	551	2,276	2,157	936	895	435	423	15,024	14,383
	31	30	198	195	98	94	20	19	4,748	4,642
	155	178	710	787	1,101	834	7	9	8,171	7,958
	6	8	40	61	303	173	1	1	1,050	1,078
	678	680	3,675	3,793	1,846	1,741	182	196	36,043	36,523

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 18, 2019, discussed at the meeting of the audit committee on February 26, 2019, and presented to the supervisory board for approval at its meeting on March 4, 2019. 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, 2018 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. Other changes to the prior-year figures are outlined either in note 3.5 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 2018. Only the accounting standards of significance for Evonik are outlined below.

First-time application of IFRS 15

Evonik applied IFRS 15 Revenue from Contracts with Customers for the first time retrospectively as of January 1, 2018.

A change in the timing of revenue recognition results from the identification of an additional performance obligation for freight and transportation services provided after the transfer of control, and from a change in the assessment of the timing of the transfer of control for overseas shipments relating to the sale of products on certain conditions, where control is transferred to customers later than the previous timing of revenue recognition (transfer of opportunities and risks).

Further, under IFRS 15 the level of revenues recognized by Evonik over the total period differs from previous practice in the following cases:

- for prepayments by customers, where it may be necessary to recognize a financing component that would increase sales
- for some agreements on the unconditional repurchase of products that can be classified individually as leases
- for exchange-type transactions with competitors, where no further revenues will be realized following first-time adoption of this standard, the underlying products are still recognized by Evonik, and the transaction is therefore classified as financing.

The following tables show the impact of retrospective application on the prior-year figures for the income statement and balance sheet.

Impact of IFRS 15 on the income statement (excerpt) T42

	Impact of change
in € million	2017
Sales	–36
Cost of sales	33
Gross profit on sales	**–3**
Other operating income	–
Other operating expense	–1
Income before financial result and income taxes, continuing operations	**–4**
Financial result	–1
Income before income taxes, continuing operations	**–5**
Income taxes	1
Income after taxes	**–4**
thereof attributable to	
Non-controlling interests	–
Shareholders of Evonik Industries AG (net income)	–4
Earnings per share in € (basic and diluted)	**–0.01**

Retrospective application reduced adjusted EBITDA 2017 by €3 million. Due to rounding, adjusted EBIT 2017 decreased by €4 million.

Impact of IFRS 15 on the balance sheet (excerpt) T43

in € million	Jan. 1, 2017 Before application of IFRS 15	Reclassification	Change in timing of recognition	Change in revenue over total period	Taxes	Jan. 1, 2017 After application of IFRS 15
Deferred taxes	1,162	–	–	–	1	1,163
Other assets	58	–	–	–	–	58
Non-current assets	**10,837**	**–**	**–**	**–**	**1**	**10,838**
Inventories	1,679	–	11	–	–	1,690
Trade accounts receivable	1,661	–	–18	–	–	1,643
Other financial assets	317	–	–	–	–	317
Other assets	300	–	2	–	–	302
Current assets	**8,808**	**–**	**–5**	**–**	**–**	**8,803**
Total assets	**19,645**	**–**	**–5**	**–**	**1**	**19,641**
Equity	**7,750**	**–**	**–6**	**–1**	**2**	**7,745**
Deferred taxes	453	–	–	–	–1	452
Other payables	71	–	–	1	–	72
Non-current liabilities	**8,700**	**–**	**–**	**1**	**–1**	**8,700**
Other provisions	1,035	–66	–	–	–	969
Other financial liabilities	401	66	–	–	–	467
Other payables	464	–	1	–	–	465
Current liabilities	**3,195**	**–**	**1**	**–**	**–**	**3,196**
Total equity and liabilities	**19,645**	**–**	**–5**	**–**	**1**	**19,641**

Under IFRS 15, the rebate and bonus agreements previously recognized as other provisions are included in financial liabilities as refund liabilities. As of January 1, 2017, this resulted in reclassifications totaling €66 million.

Impact of IFRS 15 on the balance sheet (excerpt) T44

in € million	Dec. 31, 2017 Before application of IFRS 15	Reclassification	Change in timing of recognition	Change in revenue over total period	Taxes	Dec. 31, 2017 After application of IFRS 15
Deferred taxes	1,223	–	–	–	3	1,226
Other assets	296	–	–	–	–	296
Non-current assets	**14,507**	**–**	**–**	**–**	**3**	**14,510**
Inventories	2,025	–	14	–1	–	2,038
Trade accounts receivable	1,776	–	–21	–	–	1,755
Other financial assets	159	–	–	7	–	166
Other assets	314	–	–	–1	–	313
Current assets	**5,432**	**–**	**–7**	**5**	**–**	**5,430**
Total assets	**19,939**	**–**	**–7**	**5**	**3**	**19,940**
Equity	**7,527**	**–**	**–8**	**–3**	**3**	**7,519**
Other payables	57	–	–	–	–	57
Non-current liabilities	**9,134**	**–**	**–**	**–**	**–**	**9,134**
Other provisions	1,035	–67	–	–	–	968
Other financial liabilities	371	67	–	–	–	438
Other payables	373	–	1	8	–	382
Current liabilities	**3,278**	**–**	**1**	**8**	**–**	**3,287**
Total equity and liabilities	**19,939**	**–**	**–7**	**5**	**3**	**19,940**

As of December 31, 2017, the reclassification of the rebate and bonus agreements amounted to €67 million.

First-time application of IFRS 9

Evonik has applied the new accounting standard IFRS 9 Financial Instruments since January 1, 2018. In accordance with the transitional provisions, the comparative data have not been restated, with the exception of certain aspects of hedge accounting.

IFRS 9 specifies that the classification and measurement of financial assets is based on the company's business model and the characteristics of the cash flows from the respective financial asset. Equity instruments held as of January 1, 2018, which were not held for trading, are accounted for uniformly using the option of recognizing future changes in fair value in other comprehensive income, so the results of disposal of the equity instrument are also recognized there. Impairment losses totaling €19 million for equity instruments still held, which are presented as other investments and were recognized in retained earnings including distributable profit until January 1, 2018, have been reclassified to other equity components. The measurement of other investments at fair value rather than at cost of acquisition as in the past increased their carrying amount by €4 million. This amount was recognized in other equity components as of the transition date.

There were also changes as of the transition date due to the cash flow characteristics of investment fund units. €12 million was previously allocated to the "available-for-sale" category for these investments and changes in their fair value were recognized outside of profit and loss in other comprehensive income. Under IAS 32 Financial Instruments: Presentation in conjunction with IFRS 9, they now have to be presented as debt instruments and changes in their fair value are recognized in profit or loss. Until January 1, 2018, €1 million was recognized in other equity components for changes in their fair value. This has been reclassified to retained earnings including distributable profit.

The new impairment rules have been applied to financial assets already held as of January 1, 2018, which fall within the scope of the new impairment model, and to contract assets.

The only material effects of applying the new impairment rules related to trade accounts receivable. As a result of initial application of IFRS 9, the accumulated impairment losses of €50 million recognized for trade accounts receivable in accordance with IAS 39 Financial Instruments: Recognition and Measurement as of December 31, 2017 declined by €3 million to €47 million as of January 1, 2018. For all other financial assets, which are subject to the general impairment approach and were already held as of January 1, 2018, there has not been any significant rise in the risk of default between the date of initial recognition (or the date when Evonik became a party to the contract) and January 1, 2018. For these instruments, provisions are therefore recognized on the basis of the 12-month expected credit losses. There were no reclassification effects.

As of the transition date, the switch from IAS 39 to IFRS 9 impacted financial assets as follows:

Reconciliation of financial assets from IAS 39 to IFRS 9 T45

in € million Financial assets—IAS 39 valuation categories	Carrying amount pursuant to IAS 39 as of Dec. 31, 2017	Reclassification	Revaluation due to change in valuation category	Revaluation due to application of impairment model	Carrying amount pursuant to IFRS 9 as of Jan. 1, 2018	Financial assets—IFRS 9 valuation categories
Trade accounts receivable— Loans and receivables	**1,755**	**–**	**–**	**3**	**1,758**	**Trade accounts receivable—**At amortized cost
Cash and cash equivalents— Loans and receivables	**1,004**	**–**	**–**	**–**	**1,004**	**Cash and cash equivalents—**At amortized cost
Other investments— Available-for-sale (Measured at amortized cost)	14	–	4	–	18	**Other investments—**At fair value through OCI without subsequent reclassification
Other investments— Available-for-sale (Measured at fair value)	112	–12	–	–	100	**Other investments—**At fair value through OCI without subsequent reclassification
Loans—Loans and receivables	59	–6	–	–	53	**Loans—**At amortized cost
	–	6	–	–	6	**Loans—**At fair value through profit or loss
Securities and similar claims—Available-for-sale	9	12	–	–	21	**Securities and similar claims—**At fair value through profit or loss
Receivables from derivatives—Held for trading	9	–	–	–	9	**Receivables from derivatives—**At fair value through profit or loss
Receivables from derivatives—Not allocated to any category	238	–	–	–	238	**Receivables from derivatives—**Not allocated to any category
Miscellaneous other financial assets—Loans and receivables	38	–29	–	–	9	**Miscellaneous other financial assets—**At amortized cost
	–	29	–	–	29	**Miscellaneous other financial assets—**At fair value through profit or loss
Miscellaneous other financial assets—Not allocated to any category	14	–	–	–	14	**Miscellaneous other financial assets—**Not allocated to any category
Other financial assets	**493**	**–**	**4**	**–**	**497**	**Other financial assets**
	3,252	**–**	**8**	**–**	**3,259**	

Prior-year figures restated due to the initial application of IFRS 15.

The next table shows the impact of initial application on the fair value of financial assets that are valued on the basis of individual valuation parameters (level 3):

Reconciliation of financial assets carried at fair value (level 3) from IAS 39 to IFRS 9 T46

in € million Financial assets—IAS 39 valuation categories	Carrying amount pursuant to IAS 39 as of Dec. 31, 2017	Reclassification	Reclassification due to change in fair value hierarchy	Revaluation due to change in valuation category	Carrying amount pursuant to IFRS 9 as of Jan. 1, 2018	Financial assets—IFRS 9 valuation categories
Other investments— Available-for-sale (Measured at amortized cost)	–	–	14	4	18	**Other investments—** At fair value through OCI without subsequent reclassification
Other investments— Available-for-sale (Measured at fair value)	29	–12	–	–	17	**Other investments—** At fair value through OCI without subsequent reclassification
Loans— Loans and receivables	–	–	6	–	6	**Loans—**At fair value through profit or loss
Securities and similar claims— Available-for-sale	–	12	–	–	12	**Securities and similar claims—**At fair value through profit or loss
Financial assets (level 3), total	**29**	**–**	**20**	**4**	**53**	**Financial assets (level 3), total**

Prior-year figures restated due to the initial application of IFRS 15.

By contrast, the classification and measurement of financial liabilities is basically unchanged from the previous rules in IAS 39. There was no impact as of the transition date.

Overall, initial application impacted equity as follows:

Impact of the initial application of IFRS 9 on equity T47

in € million Financial assets—IAS 39 valuation categories	Financial assets—IFRS 9 valuation categories	Impact on retained earnings/distri-butable profit as of Jan. 1, 2018	Impact on other equity components as of Jan. 1, 2018
Trade accounts receivable—Loans and receivables	**Trade accounts receivable—**At amortized cost	**3**	**–**
Other investments—Available-for-sale (Measured at amortized cost)	**Other investments—**At fair value through OCI without subsequent reclassification	4	–
Other investments—Available-for-sale (Measured at fair value)	**Other investments—**At fair value through OCI without subsequent reclassification	15	–15
Securities and similar claims—Available-for-sale	**Securities and similar claims—**At fair value through profit or loss	1	–1
Other financial assets	**Other financial assets**	**20**	**–16**
		23	**–16**

For hedge accounting, Evonik utilized the option of applying IFRS 9 prospectively from January 1, 2018 and recognizing the change in the forward and cross-currency basis spread elements over time in equity, and thus outside of profit or loss. By contrast, retrospective application is mandatory if only the intrinsic value of an option is designated as the hedging instrument in a hedging relationship. Here, IFRS 9 specifies that changes in the fair value of the time value of options over the term of the hedging relationship must initially be recognized in other comprehensive income and subsequently released through a basis adjustment or directly to profit or loss, depending on the type of hedged transaction. As of the transition date, Evonik did not have any such cases. However, in 2017 it recognized options transactions that expired in September 2017. Their purpose was to hedge the purchase price of the silica business of J.M. Huber Corporation (Huber), Atlanta (Georgia, USA). The change in the fair value only impacted the financial result in the second and third quarters, but not 2017 as a whole.

3.5 Further restatement of prior-year figures

The role of the Corporate Innovation unit is to manage and direct innovations. Since January 1, 2018, the costs incurred for this unit have been included in research and development expenses instead of in general administrative expenses as in the past. This results in an adjustment of €18 million for 2017 as a whole.

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 2018 or have not yet been officially adopted by the European Union. The accounting standards that could be of relevance for the consolidated financial statements are outlined below. They will probably be applied for the first time from the date on which they come into force.

Accounting standards that are not yet mandatory **T48**

Standard a: Issued by the IASB b: Effective date as per IASB c: Effective date as per EU d: Publication in the Official Journal of the EU		**Subject of standard—Expected impact on the consolidated financial statements**
IFRS 16 Leases	a: Jan. 13, 2016 b: Jan. 1, 2019 c: Jan. 1, 2019 d: Nov. 9, 2017	This new standard has far-reaching implications for the recognition of leases by the lessee. Under IAS 17, the transfer of substantially all opportunities and risks of the leased asset was decisive for recognition of a lease by the lessee. In future, the lessee will generally recognize each lease on the balance sheet in the form of a right of use for the leased asset and a corresponding liability. For lessors, by contrast, the accounting principles are essentially unchanged, especially as regards the continued requirements for the classification of leases. IFRS 16 supersedes IAS 17 and the associated interpretations IFRIC 4, SIC-15, and SIC-27. The group-wide project initiated by Evonik to implement the new standard on leases is currently at the quality assurance and data migration phase. Evonik has taken the following important decisions on initial or ongoing application of this standard: • Use of the practical expedient that does not require reassessment of the definition of a lease • Application of the modified retrospective method, i.e., no restatement of prior-year figures • Measurement of the right-of-use assets at the level of the lease liability • Application of uniform discount rates, taking into account the lease term and economic circumstances of the lease • Application of the recognition exemptions for short-term leases and leases where the underlying asset is of low value • Application of the practical expedient of combining lease and non-lease components for the following classes of assets: power plants, ships, storage tanks. As of the date of initial application of the standard, the quantitative impact on the consolidated financial statements and certain key performance indicators is expected to be as follows: • There will be an increase of around €0.6 billion in assets and liabilities through new right-of-use assets and lease liabilities • Adjusted EBITDA will increase by around €0.1 billion • The net cash flow from operating activities will rise by around €0.1 billion; this takes account of rental/lease payments and the associated increase in interest payments. The present nominal value of obligations as a lessor under operating leases is outlined in note 9.4.

Accounting standards that are not yet mandatory T48

Standard a: Issued by the IASB b: Effective date as per IASB c: Effective date as per EU d: Publication in the Official Journal of the EU		**Subject of standard—Expected impact on the consolidated financial statements**
IFRIC Interpretation 23 Uncertainty over Income Tax Treatments	a: Jun. 7, 2017 b: Jan. 1, 2019 c: Jan. 1, 2019 d: Oct. 24, 2018	IFRIC 23 clarifies the treatment of uncertainty relating to income taxes. It implements decisions taken by the IFRS Interpretations Committee (IFRS IC) on the recognition and measurement of tax risk positions and thus closes a gap in IAS 12. According to this interpretation, tax uncertainties must be taken into account when it is not probable that the taxation authority would accept the tax treatment. An entity is required to assume that a tax authority with the right to examine and challenge tax treatments will examine those treatments and have full knowledge of all related information. Detection risk is not considered in the recognition and measurement of uncertain tax treatments. Tax uncertainties may be measured at the most likely amount or the expected value. This interpretation clarifies that the valuation method that best reflects the existing risk should be used. The changes are not currently expected to have any impact on the consolidated financial statements.
Amendments to IFRS 9 Financial Instruments: Prepayment Features with Negative Compensation	a: Oct. 12, 2017 b: Jan. 1, 2019 c: Jan. 1, 2019 d: Mar. 26, 2018	The amendments clarify that financial assets with prepayment features are eligible for measurement at amortized cost or at fair value through comprehensive income (FVOCI) if one party receives or pays appropriate compensation for the prepayment, even though the compensation payment does not meet the cash flow criterion set out in IFRS 9. The clarification is not currently relevant for the consolidated financial statements.
Amendments to IAS 28: Long-term Interests in Associates and Joint Ventures	a: Oct. 12, 2017 b: Jan. 1, 2019 c: open d: open	Long-term investments that, in substance, form part of an entity's net investment in an entity recognized at equity must be measured and recognized in accordance with IFRS 9. However, the ruling in IAS 28.38 that such investments must be taken into account when allocating losses also has to be taken into account. The clarification will not have a material impact on the consolidated financial statements.
Annual Improvement Process (IFRSs 2015–2017 Cycle)	a: Dec. 12, 2017 b: Jan. 1, 2019 c: open d: open	Annual Improvements to IFRSs 2015–2017 Cycle comprises amendments to IFRS 3, IFRS 11, IAS 12, and IAS 23. These comprise improvements and clarification of existing standards that do not currently have any impact on the consolidated financial statements.
Amendments to IAS 19 Employee Benefits: Plan Amendment, Curtailment or Settlement	a: Feb. 7, 2018 b: Jan. 1, 2019 c: open d: open	These clarifications address plan amendments, curtailments, and settlements where the net defined benefit liability has to be remeasured in the future on the basis of current actuarial assumptions. The current service cost and net interest cost for the period after the plan amendment also have to be determined using the updated actuarial assumptions. In addition, the remeasured net benefit liability (taking into account the revised benefits resulting from remeasurement) must be used to determine the net interest cost after remeasurement. The clarification will not have a material impact on the consolidated financial statements.
Amendments to IFRS 3 Business Combinations	a: Oct. 22, 2018 b: Jan. 1, 2020 c: open d: open	The amendments clarify the definition of a business to assist entities in determining whether a transaction should be accounted for as a business combination or an asset acquisition. The amendment is to be applied prospectively. It is not expected to have a material impact on the consolidated financial statements.
Amendments to IAS 1 and IAS 8: Definition of Material	a: Oct. 31, 2018 b: Jan. 1, 2020 c: open d: open	The purpose of the amendments is to harmonize the definition of material in all IFRSs and the conceptual framework, and to avoid material information being obscured by immaterial information. The definition of "material" has therefore been clarified. The clarification is not expected to alter the understanding of material previously used in the consolidated financial statements.

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 are fully consolidated in the consolidated financial statements of Evonik Industries AG. Evonik Industries AG controls a company if it is exposed to, or has rights to, variable returns from its involvement with the company and has the ability to affect those returns through its power over the company.

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, Duisburg (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 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.

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 (in other words, the parent company's share in the net assets of the subsidiary) 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, revenues, and expenses in accordance with Evonik's rights and obligations.

The same consolidation principles 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 the 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 T49

	Average annual rates		Closing rates	
€1 corresponds to	**2018**	2017	**Dec. 31, 2018**	Dec. 31, 2017
Brazilian real (BRL)	4.30	3.63	4.44	3.97
British pound (GBP)	0.89	0.87	0.89	0.89
Chinese renminbi yuan (CNY)	7.81	7.63	7.88	7.80
Japanese yen (JPY)	130.39	127.00	125.85	135.01
Singapore dollar (SGD)	1.59	1.56	1.56	1.60
US dollar (USD)	1.18	1.13	1.15	1.20

As of July 1, 2018, Argentina was classified as a hyperinflationary economy. The concept of historical cost of acquisition and production pursuant to IAS 29 Financial Reporting in Hyperinflationary Economies has therefore been applied for two Argentinean subsidiaries for the first time. The profit or loss on the net monetary position is recognized in the financial result.

The effect of this change was €6 million as of January 1, 2018 and was recognized in retained earnings. Foreign currency translation and measurement is based on the consumer price index published by the International Monetary Fund on October 1, 2018, which was 328.352.

4. Changes in the Evonik Group

4.1 Scope of consolidation

Changes in the scope of consolidation T50

No. of companies	Germany	Other countries	Total
Evonik Industries AG and consolidated subsidiaries			
As of December 31, 2017	**43**	**107**	**150**
Acquisitions	–	1	1
Other companies consolidated for the first time	1	5	6
Divestments	–	–1	–1
Intragroup mergers	–2	–	–2
As of December 31, 2018	**42**	**112**	**154**
Joint operations			
As of December 31, 2017	**1**	**2**	**3**
As of December 31, 2018	**1**	**2**	**3**
Investments recognized at equity			
As of December 31, 2017	**4**	**11**	**15**
Divestments	–	–1	–1
As of December 31, 2018	**4**	**10**	**14**
	47	**124**	**171**

Further information on the principal acquisitions and divestments in 2018 can be found in note 4.2.

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]

Material consolidated subsidiaries T51

Name of company	Registered office	Shareholding in %
Germany		
Evonik Degussa GmbH	Essen	100.00
Evonik Functional Solutions GmbH	Essen	100.00
Evonik Nutrition & Care GmbH	Essen	100.00
Evonik Oil Additives GmbH	Essen	100.00
Evonik Performance Materials GmbH	Essen	100.00
Evonik Real Estate GmbH & Co. KG	Marl	100.00
Evonik Resource Efficiency GmbH	Essen	100.00
Evonik Röhm GmbH	Essen	100.00
Evonik Technochemie GmbH	Essen	100.00
Evonik Technology & Infrastructure GmbH	Essen	100.00

[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 T51

Name of company	Registered office	Shareholding in %
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 Chemicals Ltd.	Milton Keynes (UK)	100.00
Evonik Cyro LLC	Wilmington (Delaware, USA)	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 Industries de Mexico, S.A. de C.V.	Mexico City (Mexico)	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 Materials Corporation	Wilmington (Delaware, USA)	100.00
Evonik Methionine SEA Pte. Ltd.	Singapore (Singapore)	100.00
Evonik Oil Additives Asia Pacific 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 (SEA) Pte. Ltd.	Singapore (Singapore)	100.00
Evonik Specialty Chemicals (Nanjing) Co., Ltd.	Nanjing (China)	100.00
Evonik Specialty Chemicals (Shanghai) Co., Ltd.	Shanghai (China)	100.00
Evonik UK Holdings Ltd.	Milton Keynes (UK)	100.00

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 StoHaas Marl GmbH in stages

In the previous fiscal year, Evonik and The Dow Chemical Company, Midland (Michigan, USA), dissolved their joint operation StoHaas with effect from December 31, 2017. As a result of this transaction, StoHaas Marl GmbH (StoHaas Marl), Marl (Germany), which was previously carried as a joint operation, is now fully consolidated. The associated purchase price allocation resulted in the following adjustments in 2018:

Purchase price allocation for StoHaas Marl as of the acquisition date T52

in € million	Fair value recognized: As stated in the consolidated financial statements as of Dec. 31, 2017	Change in purchase price allocation	After change in purchase price allocation
Property, plant and equipment	135	–4	131
Non-current assets	**135**	**–4**	**131**
Inventories	1	–	1
Trade accounts receivable	19	–	19
Cash and cash equivalents	68	–	68
Current assets	**88**	**–**	**88**
Total assets	**223**	**–4**	**219**
Deferred taxes	35	–1	34
Non-current liabilities	**35**	**–1**	**34**
Financial liabilities	20	–	20
Trade accounts payable	60	–	60
Current liabilities	**80**	**–**	**80**
Total liabilities	**115**	**–1**	**114**
Net assets	**108**	**–3**	**105**
Goodwill	56	1	57
Purchase price pursuant to IFRS 3	**164**	**–2**	**162**

Finalization of the revaluation of the shares in ROH Delaware LLC, Deer Park (Texas, USA) and ROH Delaware LP, Deer Park (Texas, USA) divested as part of the transaction, which are included in the purchase price, reduced the purchase price by €2 million.

Between provisional first-time recognition and the final status of the opening balance sheet (valuation period), the fair value of property, plant and equipment declined by €4 million as a result of new information on plant and machinery. Deferred tax liabilities declined by €1 million. Goodwill increased by €1 million as a result of adjustment of the purchase price allocation.

Divestment of Evonik Jayhawk Fine Chemicals Corporation

In an agreement dated August 30, 2018, Evonik sold its 100 percent stake in Evonik Jayhawk Fine Chemicals Corporation (Evonik Jayhawk), Carson City (Nevada, USA), to Kansas HoldCo 1, Inc. (Permira Advisers LLC), New York (New York, USA). The purchase price was in the high double-digit million euro range and the full amount received impacted the cash flow. The transaction was closed on November 1, 2018. The company was part of the Performance Materials segment and was classified as held for sale in accordance with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations in the period from signature of the agreement to closing of the transaction; see note 4.3. The divestment impacted the balance sheet as follows as of the date of deconsolidation:

Impact of the divestment of Evonik Jayhawk on the balance sheet T53

in € million	
Non-current assets	57
Current assets	20
thereof cash and cash equivalents	–
Total assets	**77**
Non-current liabilities	11
Current liabilities	6
Total liabilities	**17**
Net assets	**60**

Result from the deconsolidation of subsidiaries

The result from deconsolidation was –€6 million. It is recognized in other operating expense and contained in the adjustments. In 2017, the dissolution of the StoHaas joint operation resulted in income of €75 million, which was recognized in other operating income and contained in the adjustments.

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 a 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 T54

in € million	2018	2017
Lithium ion business	3	–1
Former Energy business area	1	–1
Other discontinued operations	–2	2
	2	–

The income after taxes, discontinued operations relates to businesses sold in previous years.

On August 30, 2018, Evonik signed an agreement to divest Evonik Jayhawk. As a result, this company was classified as held for sale. The transaction was closed on November 1, 2018; see note 4.2. There were no assets or liabilities classified as held for sale on the balance sheet as of December 31, 2018 or in the previous year.

5. Notes to the income statement

5.1 Sales

The basic principles of revenue recognition are based on the five-step model defined in IFRS 15:

1. Identifying and combining contracts with the same customer

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. If a contract with a customer does not meet these criteria, it must be reassessed at regular intervals.

If several contracts are entered into with the same customer, these are combined for accounting purposes if they were 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.

2. Identifying performance obligations

Contracts with customers often comprise a number of different products and services, which have to be identified to assess whether they are distinct performance obligations. 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 free additional benefits, these normally also constitute a distinct performance obligation.

3. Determining the transaction price

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.

4. Allocating the transaction price to performance obligations

If there are several performance obligations, the transaction price 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. Price discounts are also allocated to each individual performance obligation on the basis of relative stand-alone selling prices.

For freight or storage 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 storage 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 is allocated to the free additional benefit.

5. Revenue recognition when the performance obligation is satisfied

The Evonik Group recognizes revenue from product deliveries at a point in time. This is 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 recognizes revenue for services over time. The level of revenue to be realized 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.

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. Billing for the goods takes place monthly with short payment terms (less than three months).

Contract assets from contracts with customers must be recognized if the timing of satisfaction of the performance obligation and thus of revenue recognition is before receipt of the payment. Contract liabilities from contracts with customers must be recognized if the timing of satisfaction of the performance obligation and thus of revenue recognition is after receipt of the payment.

Sales totaled €15,024 million (2017: €14,383 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 (e.g., 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 (e.g., contract manufacturing of certain chemical products).

The Services segment provides site management, utilities, waste management, technical, process technology, engineering, and logistics services for Evonik's chemical segments and external customers at our sites.

Further, the Nutrition & Care segment develops customer-specific formulations and products. 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, e.g., 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 includes 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 2018 T55

in € million	Nutrition & Care	Resource Efficiency	Performance Materials	Services	Other operations	Corporate, consolidation	**Total Group**
Western Europe	1,385	2,192	2,174	642	3	1	6,397
Eastern Europe	309	368	270	–	–	–	947
North America	1,381	1,274	723	30	1	–	3,409
Central & South America	370	171	81	1	1	–	624
Asia-Pacific North	576	1,222	466	2	10	–	2,276
Asia-Pacific South	408	375	153	–	–	–	936
Middle East & Africa	217	107	109	2	–	–	435
Total Group	**4,646**	**5,709**	**3,976**	**677**	**15**	**1**	**15,024**
thereof sales outside the scope of IFRS 15	23	26	14	9	4	–	76

Sales by segments and regions 2017 T56

in € million	Nutrition & Care	Resource Efficiency	Performance Materials	Services	Other operations	Corporate, consolidation	**Total Group**
Western Europe	1,340	2,101	2,094	682	2	–	6,219
Eastern Europe	266	319	252	–	–	–	837
North America	1,388	1,210	672	30	1	–	3,301
Central & South America	320	159	70	1	1	–	551
Asia-Pacific North	565	1,152	427	2	11	–	2,157
Asia-Pacific South	410	357	128	–	–	–	895
Middle East & Africa	218	95	108	2	–	–	423
Total Group	**4,507**	**5,393**	**3,751**	**717**	**15**	**–**	**14,383**
thereof sales outside the scope of IFRS 15	10	4	1	2	1	–	18

Prior-year figures restated.

Sales outside the scope of IFRS 15 comprise revenues from operating leases and the results of currency hedging of forecast sales in foreign currencies, which are included in hedge accounting.

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. In 2018, these sales amounted to €15 million (2017: €10 million). The breakdown is as follows:

Sales from performance obligations satisfied in previous periods T57

in € million	2018	2017
Rebate and bonus agreements	14	13
License agreements	1	1
	15	**14**

Firmly agreed performance obligations that had not been satisfied in full as of the reporting date are expected to result in revenue realization as follows:

Transaction prices of unsatisfied performance obligations T58

	Revenue realization in			
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

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.

Evonik made use of the practical expedients on initial application of IFRS 15, which permit disclosures for the current reporting date only. Further, Evonik applies the practical expedient set out in IFRS 15.121 and does not disclose the outstanding performance obligations for contracts with an expected term of no more than one year.

Further information on contract assets from contracts with customers can be found in note 6.7, while further information on contract liabilities from contracts with customers can be found in note 6.12.

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 €13,266 million in 2018 (2017: €12,790 million).

The function costs include impairment losses pursuant to IAS 36 Impairment of Assets totaling €1 million (2017: €12 million). Note 6.4 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

Other operating income T59

in € million	2018	2017
Income from the reversal of provisions	64	28
Income from non-core operations	59	63
Income from subsidies	15	22
Income from the disposal of assets	8	80
Net income from currency translation of operating monetary assets and liabilities[a]	5	–
Income from restructuring measures	4	15
thereof income from the reversal of provisions	3	14
thereof from reversals of impairment losses pursuant to IAS 39	–	1
Net income from impairment losses/ reversals of impairment losses pursuant to IFRS 9[a]	2	–
Net income from operational currency hedging[a]	–	14
Income from reversals of impairment losses pursuant to IAS 36	–	2
Income from reversals of impairment losses pursuant to IAS 39	–	3
Other income	81	84
	238	**311**
thereof adjustments	25	95

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 from non-core operations contains income from occasional, unplanned business activities that are not intended to be permanent operations.

The income from subsidiaries contains income for measures in connection with the change in German energy policy.

The income from the disposal of assets includes €8 million (2017: €5 million) from the sale of property, plant and equipment. In 2017, it included €75 million from revaluation and disposal effects in connection with the dissolution of the StoHaas joint operation.

The income from restructuring measures mainly comprises income in connection with the optimization of administrative structures and income relating to the optimization of the product portfolio in the Performance Materials segment. This item also includes income that by nature would otherwise be allocated to other line items in other operating income.

The net income from impairment losses/reversal of impairment losses for expected credit losses pursuant to IFRS 9 totaling €2 million (2017: none) relates entirely to trade accounts receivable.

In 2017, the income of €4 million from the reversal of impairment losses calculated in accordance with IAS 39 related entirely to trade accounts receivable.

Net income and expense for operational currency hedging results principally from the use of currency derivatives for portfolio hedging of trade accounts receivable and payable in foreign currencies; see note 9.2.5.

Unlike the previous year, the other operating income does not contain any income from reversals of impairment losses pursuant to IAS 36 (2017: €2 million). Note 6.4 contains details of segmentation and additional information on these reversals of impairment losses.

Other income includes insurance refunds, insurance premiums, and commission.

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.

The adjustments recognized in other operating income relate to the following functional areas:

Adjustments included in other operating income T60

in € million	2018	2017
Production-related	7	1
R&D-related	–	2
Administration-related	6	10
Not allocated to any functional area	12	82
	25	**95**

5.4 Other operating expense

Other operating expense T61

in € million	2018	2017
Expenses for restructuring measures	212	40
thereof impairment losses pursuant to IAS 36	6	2
thereof losses on the disposal of assets	6	1
Impairment losses pursuant to IAS 36	37	82
Net expenses for operational currency hedging	26	–
Losses on the disposal of assets	13	9
Expenses relating to the REACH Regulation	12	10
Expenses for recultivation and environmental protection	9	6
Impairment losses pursuant to IAS 39	–	39
Net expenses for currency translation of operating monetary assets and liabilities[a]	–	63
Other expense	328	440
	637	**689**
thereof adjustments	382	358

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 expenses for restructuring measures mainly contain expenses for reducing administrative and selling expenses and expenses in connection with the optimization of the product portfolio in the Performance Materials segment. In addition, this item contains expenses to enhance the efficiency of the oleochemical activities in the Nutrition & Care segment, and for the shutdown of a production site in Hungary. Further, this item includes expenses that by nature would otherwise be allocated to other line items in other operating expense.

Losses on the disposal of assets totaling €19 million (2017: €10 million) comprise €8 million (2017: €8 million) from the sale of property, plant and equipment and €3 million (2017: €2 million) from the sale of trade accounts receivable. In addition, it includes derecognition effects of €2 million in connection with the dissolution of the StoHaas joint operation and a further €6 million from the disposal of investments relating to optimization of the product portfolio in the Performance Materials segment.

Overall, other operating expense contains impairment losses pursuant to IAS 36 amounting to €43 million (2017: €84 million). Note 6.4 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.

The impairment losses of €39 million recognized in 2017 in accordance with IAS 39 related entirely to trade accounts receivable.

The other expense of €328 million (2017: €440 million) mainly comprises costs of €27 million in connection with the acquisition in 2017 of the specialty additives business of Air Products and Chemicals, Inc., Allentown (Pennsylvania, USA) and the Huber silica business (2017: €62 million), as well as the planned acquisition of PeroxyChem, Philadelphia (Pennsylvania, USA). In addition, it contains the costs of examining the options for the methacrylates business. Further, this item includes expenses for insurance deductibles, outsourcing, non-core businesses, commission payments, other taxes, and legal and consultancy fees.

The adjustments recognized in other operating expense relate to the following functional areas:

Adjustments included in other operating expense T62

in € million	2018	2017
Production-related	43	105
Sales-related	42	–
Administration-related	186	122
Not allocated to any functional area	111	131
	382	**358**

5.5 Financial result

Financial result T63

in € million	2018	2017
Income from securities and loans	5	5
Interest and similar income from derivatives	13	17
Other interest-type income	31	51
Interest income	**49**	**73**
Interest expense on financial liabilities	–51	–61
Interest and similar expenses for derivatives	–53	–63
Interest expense for other provisions[a]	–17	–22
Net interest expense for pensions	–70	–77
Other interest-type expense	–19	–20
Interest expense	**–210**	**–243**
Result from currency translation of financing-related assets and liabilities	–17	1
Income from financing-related currency hedging	15	–23
Miscellaneous financial income and expenses	–2	–11
Other financial income/expense	**–4**	**–33**
	–165	**–203**

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 2017, 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 €22 million relating to taxes (2017: €25 million) 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 (2017: €1 million) from the recognition of contract liabilities for significant financing components 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 9.2.5. In 2017, expenses of €9 million for currency hedging of the acquisition of the Huber silica business were included in other financial income/expense.

The miscellaneous financial income and expense includes a net profit of €1 million in respect of impaired financial assets. In 2017, this item contained expenses of €13 million calculated in accordance with the provisions of IAS 39.

Borrowing costs of €5 million (2017: €3 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 0.8 percent (2017: 0.8 percent).

5.6 Result from investments recognized at equity

Result from investments recognized at equity T64

in € million	2018	2017
Income from measurement at equity	11	13
Expenses for measurement at equity	–3	–3
	8	**10**
thereof adjustments	–	2

The prior-year figure contains the reversal of an impairment, which was recognized in the adjustments. Note 6.4 contains details of segmentation and additional information on the reversals of impairment losses determined in accordance with IAS 36.

5.7 Income taxes

Income taxes shown in the income statement T65

in € million	2018	2017
Other income taxes	**276**	**359**
thereof relating to other periods	−18	52
Deferred taxes	**−26**	**−67**
thereof relating to other periods	−22	−14
thereof relating to temporary differences	−17	−74
	250	**292**

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 T66

in € million	2018	2017
Income before income taxes, continuing operations	**1,202**	**1,022**
Expected income taxes	385	327
Variances due to differences in the assessment base for trade tax	5	5
Deviation from the expected tax rate	−55	−18
Changes in the valuation of deferred taxes	−43	−5
Losses not affecting deferred taxes and the use of loss carryforwards	−5	21
Changes in tax rates and tax legislation	–	−38
Non-deductible expenses	20	18
Interest ceiling	–	–
Tax-free income	−20	−48
Result from investments recognized at equity	–	−3
Other	−37	33
Effective income taxes (current income taxes and deferred taxes)	**250**	**292**
Effective income tax rate in %	20.8	28.6

Prior-year figures restated.

Changes in the valuation of deferred taxes relate exclusively to reversals of impairment losses and are mainly temporary differences. “Other” contains other income taxes and deferred taxes relating to different periods.

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 2018 or 2017, diluted earnings per share are identical to basic earnings per share.

Earnings per share T67

in € million	2018	2017
Income after taxes, continuing operations	952	730
Income after taxes, discontinued operations	2	–
Less income after taxes attributable to non-controlling interests	−22	−17
Income after taxes attributable to shareholders of Evonik Industries AG (net income)	**932**	**713**
Earnings per share in € (basic and diluted)		
from continuing operations	2.04	1.57
less earnings per share attributable to non-controlling interests	−0.04	−0.04
Earnings per share in € (basic and diluted) attributable to shareholders of Evonik Industries AG	**2.00**	**1.53**

Prior-year figures restated.

6. Notes to the balance sheet

6.1 Intangible assets

Change in intangible assets T68

in € million	Goodwill	Franchises, trademarks, and licenses	Capitalized development costs	Other intangible assets	Total
Cost of acquisition/production					
As of January 1, 2017	**2,929**	**1,744**	**165**	**543**	**5,381**
Currency translation	−298	−12	–	−75	−385
Additions from business combinations	2,133	342	–	806	3,281
Other additions	–	15	–	20	35
Disposal	−25	−40	−1	–	−66
Reclassification	–	36	–	−28	8
As of December 31, 2017	**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**
Amortization and impairment losses					
As of January 1, 2017	**97**	**1,341**	**162**	**469**	**2,069**
Currency translation	–	−8	–	−3	−11
Amortization	–	77	–	46	123
Impairment losses	–	4	1	–	5
Reclassification in accordance with IFRS 5	–	–	–	–	–
Disposal	–	−38	–	–	−38
Reclassification	–	4	–	−3	1
As of December 31, 2017	**97**	**1,380**	**163**	**509**	**2,149**
Currency translation	–	2	–	3	5
Amortization	–	80	–	53	133
Impairment losses	–	13	–	–	13
Reversals of impairment losses	–	–	–	–	–
Reclassification in accordance with IFRS 5	–	–	–	–	–
Disposal	–	−11	–	–	−11
Reclassification	–	–	–	–	–
As of December 31, 2018	**97**	**1,464**	**163**	**565**	**2,289**
Carrying amounts as of December 31, 2017	**4,642**	**705**	**1**	**757**	**6,105**
Carrying amounts as of December 31, 2018	**4,748**	**662**	**1**	**723**	**6,134**

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 alters 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 is 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 5 and 20 years. Amortization also takes account of the probability of continuance of the customer relationship in the form of a churn rate.

Franchises, trademarks, and licenses include trademarks with an indefinite useful life totaling €203 million (Dec. 31, 2017: €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, which 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 T69

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, 2017	**3,471**	**13,185**	**1,064**	**842**	**18,562**
Currency translation	–124	–467	–16	–48	–655
Additions from business combinations	117	446	14	37	614
Other additions	54	207	46	736	1,043
Disposal	–17	–342	–51	–10	–420
Reclassification	59	428	20	–509	–2
As of December 31, 2017	**3,560**	**13,457**	**1,077**	**1,048**	**19,142**
Currency translation	38	100	3	19	160
Additions from business combinations	–	–	–	–	–
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**
Depreciation and impairment losses					
As of January 1, 2017	**1,731**	**9,876**	**864**	**50**	**12,521**
Currency translation	–48	–298	–11	–	–357
Depreciation	83	555	68	–	706
Impairment losses	18	68	1	4	91
Reversals of impairment losses	–2	–	–	–	–2
Reclassification in accordance with IFRS 5	–	–	–	–	–
Disposal	–16	–250	–48	–1	–315
Reclassification	–	4	–1	–	3
As of December 31, 2017	**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
Reversals of impairment losses	–	–	–	–	–
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**
Carrying amounts as of December 31, 2017	**1,794**	**3,502**	**204**	**995**	**6,495**
Carrying amounts as of December 31, 2018	**1,853**	**3,542**	**192**	**1,198**	**6,785**

The carrying amount of property, plant and equipment, which is used as collateral for liabilities of Evonik, is €22 million (Dec. 31, 2017: none).

A lease comprises an agreement that transfers the right to use an asset for a certain period in return for one or more payments. The Evonik Group is mainly party to operating leases—as either lessor or lessee.

As a lessor, Evonik mainly leases out land under operating leases. The nominal values of expected future minimum lease payments for these assets over the non-cancelable term of the lease are due as follows:

Maturity structure of future minimum lease payments (lessor; operating leases) **T70**

in € million	2018	2017
Due within 1 year	5	7
Due in more than 1 and up to 5 years	18	19
Due in more than 5 years	144	144
	167	**170**

6.3 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 **T71**

in € million	Dec. 31, 2018	Dec. 31, 2017
Carrying amount of individually non-material associates	8	8
Carrying amount of individually non-material joint ventures	38	39
	46	**47**

The condensed financial data for the investments recognized at equity that 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 **T72**

	Associates		Joint ventures	
in € million	2018	2017	2018	2017
Income after taxes, continuing operations	6	7	2	3
Total comprehensive income	**6**	**7**	**2**	**3**

For information on contingent liabilities to associates and joint ventures, see note 9.3.

6.4 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, 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 of disposal 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.

For impairment testing of other intangible assets, property, plant and equipment, the recoverable amount is normally determined by calculating the value in use of the CGU/group of CGUs.

Parameters used in impairment testing and allocation of goodwill by segment T73

	WACC after taxes (in %)		Terminal growth rate (in %)		Goodwill (in € million)	
	2018	2017	**2018**	2017	**Dec. 31, 2018**	Dec. 31, 2017
Nutrition & Care	7.17	6.94	1.50	1.50	2,040	1,981
Resource Efficiency	7.33	7.27	1.50	1.50	2,160	2,118
Performance Materials	7.30	7.81	1.50	1.50	486	482
Services	7.28	7.32	1.50	1.50	62	61

The carrying amounts of goodwill are normally recognized directly in the segments. The goodwill relating to former acquisitions of shares in Evonik Degussa GmbH (Evonik Degussa), 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.

In 2017, the reversals of impairment losses pursuant to IAS 36 comprised €2 million for property, plant and equipment, and €2 million for investments recognized at equity. In 2017, the impairment losses pursuant to IAS 36 comprised €13 million (2017: €5 million) on intangible assets, €24 million (2017: €91 million) on property, plant and equipment, and €7 million (2017: none) on other assets. The impairment losses and reversals of impairment losses relate to the following segments:

Impairment losses and reversals of impairment losses by segment T74

	Reversals of impairment losses		Impairment losses	
in € million	**2018**	2017	**2018**	2017
Nutrition & Care	–	2	16	31
Resource Efficiency	–	1	16	53
Performance Materials	–	–	4	11
Services	–	1	8	1
	–	**4**	**44**	**96**

Prior-year figures restated.

The reversals of impairment losses in the Nutrition & Care segment in 2017 comprised a €2 million reversal of an impairment loss on an investment recognized at equity.

The impairment losses in the Nutrition & Care segment mainly related to a production facility in southern Europe, which was partially impaired. In addition, impairment losses were recognized on both property, plant and equipment, and intangible assets in connection with discontinued research and development projects.

In the Resource Efficiency segment, this mainly applies to the complete write-down of an intangible asset because a research and development project is no longer being pursued.

All impairment losses involved a reduction in the value in use.

The impairment loss in the Services segment mainly relates to the complete write-down of an advance payment.

The impairment test on trademarks with an indefinite useful life was 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 **T75**

in € million	Dec. 31, 2018	Dec. 31, 2017
Nutrition & Care	45	45
Resource Efficiency	130	130
Performance Materials	28	28
	203	**203**

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 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.

6.5 Financial assets

Financial assets **T76**

	Dec. 31, 2018		Dec. 31, 2017		Jan. 1, 2017	
in € million	Total	thereof non-current	Total	thereof non-current	Total	thereof non-current
Trade accounts receivable	**1,686**	**–**	**1,755**	**–**	**1,643**	**–**
Cash and cash equivalents	**988**	**–**	**1,004**	**–**	**4,623**	**–**
Other investments	149	149	126	126	110	110
Loans	63	7	59	43	72	69
Securities and similar claims	24	16	9	1	12	1
Receivables from derivatives	118	58	247	152	299	30
Miscellaneous other financial assets	19	3	52	5	37	3
Other financial assets	**373**	**233**	**493**	**327**	**530**	**213**
	3,047	**233**	**3,252**	**327**	**6,796**	**213**

Prior-year figures restated.

(a) Other investments

The other investments are all designated at fair value through other comprehensive income, without reclassification. Other investments include shares in Borussia Dortmund GmbH & Co. KGaA, Dortmund (Germany) totaling €108 million (Dec. 31, 2017: €83 million), which are recognized at their stock market value as of the reporting date. Further, a total of €41 million (Dec. 31, 2017: €43 million) relates to a mid-double-digit number of non-listed equity instruments whose individual fair values are immaterial, ranging from zero to €4 million. €28 million of this amount comprises equity investments resulting from venture capital activities.

(b) Securities and similar claims

Securities and similar claims comprise listed bonds and money market paper purchased to invest liquid funds, and shares in unlisted investment funds in which Evonik has a long-term strategic investment.

(c) Receivables from derivatives

Receivables from derivatives T77

in € million	Dec. 31, 2018	Dec. 31, 2017
Receivables from interest rate swaps	1	–
Receivables from cross-currency interest rate swaps	101	150
Receivables from forward exchange contracts, currency options, and currency swaps	16	95
Receivables from commodity derivatives	–	2
	118	**247**

(d) Miscellaneous other financial assets

The miscellaneous other financial assets of €19 million (Dec. 31, 2017: €52 million; Jan. 1, 2017: €37 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 €6 million (Dec. 31, 2017: €14 million; Jan. 1, 2017: €5 million) from finance leases.

Further, in 2017 financial assets from exchange-type transactions with competitors totaling €6 million were recognized here. Exchange-type transactions with competitors are outside the scope of IFRS 15. The underlying products are recognized as rights or obligations to return inventories and the transaction is classified as financing.

6.6 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.

Rights to return inventories result from exchange-type transactions with competitors, which are outside the scope of IFRS 15.

Impairment losses on raw materials, supplies, and merchandise totaling €52 million were recognized in 2018 (2017: €32 million), while reversals of impairment losses amounted to €27 million (2017: €21 million). Reversals of impairment losses were mainly due to higher selling prices and improved market conditions.

Inventories T78

in € million	Dec. 31, 2018	Dec. 31, 2017	Jan. 1, 2017
Raw materials and supplies	483	466	423
Work in progress	73	82	68
Finished goods and merchandise	1,746	1,490	1,199
Rights to return inventories	2	–	–
	2,304	**2,038**	**1,690**

Prior-year figures restated.

6.7 Other assets

Other assets T79

in € million	Dec. 31, 2018 Total	Dec. 31, 2018 thereof non-current	Dec. 31, 2017 Total	Dec. 31, 2017 thereof non-current	Jan. 1, 2017 Total	Jan. 1, 2017 thereof non-current
Net defined benefit assets from overfunded pension plans[a]	–	–	232	232	–	–
Advance payments made	25	–	33	–	37	–
Deferred expenses	47	10	45	9	42	10
Contract assets from contracts with customers	11	6	5	3	2	–
Miscellaneous other assets	268	40	294	52	279	48
	351	**56**	**609**	**296**	**360**	**58**

Prior-year figures restated.

[a] See note 6.9.

(a) Contract assets from contracts with customers

Contract assets from contracts with customers arise, on the one hand, from license agreements based on milestones, where a customer is granted a right of use, and on the other hand, from agreements to develop products, which are realized over time. The contract assets are reclassified to receivables as soon as the associated rights become unconditional. Information on loss allowances is presented in note 9.2.5.

The following material changes in contract assets from contracts with customers occurred in the reporting period:

Development of contract assets from contracts with customers T80

in € million	2018	2017
As of January 1	**5**	**2**
Additions	9	3
Reclassification to receivables	−3	–
As of December 31	**11**	**5**

(b) Miscellaneous other assets

Miscellaneous other assets mainly comprise receivables from other taxes, receivables from governments, and receivables from insurance policies.

6.8 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.

(a) Issued capital

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.

(b) Authorized capital

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 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.

(c) Conditional capital

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.

(d) Treasury shares

On March 6, 2018, 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 €139.5 million by April 6, 2018 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 members of the management of subordinated affiliated companies of Evonik Industries AG.

Through this share buyback program, by April 4, 2018 Evonik Industries AG purchased a total of 594,663 shares in the company (corresponding to 0.1 percent or €594,663 of the capital stock). A total of €16.9 million was spent on the shares, corresponding to an average price of €28.44 per share. The purchases were made from March 8, 2018 at an average daily volume of around 33,000 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 and May, 566,447 ordinary shares (including 146,131 bonus shares) were transferred to participating employees on the basis of the share price and the exchange rate for the US dollar, Singapore dollar, and Chinese renminbi yuan prevailing on April 5, 2018. The remaining 28,216 ordinary shares were sold to third parties via the stock exchange by April 11, 2018. As of December 31, 2018, Evonik Industries AG therefore no longer held any treasury shares.

(e) Capital reserve

The capital reserve mainly contains other payments received from shareholders pursuant to section 272 paragraph 2 no. 4 of the German Commercial Code (HGB).

(f) Retained earnings including distributable profit

Retained earnings including distributable profit amounted to €6,237 million (Dec. 31, 2017: €6,012 million) and comprises Group earnings from 2018 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 the entire distributable profit of Evonik Industries AG of €535,900,000.00 for 2018 should be used to pay a dividend. That corresponds to a dividend of €1.15 per no-par share.

(g) Other equity components

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 available-for-sale securities contain remeasurement amounts resulting from changes in the value of financial instruments that are expected to be temporary and are therefore recognized outside of profit or loss in accordance with IAS 39. 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 in accordance with IFRS 9. The other equity components from financial instruments in hedging relationships pursuant to IAS 39 and from hedging instruments for designated risk components pursuant to IFRS 9 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 hedging costs pursuant to IFRS 9 reflect changes in the time value of options and the interest spread (forward components) and foreign currency basis spreads on forward currency transactions and currency swaps. The hedging costs relate 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. The changes pursuant to IAS 8 relate exclusively to the transition to IFRS 9; see note 3.4.

Change in other equity components attributable to shareholders of Evonik Industries AG **T81**

in € million	Available-for-sale securities (IAS 39)	Financial instruments in hedging relationships (IAS 39)	Equity instruments recognized at fair value in OCI (IFRS 9)	Hedging instruments: designated risk components (IFRS 9)	Hedging instruments: cost of hedging (IFRS 9)	Revaluation of acquisitions made in stages	Currency translation	**Total**
As of January 1, 2017	**21**	**61**	**–**	**–**	**–**	**10**	**218**	**310**
Other comprehensive income as in the statement of comprehensive income	**17**	**11**	**–**	**–**	**–**	**–**	**–549**	**–521**
Recognized gains and losses	11	175	–	–	–5	–	–	191
Amounts reclassified to the income statement	–	–55	–	–	5	–	–	–50
Amounts reclassified to assets and liabilities	–	–86	–	–	–	–	–	–86
Currency translation	–	–	–	–	–	–	–549	–549
From investments recognized at equity (after income taxes)	–	–	–	–	–	–	–	–
Deferred taxes	6	–23	–	–	–	–	–	–17
Other changes	**–**	**–**	**–**	**–**	**–**	**–3**	**–**	**–3**
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
Amounts reclassified to assets and liabilities	–	–	–	–	–	–	–	–
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**

Prior-year figures restated.

In 2018, €58 million was reclassified from other equity components for designated risk components and for hedging costs to the income statement in accordance with IFRS 9 (2017: €50 million from other equity components for financial instruments in hedging relationships pursuant to IAS 39 and IFRS 9; see note 3.4):

Reclassification of hedging results from other equity components to the income statement T82

in € million	2018	2017
Sales	62	13
Cost of sales	1	–
Other operating income/expense	−2	–
Net interest expense	−2	−3
Other financial income/expense	−5	40
	58	**50**

Prior-year figures restated.

For further information on changes in the other equity components from hedging instruments for designated risk components and for hedging costs in accordance with IFRS 9 and their allocation among the various risk types, see note 9.2.4.

(h) Non-controlling interests

Non-controlling interests amounting to €96 million (Dec. 31, 2017: €88 million) comprise shares in the issued capital and reserves of consolidated subsidiaries that are not attributable to the shareholders of Evonik Industries AG.

Changes in shareholdings in subsidiaries without loss of control were negligible in 2018, as in the previous year.

Change in other equity components attributable to non-controlling interests T83

in € million	Currency translation	Total
As of January 1, 2017	**4**	**4**
Other comprehensive income as in the statement of comprehensive income	**−5**	**−5**
Other comprehensive income from currency translation	−5	−5
As of December 31, 2017	**−1**	**−1**
Other comprehensive income as in the statement of comprehensive income	**–**	**–**
Other comprehensive income from currency translation	–	–
As of December 31, 2018	**−1**	**−1**

6.9 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 during a year 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 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, 2018 mainly relate to the following countries:

Breakdown of the present value of the defined benefit obligation and the fair value of plan assets T84

in € million	Defined benefit obligation 2018	Plan assets 2018
Evonik total	**11,669**	**8,037**
thereof Germany	10,417	6,938
thereof pension fund/reinsured support fund	4,843	3,474
thereof funded through CTA	5,239	3,464
thereof USA	606	395
thereof UK	479	576

in € million	Defined benefit obligation 2017	Plan assets 2017
Evonik total	**11,563**	**8,087**
thereof Germany	10,224	6,906
thereof pension fund/reinsured support fund	4,649	3,426
thereof funded through CTA	5,224	3,479
thereof USA	663	441
thereof UK	509	615

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 Degussa 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, they 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. Minimum funding levels have to be observed. To avoid volatility this is supported by an asset-liability matching strategy. 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:**

In the UK, plans are organized through external trusts and the majority of the assets are invested in funds. The majority of the obligations relate to vested benefits for former employees and retirees. 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 **T85**

	Evonik Group		Germany	
in %	**2018**	2017	**2018**	2017
Discount rate as of December 31	2.15	2.12	2.00	2.00
Future salary increases	2.55	2.56	2.50	2.50
Future pension increases	1.58	1.58	1.50	1.50
Healthcare cost trend	6.27	6.52	–	–

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 is 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.

Analogous methods are used in the UK and the USA. As of December 31, 2018, the rounded discount rate was 4.26 percent for the USA (Dec. 31, 2017: 3.61 percent) and 2.75 percent for the UK (Dec. 31, 2017: 2.56 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 S1PXA tables are used and for the USA the MP-2018 mortality projection scales are used.

Change in the present value of the defined benefit obligation T86

in € million	2018	2017
Present value of the defined benefit obligation as of January 1	**11,563**	**11,585**
Current service cost	185	200
Interest cost	240	243
Employee contributions	43	43
Actuarial gains (–) and losses (+) (remeasurement component)	61	64
of which based on financial assumptions	–66	25
of which based on demographic assumptions	92	–12
of which changes in the past fiscal year	35	51
Benefits paid	–456	–462
Past service cost	2	–5
Changes at the companies	6	10
Reclassification in accordance with IFRS 5	–	–
Gain/loss from settlement	–	–
Payments for settlement of plans	–	–
Currency translation	25	–115
Present value of the defined benefit obligation as of December 31	**11,669**	**11,563**

The weighted term of the obligations is 16.9 years (2017: 17.0 years).

Breakdown of the present value of the defined benefit obligation T87

in € million	2018	2017
Unfunded plans	364	384
Partially or fully funded plans	11,205	11,071
Healthcare benefit obligations	100	108
Present value of the defined benefit obligation as of December 31	**11,669**	**11,563**

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 T88

	Reduction of 1 percentage point		Increase of 1 percentage point	
in € million	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
Group-wide discount rate	2,218	2,208	–1,696	–1,687
Future salary increases	–146	–159	157	169
Future pension increases	–906	–899	1,087	1,078
Healthcare cost trend	–9	–11	11	13

Assuming all other parameters remain unchanged, a reduction of 20 percent in mortality in the retirement phase would increase the defined benefit obligation by €861 million (2017: €862 million).

Change in the fair value of plan assets T89

in € million	2018	2017
Fair value of plan assets as of January 1	**8,087**	**7,807**
Interest income from plan assets	173	168
Employer contributions	213	209
Employee contributions	11	11
Income from assets excluding interest income from plan assets (remeasurement component)	−250	202
Other administrative expense	−5	−6
Benefits paid	−206	−210
Payments for settlement of plans	–	–
Changes at the companies	–	−9
Currency translation	14	−85
Fair value of plan assets as of December 31	**8,037**	**8,087**

Breakdown of the fair value of plan assets T90

	Dec. 31, 2018		Dec. 31, 2017	
	in € million	in %	in € million	in %
Cash/balances with banks	209	2.6	243	3.0
Shares—active market	755	9.4	784	9.7
Shares—no active market	–	–	–	–
Government bonds—active market	1,045	13.0	1,148	14.2
Government bonds—no active market	24	0.3	40	0.5
Corporate bonds—active market	2,363	29.4	2,273	28.1
Corporate bonds—no active market	603	7.5	631	7.8
Other bonds—active market	338	4.2	429	5.3
Other bonds—no active market	–	–	–	–
Real estate (direct and indirect investments)—active market	16	0.2	16	0.2
Real estate (direct and indirect investments)—no active market	1,712	21.3	1,577	19.5
Other investment funds—active market	–	–	–	–
Other investment funds—no active market	–	–	–	–
Alternative investments (infrastructure/hedge funds/commodities)—active market	587	7.3	736	9.1
Alternative investments (infrastructure/hedge funds/commodities)—no active market	273	3.4	97	1.2
Other—active market	32	0.4	32	0.4
Other—no active market	80	1.0	81	1.0
	8,037	**100.0**	**8,087**	**100.0**

In 2018, as in 2017, none of the other assets were used by the company.

Change in the asset ceiling T91

in € million	2018	2017
Asset ceiling as of January 1	**109**	**74**
Interest expense on the unrecognized portion of plan assets	3	2
Changes in asset ceiling, excluding interest expense (remeasurement component)	−11	36
Changes at the companies	–	–
Currency translation	−1	−3
Asset ceiling as of December 31	**100**	**109**

Change in the net defined benefit liability T92

in € million	Dec. 31, 2018	Dec. 31, 2017
Net defined benefit liability as of January 1	**3,585**	**3,852**
Current service cost	185	200
Past service cost	2	−5
Gain/loss from settlement	–	–
Net interest cost	70	77
Employee contributions	32	32
Other administrative expense	5	6
Changes recognized in OCI (remeasurement)	300	−102
Benefits paid	−250	−252
Employer contributions	−213	−209
Changes at the companies	6	19
Reclassification in accordance with IFRS 5	–	–
Currency translation	10	−33
Net defined benefit liability as of December 31	**3,732**	**3,585**
Assets from overfunded plans as of December 31	**–**	**232**
Pension provisions as of December 31	**3,732**	**3,817**

The pension provisions recognized on the balance sheet included healthcare benefit entitlements, mainly of retirees of US subsidiaries.

The recognition of assets from overfunded plans in 2017 resulted from a pension plan where the sponsoring company is entitled to the surplus assets, so they cannot be set off against the pension provisions of other plans. Recognition of such assets was not necessary in 2018.

Expected change in benefit payments T93

in € million	Reporting period	Prior year
2018		248
2019	247	255
2020	258	258
2021	263	265
2022	268	268
2023	274	

Employer contributions of €216 million are expected to be incurred for the following year (2017: €208 million).

The net interest cost is included in the financial result; see note 5.6. The other amounts are allocated to the functional areas as personnel expense (pension expenses). A breakdown of overall personnel expense is given in note 10.2.

For details of the deferred tax assets relating to pension provisions, see note 6.13, deferred taxes, other income taxes.

Foreign subsidiaries paid a total of €34 million (2017: €34 million) into defined contribution plans, which are also included in personnel expense (pension expenses).

Further, €151 million (2017: €144 million) was 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).

6.10 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 T94

in € million	Dec. 31, 2018 Total	Dec. 31, 2018 thereof non-current	Dec. 31, 2017 Total	Dec. 31, 2017 thereof non-current	Jan. 1, 2017 Total	Jan. 1, 2017 thereof non-current
Personnel-related	932	304	906	343	913	367
Recultivation and environmental protection	299	246	310	250	329	257
Restructuring	241	160	86	37	138	55
Sales and procurement	44	8	49	9	48	11
Other taxes and interest on taxes	49	37	40	33	35	24
Other obligations	337	100	365	116	323	103
	1,902	**855**	**1,756**	**788**	**1,786**	**817**

Prior-year figures restated.

Overall, the other provisions were €146 million higher than in 2017, principally as a result of the development of restructuring and personnel-related provisions. It is expected that slightly more than half of total provisions will be utilized in 2019.

Provisions relating to relevant legal risks amounted to €106 million (Dec. 31, 2017: €136 million; Jan. 1, 2017: €121 million) and are allocated to the various categories of provisions on the basis of their type. In 2018 and 2017, 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, status of the legal proceedings, the opinion of lawyers, experience of comparable cases, and probability assumptions. The relevant legal risks for which provisions have been set up relate to two ongoing appraisal proceedings in connection with the squeeze-out of former shareholders and a claim for indemnification from environmental guarantees filed by the purchaser of the former carbon black business. 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 of the combined management report.

Change in other provisions T95

in € million	Personnel-related	Recultivation, environmental protection	Restructuring	Sales, procurement	Other taxes, interest on taxes	Other obligations	Total
As of January 1, 2018	**906**	**310**	**86**	**49**	**40**	**365**	**1,756**
Additions	519	28	172	19	25	105	868
Utilization	–470	–33	–13	–3	–	–87	–606
Reversal	–29	–11	–4	–21	–16	–48	–129
Unwinding of discounting/interest rate changes	7	4	–	–	–	1	12
Reclassification in accordance with IFRS 5	–1	–	–	–	–	–	–1
Other	–	1	–	–	–	1	2
As of December 31, 2018	**932**	**299**	**241**	**44**	**49**	**337**	**1,902**

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 one third of non-current personnel-related provisions will result in payments after the end of 2023.

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 less than three quarters of the non-current provisions will result in payments after the end of 2023.

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 additions to these provisions were the principal reason for the increase in provisions for restructuring in the reporting period. The non-current portion of all restructuring provisions will be utilized by the end of 2023.

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. Under IFRS 15, the provisions for rebate and bonus agreements previously recognized here are included in other financial liabilities as refund liabilities. The non-current portion will be utilized by the end of 2023.

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 2023.

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 and European emissions trading. The non-current portion of provisions for other obligations will mainly be utilized by year-end 2023.

6.11 Financial liabilities

Financial liabilities **T96**

	Dec. 31, 2018		Dec. 31, 2017		Jan. 1, 2017	
in € million	**Total**	thereof non-current	**Total**	thereof non-current	**Total**	thereof non-current
Trade accounts payable	**1,493**	**–**	**1,449**	**–**	**1,212**	**–**
Bonds	3,632	3,632	3,624	3,624	3,127	3,127
Liabilities to banks	214	52	350	70	375	103
Loans from non-banks	18	–	18	–	16	–
Liabilities from derivatives	107	5	32	12	188	94
Refund liabilities	61	–	67	–	66	–
Miscellaneous other financial liabilities	52	–	53	–	29	10
Other financial liabilities	**4,084**	**3,689**	**4,144**	**3,706**	**3,801**	**3,334**
	5,577	**3,689**	**5,593**	**3,706**	**5,013**	**3,334**

Prior-year figures restated.

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 of the combined management report.

Financial debt T97

in € million	Bonds	Liabilities to banks	Loans from non-banks	Miscellaneous other financial liabilities[a]	Total
As of December 31, 2016	**3,127**	**375**	**16**	**29**	**3,547**
Addition and repayment of financial liabilities	495	−6	–	10	499
Changes in the scope of consolidation	–	3	–	–	3
Changes in exchange rates	–	−23	–	−1	−24
Other	2	1	2	15	20
As of December 31, 2017	**3,624**	**350**	**18**	**53**	**4,045**
Addition and repayment of financial liabilities	–	−128	–	−6	−134
Changes in the scope of consolidation	–	−1	–	–	−1
Changes in exchange rates	–	−8	–	–	−8
Other	8	1	–	2	11
As of December 31, 2018	**3,632**	**214**	**18**	**49**	**3,913**

[a] Excluding financial liabilities from exchange-type transactions with competitors.

(a) Bonds

Bonds T98

in € million	Interest coupon in %	Nominal value	Carrying amount Dec. 31, 2018	Carrying amount Dec. 31, 2017	Stock market value Dec. 31, 2018	Stock market value Dec. 31, 2017
Evonik Industries AG						
Fixed-interest bond 2013/2020	1.875	500	499	498	511	521
Fixed-interest bond 2015/2023	1.000	750	747	746	761	771
Hybrid bond 2017/2077[a]	2.125	500	496	495	481	513
Evonik Finance B.V.						
Fixed-interest bond 2016/2021	0.000	650	649	646	646	645
Fixed-interest bond 2016/2024	0.375	750	746	745	720	727
Fixed-interest bond 2016/2028	0.750	500	495	494	452	468
		3,650	**3,632**	**3,624**	**3,571**	**3,645**

[a] The formal tenor of the bond is 60 years, but Evonik has a first redemption right in 2022.

(b) Loans from non-banks

The accrual of €18 million (Dec. 31, 2017: €18 million) for payment of the coupon on the bonds is recognized in current loans from non-banks.

(c) Liabilities from derivatives

Liabilities from derivatives T99

in € million	Dec. 31, 2018	Dec. 31, 2017
Liabilities from interest rate swaps	–	2
Liabilities from cross-currency interest rate swaps	22	11
Liabilities from forward exchange contracts and currency swaps	84	17
Liabilities from commodity derivatives	1	2
	107	**32**

(d) Refund liabilities
The refund liabilities show the liabilities under rebate and bonus agreements arising from contracts with customers.

(e) Miscellaneous other financial liabilities
The miscellaneous other financial liabilities contain financial liabilities of €3 million (Dec. 31, 2017: none; Jan. 1, 2017: none) from exchange-type transactions with competitors. Exchange-type transactions with competitors are outside the scope of IFRS 15.

6.12 Other payables

Other payables **T100**

	Dec. 31, 2018		Dec. 31, 2017		Jan. 1, 2017	
in € million	Total	thereof non-current	Total	thereof non-current	Total	thereof non-current
Obligations to return inventories	–	–	6	–	–	–
Contract liabilities from contracts with customers	89	40	82	45	73	37
Deferred income	11	3	9	6	98	8
Miscellaneous other payables	302	4	342	6	366	27
	402	**47**	**439**	**57**	**537**	**72**

Prior-year figures restated.

(a) Obligations to return inventories
Obligations to return inventories result from exchange-type transactions with competitors, which are outside the scope of IFRS 15.

(b) Contract liabilities from contracts with customers
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.

The following material changes in contract liabilities from contracts with customers occurred in the reporting period:

Development of contract liabilities **T101**

in € million	2018	2017
As of January 1	**82**	**73**
Currency translation	2	−5
Additions	47	41
Reclassification	1	−1
Reclassification in accordance with IFRS 5	−5	–
Refunds	−1	−1
Revenue recognition	−37	−25
As of December 31	**89**	**82**

Revenue recognition relating to contract liabilities from contracts with customers totaling €37 million (2017: €25 million) includes contract liabilities of €24 million (2017: €11 million) recognized in prior years and contract liabilities of €13 million (2017: €14 million) recognized in 2018.

(c) Miscellaneous other payables
The miscellaneous other payables mainly comprise liabilities for other taxes, liabilities to the public sector, and liabilities from insurance contracts.

6.13 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.

Deferred taxes and other income taxes reported on the balance sheet T102

	Dec. 31, 2018		Dec. 31, 2017		Jan. 1, 2017	
in € million	**Total**	thereof non-current	**Total**	thereof non-current	**Total**	thereof non-current
Deferred tax assets	1,419	1,283	1,226	1,133	1,163	1,006
Other income tax assets	196	16	168	14	236	8
Deferred tax liabilities	557	487	541	419	452	407
Other income tax liabilities	287	223	275	225	256	173

Prior-year figures restated.

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 T103

	Deferred tax assets			Deferred tax liabilities		
in € million	Dec. 31, 2018	Dec. 31, 2017	Jan. 1, 2017	Dec. 31, 2018	Dec. 31, 2017	Jan. 1, 2017
Assets						
Intangible assets	6	3	3	207	247	127
Property, plant and equipment	63	38	45	382	284	415
Financial assets	1,009	932	654	78	76	174
Inventories	64	60	59	–	–	–
Other assets	43	38	244	40	107	23
Liabilities						
Provisions	1,383	1,220	1,196	1,017	887	908
Payables	98	68	204	85	62	56
Special tax allowance reserves (based on local law)	–	–	–	38	38	28
Loss carryforwards	30	25	35	–	–	–
Tax credits	6	3	1	–	–	–
Other	9	–	1	2	1	–
Deferred taxes (gross)	**2,711**	**2,387**	**2,442**	**1,849**	**1,702**	**1,731**
Netting	–1,292	–1,161	–1,279	–1,292	–1,161	–1,279
Deferred taxes (net)	**1,419**	**1,226**	**1,163**	**557**	**541**	**452**

€1,150 million of the deferred tax assets (Dec. 31, 2017: €1,042 million; Jan. 1, 2017: €1,013 million) relate to the pension provisions recognized on the balance sheet.

No deferred tax assets were recognized on temporary differences of €92 million (Dec. 31, 2017: €341 million; Jan. 1, 2017: €357 million) because it is not probable that there will be sufficient future taxable income to enable them to be realized.

The total taxable temporary differences relating to shares in subsidiaries for which no deferred taxes were recognized amounted to €1,714 million (Dec. 31, 2017: €1,337 million; Jan. 1, 2017: €1,872 million). €1,634 million (Dec. 31, 2017: €1,246 million; Jan. 1, 2017: €1,789 million) of this amount is only subject to a tax rate of around 1.6 percent, based on section 8b of the German Corporation Tax Act (KStG). Evonik is in a position to manage the timing of the reversal of temporary differences.

Deferred tax assets of €89 million (Dec. 31, 2017: €53 million; Jan. 1, 2017: €16 million) were recognized for companies that made a loss. Utilization will be ensured by suitable measures.

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 T104

	Corporation taxes (German and foreign)		Local taxes (German and foreign)		Tax credits (foreign)	
in € million	2018	2017	2018	2017	2018	2017
Up to 1 year	–	–	–	–	–	–
More than 1 and up to 5 years	165	110	–	–	–	–
More than 5 and up to 10 years	5	9	–	–	–	–
Unlimited	470	350	191	232	–	–
	640	**469**	**191**	**232**	**–**	**–**

7. Notes to the cash flow statement

The cash flow statement shows the changes in cash and cash equivalents of the Evonik 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.

Interest paid and interest and dividends received are included in operating activities, while dividends paid are assigned to financing activities.

7.1 Cash flow from operating activities

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.

7.2 Cash flow from investing activities

The cash outflows for investments in subsidiaries 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. These acquisitions included a small amount of cash and cash equivalents (2017: €56 million).

7.3 Cash and cash equivalents

As well as the cash and cash equivalents shown on the balance sheet, where applicable this item includes 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 and cash equivalents shown on the balance sheet amounted to €988 million (Dec. 31, 2017: €1,004 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 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 and the accounting policies described in the other notes.

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, 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. 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 for animal nutrition. Alongside its high technological competence, one factor in its success is years of experience of chemical synthesis and biotechnology, which Evonik regards as major growth drivers. Other significant competitive advantages for this segment are its global distribution network and extensive and differentiated service offering. The Nutrition & Care segment is also a strategic partner for the healthcare industry.

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 for integrated C_4 and hydrocyanic production, and for alkoxides, which are used, among other things, in the production of biodiesel. Through its methacrylates business and the strong PLEXIGLAS® brand, Performance Materials is a trendsetter and driving force in the design, lighting design, architecture, and automotive areas.

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 Degussa, 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.

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 T105

in € million	2018	2017
Sales, reporting segments	**17,509**	**16,703**
Sales, other operations	42	40
Corporate, consolidation, less discontinued operations	−2,527	−2,360
External sales of the Evonik Group	**15,024**	**14,383**

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 5.6.

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.

External sales by country (location of customer) T106

in € million	2018	2017
USA	2,924	2,873
Germany	2,626	2,607
China	1,174	1,078
Switzerland	707	673
Netherlands	623	684
UK	540	483
Japan	502	499
France	484	476
Italy	384	356
Brazil	382	353
Other countries	4,678	4,301
External sales of the Evonik Group	**15,024**	**14,383**

Prior-year figures restated.

Reconciliation from adjusted EBITDA of the reporting segments to income before income taxes, continuing operations T107

in € million	2018	2017
Adjusted EBITDA, reporting segments	2,914	2,711
Adjusted EBITDA, other operations	−86	−100
Adjusted EBITDA, Corporate	−224	−253
Consolidation	−3	−1
Less discontinued operations	–	–
Adjusted EBITDA, Corporate, consolidation	−227	−254
Adjusted EBITDA	**2,601**	**2,357**
Depreciation and amortization	−837	−829
Impairment losses/reversals of impairment losses	−43	−129
Depreciation, amortization, impairment losses/reversal of impairment losses included in adjustments	3	87
Adjusted depreciation, amortization and impairment losses	−877	−871
Adjusted EBIT	**1,724**	**1,486**
Adjustments[a]	−357	−261
Financial result	−165	−203
Income before income taxes, continuing operations	**1,202**	**1,022**

Prior-year figures restated.

[a] See management report, section 2.4 Business performance.

Retrospective application of new accounting standards had the following impact on the figures for 2017: Retrospective application of IFRS 15 reduced the adjusted EBITDA of the reporting segments by €3 million. Adjusted EBITDA was altered by the same amount. Due to rounding, adjusted EBIT decreased by €4 million. This retrospective adjustment reduced income before income taxes, continuing operations, by €5 million (rounded).

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 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 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 (c.f. IFRS 8.33 b).

Breakdown of non-current assets by country **T108**

in € million	**Dec. 31, 2018**	Dec. 31, 2017
Germany	5,197	5,231
USA	3,757	3,599
Singapore	1,071	807
China	702	774
Belgium	587	554
Other countries	1,605	1,635
Non-current assets	**12,919**	**12,600**

Prior-year figures restated.

9. Other disclosures

9.1 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. Since there was no share price at the start of the performance period, as an exception, the virtual shares for the 2013 tranche were calculated from the share price in the first 60 trading days following admission to the stock exchange (April 25, 2013). 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.

At the end of the performance period, there is an option to extend it once for a further year. 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.

Since the previous performance periods for the LTI plan for executives, including the 2012 tranche, were three years, the 2013 tranche for executives was set to allow the first half of the 2013 tranche to be exercised after three years and the second half after four years. As a further incentive for the transition, the payments for this tranche are multiplied by 1.2. From the 2014 tranche, a four-year performance period is also applied for executives.

LTI plan for executive board members—Tranches 2013 to 2018 T109

		2018 tranche	2017 tranche	2016 tranche	2015 tranche	2014 tranche	2013 tranche
Grant date		May 15, 2108	June 7, 2017	May 18, 2016	Apr. 29, 2015	Apr. 14, 2014	Aug. 14, 2013
No. of virtual shares granted		119,846	108,283	139,109	175,787	140,145	153,123
No. of virtual shares forfeited		–	–	–	–	–	51,760
No. of virtual shares exercised		–	–	–	–	140,145	101,363
No. of virtual shares as of December 31, 2018		119,846	108,283	139,109	175,787	–	–
Performance period	from–to	Jan. 1, 2018–Dec. 31, 2021	Jan. 1, 2017–Dec. 31, 2020	Jan. 1, 2016–Dec. 31, 2019	Jan. 1, 2015–Dec. 31, 2018	Jan. 1, 2014–Dec. 31, 2017	Jan. 1, 2013–Dec. 31, 2017[a]
Expense (+)/income (–) for the period	in €'000	456	125	–188	172	1	–
Carrying amount of provision	in €'000	456	760	2,486	4,214	–	–

[a] Extension option utilized in some cases.

LTI plan for executives—Tranches 2013 to 2018 T110

		2018 tranche	2017 tranche	2016 tranche	2015 tranche	2014 tranche	2013 tranche
Grant date		May 11, 2018	Jun. 6, 2017	May 18, 2016	May 18, 2015	Apr. 11, 2014	Aug. 27, 2013
No. of virtual shares granted		460,095	523,169	436,125	535,195	420,598	395,422
No. of virtual shares forfeited		1,598	7,256	7,880	14,821	17,177	13,456
No. of virtual shares exercised		–	–	–	–	401,613	381,966
No. of virtual shares as of December 31, 2018		458,497	515,913	428,245	520,374	1,808	–
Performance period	from–to	Jan. 1, 2018–Dec. 31, 2021	Jan. 1, 2017–Dec. 31, 2020	Jan. 1, 2016–Dec. 31, 2019	Jan. 1, 2015–Dec. 31, 2018	Jan. 1, 2014–Dec. 31, 2018[a]	Jan. 1, 2013–Dec. 31, 2017[a]
Expense (+)/income (–) for the period	in €'000	1,743	578	–1,059	1,049	–32	–
Carrying amount of provision	in €'000	1,743	3,619	2,733	11,188	–	–

[a] Extension option utilized in some cases.

As of December 31, 2018, total provisions for share-based payment amounted to €27.2 million (2017: €38.9 million). In 2018, total expense for share-based payment was €2.8 million (2017: €14.8 million).

9.2 Additional information on financial instruments

Financial instruments comprise contractually agreed rights and obligations resulting in an inflow or outflow of financial assets or the issue of equity instruments. They are initially measured at fair value plus any directly attributable transaction costs. 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. Subsequent measurement is based on the classification of financial instruments defined in IFRS 9.

(a) Non-derivative financial instruments

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. Non-derivative financial liabilities are derecognized when the obligation has been settled or canceled, or has expired.

In the Evonik Group, non-derivative financial assets are allocated to the categories at fair value through other comprehensive income without subsequent reclassification, at amortized cost, or at fair value through profit or loss. Non-derivative financial liabilities are recognized at fair value through profit or loss or at amortized cost. Voluntary designation at fair value through profit or loss (fair value option) is not used for either financial assets or financial liabilities.

The category at fair value through other comprehensive income without subsequent reclassification contains shares in other investments that are irrevocably designated in this category because Evonik classifies them as long-term strategic investments. The category at amortized cost mainly comprises trade accounts receivable and 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, loans, 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 which Evonik recognizes 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 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.

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 and miscellaneous other financial assets carried at amortized cost, which are subject to the general impairment approach. For trade accounts receivable (with and without financing components), receivables from finance leases, and contract assets (with and without financing components) the simplified approach using an impairment matrix is applied. 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. 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. For further details, see note 9.2.5.

(b) Derivative financial instruments

Derivative financial instruments are used to hedge the risk of changes in exchange rates, the price of commodities, and interest rates. Initial recognition is on the trading date and they are measured at fair value. If no stock exchange or market price is available for the derivative from an active market, the fair value is determined using financial valuation methods. 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 9.2.4).

Stand-alone derivatives are carried at fair value through profit or loss. Derivatives included in hedge accounting are not allocated to any category. They are recognized on the balance sheet at fair value. However, the treatment of changes in their fair value is based on the special rules for hedge accounting.

The fair value is the price 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 assets or liabilities in an active market without adjustment (level 1). If such data are not available, 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.

9.2.1 Disclosures on the carrying amounts and fair values of financial instruments

Carrying amounts and fair values of financial assets as of December 31, 2018 T111

in € million	Carrying amounts by valuation category: At fair value through OCI without subsequent reclassification	At amortized cost	At fair value through profit or loss	Not allocated to any category	Dec. 31, 2018: 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 assets as of December 31, 2017 T112

in € million	Carrying amounts by valuation category: Available-for-sale	Loans and receivables	Held for trading	Not allocated to any category	Dec. 31, 2017: Carrying amount	Fair value
Trade accounts receivable	**–**	**1,755**	**–**	**–**	**1,755**	**1,755**
Cash and cash equivalents	**–**	**1,004**	**–**	**–**	**1,004**	**1,004**
Other investments[a]	126	–	–	–	126	112
Loans	–	59	–	–	59	59
Securities and similar claims	9	–	–	–	9	9
Receivables from derivatives	–	–	9	238	247	247
Miscellaneous other financial assets	–	38	–	14	52	52
Other financial assets	**135**	**97**	**9**	**252**	**493**	**479**
	135	**2,856**	**9**	**252**	**3,252**	**3,238**

Prior-year figures restated.

[a] The fair value of the other investments (€112 million) does not include investments of €14 million recognized at cost of acquisition as their fair value cannot be determined reliably.

Carrying amounts and fair values of financial liabilities as of December 31, 2018 T113

in € million	Carrying amounts by valuation category: At fair value through profit or loss	Carrying amounts by valuation category: At amortized cost	Carrying amounts by valuation category: Not allocated to any category	Dec. 31, 2018: Carrying amount	Dec. 31, 2018: Fair value
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 liabilities	–	–	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**

Carrying amounts and fair values of financial liabilities as of December 31, 2017 T114

in € million	Carrying amounts by valuation category: Liabilities held for trading	Carrying amounts by valuation category: Liabilities at amortized cost	Carrying amounts by valuation category: Not allocated to any category	Dec. 31, 2017: Carrying amount	Dec. 31, 2017: Fair value
Trade accounts payable	**–**	**1,449**	**–**	**1,449**	**1,449**
Bonds	–	3,624	–	3,624	3,644
Liabilities to banks	–	350	–	350	354
Loans from non-banks	–	18	–	18	18
Liabilities from derivatives	7	–	25	32	32
Refund liabilities	–	–	67	67	67
Miscellaneous other financial liabilities	–	53	–	53	53
Other financial liabilities	**7**	**4,045**	**92**	**4,144**	**4,168**
	7	**5,494**	**92**	**5,593**	**5,617**

Financial instruments recognized at fair value

The following tables show the financial instruments that are measured at fair value on a recurring basis after initial recognition on the balance sheet:

Financial instruments recognized at fair value as of December 31, 2018 T115

in € million	Fair value based on			Dec. 31, 2018
	Publicly quoted market prices (level 1)	Directly observable market-related prices (level 2)	Individual valuation parameters (level 3)	
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

Financial instruments recognized at fair value as of December 31, 2017 T116

in € million	Fair value based on			Dec. 31, 2017
	Publicly quoted market prices (level 1)	Directly observable market-related prices (level 2)	Individual valuation parameters (level 3)	
Other investments	83	–	29	112
Securities and similar claims	9	–	–	9
Receivables from derivatives	–	247	–	247
Liabilities from derivatives	–	−32	–	−32

The financial instruments allocated to level 1 are recognized at their present stock market price. They comprise all securities 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, which are measured on the basis of the best available information as of the reporting date. Their fair value 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 also 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 T117

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**

Fair value of financial instruments recognized at amortized cost

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.

9.2.2 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 2018 T118

	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
Income from other investments (including dividends)	–	–	1	–	1
	−10	**−50**	**1**	**−51**	**−110**

In the reporting period, dividends of €1 million were received from other investments. In this period, no dividends were received from other investments divested during the fiscal year.

Net result by valuation category 2017 **T119**

	Net result by valuation category				2017
in € million	Available-for-sale assets	Loans and receivables	Financial instruments held for trading	Liabilities at amortized cost	
Proceeds from disposals	2	−2	–	–	–
Income from derivatives	–	–	−8	–	−8
Impairment losses/reversals of impairment losses	–	−49	–	–	−49
Net interest expense	1	4	−46	−61	−102
Income from other investments	3	–	–	–	3
	6	**−47**	**−54**	**−61**	**−156**

Proceeds from disposals comprises expenses for trade accounts receivable and expenses for selected financial instruments.

Income from derivatives does not include income from derivative financial instruments, for which hedge accounting is applied.

As in 2017, net interest expense did not include any interest income on the impaired portion of financial assets or trade accounts receivable.

9.2.3 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 **T120**

	Dec. 31, 2018			Dec. 31, 2017		
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	1,727	88	1,639
Forward exchange contracts, currency options, and currency swaps	4,755	4,481	274	3,873	3,606	267
Commodity derivatives	15	13	2	56	30	26
	7,088	**5,511**	**1,577**	**6,306**	**3,724**	**2,582**

9.2.4 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 other 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 intra-group 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 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, regression analysis, and sensitivity analyses.

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 is 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 and 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 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 and recognized in other equity components. 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 and recognized in other equity components. A direct hedging relationship is used and the economic relationship is reviewed by comparing the notional value of the hedging instruments and the nominal value of the hedged item. The maturities of the hedging instrument and hedged item normally correspond. Ineffectiveness may occur if the notional values 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 **T121**

	Maturing in 2019	Maturing in 2020	Maturing >2020
Average EUR/USD exchange rate	1.17	1.19	1.04
Average EUR/CNH[a] exchange rate	8.08	7.90	7.35
Average EUR/SGD exchange rate	1.63	1.61	–

[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 planned acquisition** of PeroxyChem, a USD currency option transaction expiring in 2019 was concluded as a cash flow hedge. The notional value of this transaction is US$113 million. The intrinsic value of the option was designated. The time value of the option was recognized as hedging expense in other equity components from hedging instruments. This is a direct hedging relationship and the economic relationship is reviewed by comparing the notional value of the hedging instruments and the nominal value of the hedged item. The maturities of the hedging instrument and hedged item correspond. Ineffectiveness may occur if the notional value of the hedging instruments and the nominal value of the hedged items do not correspond or their maturities differ.

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 fiscal 2018, the accumulated realized hedging expense for a cash flow hedge that ended in 2013 and was recognized in other equity components from hedging instruments was fully released to net interest income/expense. In addition, there is a fair value hedge expiring in 2023, 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. Further, in the reporting period a proxy hedge for a naphtha component in raw material procurement contracts was closed out. The realized hedging income relating to the hedging costs is recognized in other equity components from financial instruments and will be released to operating income on a pro rata basis over the remaining term of the hedged items.

Hedge accounting was applied for the following major transactions in 2018:

Hedging instruments for currency risks used in hedge accounting as of December 31, 2018 — T122

in € million	Notional value, total	thereof non-current	Receivables from derivatives	Liabilities from derivatives
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**

Hedging instruments for interest rate risks used in hedge accounting as of December 31, 2018 — T123

in € million	Notional value, total	thereof non-current	Receivables from derivatives	Liabilities from derivatives
Interest rate swaps	650	650	1	–
Fair value hedges	**650**	**650**	**1**	**–**

Hedging instruments for commodity price risks used in hedge accounting as of December 31, 2018 — T124

in € million	Notional value, total	thereof non-current	Notional value, total	thereof non-current	Receivables from derivatives	Liabilities from derivatives
Gas derivatives	167 million m^3	91 million m^3	8	2	–	–
Coal derivatives	123 thousand metric tons	–	7	–	–	1
			15	**2**	**–**	**1**

Excluding deferred taxes, the other equity components from hedging instruments for designated risk components and for hedging costs pursuant to IFRS 9 changed as follows in 2018:

Change in other equity components from hedging instruments for designated risk components T125

in € million	Currency hedges	Interest rate hedges	Commodity 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**

The next table shows the change in other equity components from hedging instruments for the cost of hedging currency risks, excluding deferred taxes. Effects from changes in time value relate solely to currency options transactions. While effects of foreign currency basis spreads result from both the use of cross-currency interest rate swaps, and from forward exchange contracts and currency swaps, effects from forward components relate solely to forward currency contracts and currency swaps. There were no significant effects from changes in the time value of options.

Change in other equity components from hedging instruments for hedging costs T126

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	**–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 due to realization of the hedged item	**12**
Hedges where the hedged item is realized at a point in time	–
Reclassification offset against cost of acquisition	**–**
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	**1**
As of December 31, 2018	**–17**

Other equity components from active hedging relationships and those that had ended as of December 31, 2018 T127

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 the hedge reserve for 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 the hedge reserve for 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 interest rate risk. The carrying amount of the hedged item is a financial liability.

Fair value hedges recognized on the balance sheet as of December 31, 2018 T128

in € million	Interest rate hedges
Carrying amount of the hedged items on the balance sheet	649
Cumulative fair value hedge adjustment of active hedging relationships	–1

In the following table, the effectiveness of hedging relationships is demonstrated by a comparison of the changes in the hedged item and the designated value of the hedging instrument in the reporting period.

Effectiveness of the hedging relationships 2018 T129

in € million	Currency hedges	Interest rate hedges	Commodity price hedges
Change in the value of the hedged item	198	–	–4
Change in the designated value of the hedging instrument	–198	–	4
Ineffective portion recognized in profit or loss	–	–	–
Cash flow hedges	**–**	**–**	**–**
Change in the value of the hedged item	–1	–	–
Change in the designated value of the hedging instrument	1	–	–
Ineffective portion recognized in profit or loss	–	–	–
Hedge of a net investment	**–**	**–**	**–**
Change in the value of the hedged item	–	–3	–
Change in the designated value of the hedging instrument	–	3	–
Ineffective portion recognized in profit or loss	–	–	–
Fair value hedges	**–**	**–**	**–**

Prior-year disclosures pursuant to IAS 39

Cash flow hedges of forecast foreign currency sales totaled around €1,620 million and the fair value of the hedging instruments for which hedge accounting was applied was €72 million. Income of €92 million was recognized in other equity components from hedging instruments.

The notional value of cash flow hedges used to hedge currency risks from intragroup foreign currency loans was €2,004 million and the fair value of the hedged items was €156 million. Income of €16 million was recognized in other equity components from hedging transactions.

Other equity components for hedging instruments relating to cash flow hedges comprised expenses of €2 million.

The fair value of the designated cash flow hedges for price risks from forecast purchases of raw materials was €1 million. No income effects were allocated to other equity components from hedging instruments.

The fair value of outstanding hedging contracts recognized as hedges of a net investment was –€1 million. Between the start of hedging and year-end 2018, total expenses of €5 million were allocated to other equity components from hedging instruments for these rolling hedges.

The fair value of the interest rate swaps designated as fair value hedges of interest rate risks was –€2 million.

9.2.5 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 Emissions Trading Act (TEHG) can be optimized through use of emission allowance and emission reduction transactions based on swaps and futures.

Overview of financial risks **T130**

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—equity prices	Investments in equity instruments	Sensitivity analyses	Portfolio diversification
Market risk—commodities	Purchase and sale of raw materials	Sensitivity analyses	Price escalation clauses, swaps
Credit 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
Liquidity risk	Unplanned liquidity requirements	Rolling cash flow forecasts	Cash and cash equivalents, availability of committed credit lines

9.2.5.1 Market risk

Market risk can basically be subdivided into exchange rate, interest rate, and commodity risks. The management of these risks is explained below.

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 hedging costs on a straight-line basis over the term of the 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. The net risk positions are then bundled through intragroup hedging and, where appropriate, netted at Group level. The remaining net positions are then hedged externally via forward exchange contracts and currency swaps. Currency risk management is carried out separately for operational risk positions (mainly trade accounts receivable and payable in foreign currencies) and risk positions arising from current financing activities such as cash pooling, bank deposits, and cash and cash equivalents.

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 hedging costs (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 balance 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 6.8 (g). In addition, the currency risks relating to net investments in foreign operations are hedged and included in the 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 2018, 96 percent (2017: 94 percent) of non-derivative financial instruments were fixed-interest contracts. Taking financial derivatives into account, the proportion of fixed-interest financial instruments declines to 79 percent (2017: 77 percent).

Several scenario analyses were carried out to **measure exchange rate and interest rate risk** as of December 31, 2018.

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, 2018 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 deviations of changes in exchange rates versus the euro in 2018 was 6.7 percent for the USD, as in the previous year, and 6.1 percent for the CNY/CNH (2017: 6.4 percent). The results of these scenarios were as follows:

USD sensitivity analysis T131

	Dec. 31, 2018		Dec. 31, 2017	
in € million	Impact on income	Impact on equity	Impact on income	Impact on equity
+5%	4	–49	–	–28
–5%	–4	49	–	28
+10%	8	–98	1	–57
–10%	–8	98	–1	57

CNY/CNH sensitivity analysis T132

	Dec. 31, 2018		Dec. 31, 2017	
in € million	Impact on income	Impact on equity	Impact on income	Impact on equity
+5%	1	–11	1	–3
–5%	–1	11	–1	3
+10%	1	–22	2	–7
–10%	–1	22	–2	7

Several scenario analyses were carried out to measure interest rate risk as of December 31, 2018. These analyzed shifts of 50, 100, and 150 basis points in EUR interest rates or the EUR interest rate curve to simulate the possible loss of value of derivative and non-derivative financial instruments. The scenarios are summarized in the table:

EUR interest rate sensitivity analysis T133

	Dec. 31, 2018		Dec. 31, 2017	
in € million	Impact on income	Impact on equity	Impact on income	Impact on equity
+50 basis points	–	–1	–	–8
–50 basis points	–	1	–	9
+100 basis points	–	–2	–	–17
–100 basis points	–	2	–	17
+150 basis points	–	–3	–	–25
–150 basis points	–	3	–	26

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, 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 2018, as in 2017. As in the previous year, the impact on income would have been negligible.

9.2.5.2 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 Group companies 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, 2018, Evonik had cash and cash equivalents amounting to €988 million. Alongside cash and cash equivalents and investments in current securities, Evonik's central source of liquidity is a €1.75 billion revolving credit facility. Following exercise of the first extension option in June 2018, the credit facility concluded in June 2017 runs until June 2023, with a further option to extend it by one year to June 2024 at the latest. It was not utilized in 2018 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, 2018, €495 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 2018 T134

	Payments due in				**Dec. 31, 2018**
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	**1,493**	**–**	**–**	**–**	**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**

Remaining maturity of non-derivative financial instruments 2017 T135

	Payments due in				Dec. 31, 2017
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	**1,449**	**–**	**–**	**–**	**1,449**
Bonds	34	568	1,199	2,036	3,837
Liabilities to banks	280	49	21	8	358
Loans from non-banks	18	–	–	–	18
Miscellaneous other financial liabilities	53	–	–	–	53
Other financial liabilities	**385**	**617**	**1,220**	**2,044**	**4,266**

A disclosure on the maturity of existing financial guarantees can be found in the section on risk of default below. The 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, and cross-currency interest rate swaps, they are presented as gross amounts:

Remaining maturity of derivative financial instruments 2018 T136

in € million	Payments due in up to 1 year	more than 1 and up to 3 years	more than 3 years	Dec. 31, 2018
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, currency options, 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, currency options, 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**

Remaining maturity of derivative financial instruments 2017 T137

in € million	Payments due in up to 1 year	more than 1 and up to 3 years	more than 3 years	Dec. 31, 2017
Cross-currency interest rate swaps	–32	27	60	55
Cash inflows	10	848	632	1,490
Cash outflows	–42	–821	–572	–1,435
Forward exchange contracts and currency swaps	80	–3	–	77
Cash inflows	2,357	207	–	2,564
Cash outflows	–2,277	–210	–	–2,487
Commodity derivatives	1	–	–	1
Receivables from derivatives	**49**	**24**	**60**	**133**
Interest rate swaps	1	–2	–1	–2
Cross-currency interest rate swaps	–10	–22	–	–32
Cash inflows	47	279	–	326
Cash outflows	–57	–301	–	–358
Forward exchange contracts and currency swaps	–17	–3	–	–20
Cash inflows	1,314	55	–	1,369
Cash outflows	–1,331	–58	–	–1,389
Commodity derivatives	–	–1	–	–1
Liabilities from derivatives	**–26**	**–28**	**–1**	**–55**

In 2017, 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 exceeded 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.

9.2.5.3 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 (e.g., 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 (e.g., 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 creditworthiness of contracting parties is updated constantly via ratings or scoring processes. The internal credit scoring model used for this comprises six risk categories (1 = high creditworthiness; 6 = low creditworthiness). Category 1 comprises customers with a very good payment profile in the past twelve months, normally with long-term business relationships, who are based in countries with good to very good economic and political risk assessments. Category 2 comprises customers with a good payment profile in the past twelve months and a business relationship over several months, who are based in countries with good economic and political risk assessments. Category 3 comprises customers who make payments regularly, often relatively new business relationships, but are based in countries with weaker economic and political prospects. Categories 4–6 comprise customers where payments are sometimes unpunctual; these customers are often based in countries with economic and political risks.

Evonik applies the IFRS 9 provisions on loss allowances for expected credit losses as follows:

As a matter of principle, Evonik only places investments with financial counterparties with an investment grade rating. A low default risk (level 1) 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. A review of whether there has been a significant increase in the default risk since the last assessment (transfer to level 2) must be made at least quarterly. This is assumed if payment is 30 days overdue. Unless there were indicators of an impairment of creditworthiness at an earlier period, impairment is generally assumed when payments are more than 90 days overdue (transfer to level 3). All loans and miscellaneous other financial assets that are measured at amortized cost are considered to have a low default risk. In 2018, all financial assets subject to the general impairment model were therefore allocated to level 1. Consequently only the 12-month expected credit loss was determined. 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.

Loss allowances for financial assets—general approach

As of December 31, 2018, the general impairment model was applied for loans amounting to €60 million (Jan. 1, 2018: €53 million) and miscellaneous other financial assets of €13 million (Jan. 1, 2018: €9 million), all of which were allocated to level 1 (low default risk) at the date of transition to IFRS 9. No significant increase in the credit risk was identified in fiscal 2018. As of December 31, 2018, 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 as of January 1, 2018 or as of December 31, 2018, so we do not present a table showing the change in loss allowances. No significant changes were made to the estimation methods or assumptions in the reporting period.

Default risk by rating classes as of December 31, 2018

All loans (€60 million) and miscellaneous other financial assets (€13 million) where there is a credit risk pursuant to IFRS 9 are allocated to level 1 (12-month expected credit loss). Of these, loans amounting to €60 million and miscellaneous other financial assets totaling €10 million have an investment grade rating. Miscellaneous other financial assets totaling €3 million do not have an external rating. There were no overdue items.

Loss allowances for financial assets—simplified approach

For trade accounts receivable, receivables from finance leases, and contract assets, Evonik uses the simplified approach, where the loss allowance is equal to the lifetime expected credit losses of the respective receivable. The loss allowance matrix takes account of all components of receivables that are exposed to a credit 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 customers 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. 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 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. The loss allowances for receivables from finance leases (carrying amount as of January 1, 2018: €14 million; December 31, 2018: €6 million) and contract assets (carrying amount as of January 1, 2018: €5 million; December 31, 2018: €11 million) calculated on this basis and the change in the loss allowances are not material.

Loss allowances for financial assets—simplified approach (loss allowance matrix) T138

in € million	Trade accounts receivable
Loss allowance as of December 31, 2017	**10**
Retrospective adjustment via retained earnings/distributable profit	–5
Loss allowance as of January 1, 2018	**5**
Change	2
Loss allowance as of December 31, 2018	**7**

The difference between the loss allowance as of January 1, 2018 and the change presented in the statement of changes in equity is due to the counter-effect of deferred taxes.

Credit loss matrix as of December 31, 2018 T139

			Lifetime expected credit loss based on				
			credit risk criteria	days overdue			
in € million	Credit default rate in %	Gross carrying amount		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 low default risk (categories 4–6)	1.5	461	2	1	–	1	3
Total		**1,410**	**2**	**1**	**–**	**1**	**3**

The loss allowance as of December 31, 2017 is the flat-rate individual write-down. For receivables in categories 1–3, the lifetime expected credit losses based on credit risk criteria was less than €0.5 million. They are not shown separately in the table.

Loss allowances for financial assets that have to be tested individually for impairment T140

in € million	Trade accounts receivable
Loss allowance as of December 31, 2017	40
Changes in the scope of consolidation	–
Additions	10
Utilization	–12
Reversal	–14
Loss allowance as of December 31, 2018	24

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.

Within the scope of IAS 39 (up to December 31, 2017), impairment losses for trade accounts receivable were estimated using the realized losses model. If there were objective indications, based on historical experience, that the settlement amounts due would not be collectible on the customary terms, an impairment loss was recognized for the difference between the carrying amount of the asset and present value of the estimated future payments determined on the basis of the original effective interest rate.

The following table shows the risk and maturity structure as of December 31, 2017:

Risk and maturity structure (impairment losses pursuant to IAS 39) T141

in € million	Dec. 31, 2017 Loans	Dec. 31, 2017 Miscellaneous other financial assets	Dec. 31, 2017 Trade accounts receivable
Impaired financial assets	**–**	**–**	**17**
Nominal value	13	–	67
Impairment losses	–13	–	–50
Non-impaired financial assets	**59**	**52**	**1,738**
Not yet due	59	52	1,436
Overdue	–	–	302
up to 3 months	–	–	242
more than 3 and up to 6 months	–	–	13
more than 6 and up to 9 months	–	–	6
more than 9 and up to 12 months	–	–	13
more than 1 year	–	–	28
	59	52	1,755

Prior-year figures restated.

At year end, trade accounts receivable totaling €473 million (Dec. 31, 2017: €291 million) were covered by credit insurance (after factoring out the deductible). The maximum default risk was €1,213 million (Dec. 31, 2017: €1,464 million).

As of December 31, 2018, 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.

Default risk on financial derivatives

Credit management also covers derivative financial instruments, where the risk of default is equivalent to the 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 T142

in € million	Receivables from derivatives		Liabilities from derivatives	
	Dec. 31, 2018	Dec. 31, 2017	**Dec. 31, 2018**	Dec. 31, 2017
Netting of financial assets/liabilities				
Gross amount of transactions affected by netting arrangements	117	246	104	30
Amounts set off in accordance with IAS 32	–	–	–	–
Amounts recognized for the relevant transactions	117	246	104	30
Affected by enforceable master netting arrangements or similar arrangements				
Receivables/liabilities that do not fully meet the offsetting criteria	42	26	42	26
Amounts related to financial collateral	–	–	–	–
Net amount	**75**	**220**	**62**	**4**

Further, there is a default risk relating to the granting of financial guarantees. As of the reporting date, guarantees to a joint venture with a total nominal value of €33 million (Dec. 31, 2017: €37 million) had been granted. This is also the maximum default risk; see note 9.3. In principle, these guarantees can be called in full at any time during their residual term (2018 or 2023), as soon as the contractual conditions are met. At present, there is no indication that these financial guarantees will result in a loss.

9.3 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.

Business relations with related parties T143

in € million	RAG-Stiftung		Fellow subsidiaries		Joint ventures		Associates	
	2018	2017	**2018**	2017	**2018**	2017	**2018**	2017
Goods and services supplied	–	–	1	1	28	27	7	5
Goods and services received	–	–	−23	−22	–	−4	−2	−1
Other income	–	–	–	–	3	1	6	7
Receivables as of December 31	–	–	–	–	4	5	1	–
Liabilities as of December 31	–	–	−2	–	−21	−14	−1	–
Contingent liabilities as of December 31	–	–	–	–	−33	−37	–	–

The dividend for fiscal 2017 was paid in the second quarter of 2018, following the adoption of the resolution by the annual shareholders' meeting on May 23, 2018. RAG-Stiftung, Essen (Germany) received €363 million.

In 2018, Evonik received dividends of €9 million (2017: €8 million), mainly from associates.

The contingent liability recognized as of December 31, 2018 comprises €33 million resulting from a guarantee granted to secure a loan for the joint venture Saudi Acrylic Polymers Company, Ltd., Jubail (Saudi Arabia).

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.

Remuneration paid to related parties **T144**

	Executive Board of Evonik Industries AG		Supervisory Board of Evonik Industries AG		Other management members		Total	
in €'000	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
Short-term remuneration	8,915	8,620	3,469	3,170	16,646	13,803	29,030	25,593
Share-based payment	566	5,108	–	–	567	2,224	1,133	7,332
Current service cost for pensions and other post-employment benefits	2,431	1,482	–	–	1,555	1,660	3,986	3,142
Termination benefits	–	9,660	–	–	–	–	–	9,660

Short-term remuneration comprises both amounts not related to performance and short-term performance-related payments.

As of December 31, 2018, there were provisions of €4,375 thousand (Dec. 31, 2017: €3,148 thousand) for short-term performance-related remuneration of members of the executive board and €12,525 thousand (2017: €9,521 thousand) for other management members.

At year-end 2018, provisions for share-based payments amounted to €7,915 thousand (Dec. 31, 2017: €12,876 thousand) for members and former members of the executive board, and €4,880 thousand (Dec. 31, 2017: €5,108 thousand) for other management members.

The share-based payments are expenses incurred in 2018 for LTI tranches from 2014 to 2018.

The present value of pension obligations (defined benefit obligations) was €17,671 thousand (Dec. 31, 2017: €14,713 thousand) for the executive board and €29,009 thousand (Dec. 31, 2017: €26,683 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.

9.4 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 €56 million (Dec. 31, 2017: €59 million). They include a guarantee of €33 million in favor of a joint venture (see note 9.3) and indemnity obligations of €10 million in connection with divestments, which expired in the period up to December 31, 2018.

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 other investments with a total carrying amount of €15 million. As a result of contractual agreements, there are obligations to make payments into the fund assets of a maximum of €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, 2018.

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, and operating lease liabilities, where Evonik is the lessee.

As of the reporting date, the Group had commitments of €1 million (Dec. 31, 2017: €1 million) to purchase intangible assets and of €206 million (Dec. 31, 2017: €191 million) to purchase property, plant and equipment.

The operating lease liabilities are mainly rents for land and buildings, plant, and office furniture and equipment. The table shows the nominal value of obligations from future minimum lease payments for leased assets with the following payment terms:

Maturity structure of future minimum lease payments (lessee; operating leases) T145

in € million	2018	2017
Due within 1 year	120	128
Due in more than 1 and up to 5 years	311	315
Due in more than 5 years	316	230
	747	**673**

Prior-year figures restated (total increase €53 million).

Total payments of €139 million were recognized as expense for operating leases in the reporting period (2017: €142 million). These include minimum lease payments of €131 million (2017: €131 million) and contingent rental payments of €8 million (2017: €11 million). The expected future minimum future lease payments for sub-leasing agreements amount to €4 million (2017: €3 million).

9.5 Events after the reporting date

No material events have occurred since the reporting date.

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.[1]

Disclosure pursuant to section 313 paragraph 2 no. 5 of the German Commercial Code (HGB):

Evonik holds more than 5 percent of the voting rights in the following company, which is defined as a large stock corporation in accordance with section 267 paragraph 3 of the German Commercial Code (HGB): Borussia Dortmund GmbH & Co. KGaA, Dortmund (Germany) (shareholding: 14.78 percent; fiscal year 2017/2018: income after taxes: €26.7 million; equity: €369 million).

10.2 Personnel expense and number of employees pursuant to section 314 paragraph 1 no. 4 of the German Commercial Code (HGB)

Personnel expense T146

in € million	2018	2017
Wages and salaries	2,876	2,665
Social security contributions	414	404
Pension expenses	221	229
Other personnel expense	84	76
	3,595	**3,374**

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.

The table shows the annual average headcount for the continuing operations:

Headcount (annual average) T147

No. of employees	2018	2017
Nutrition & Care	8,248	8,491
Resource Efficiency	10,263	9,493
Performance Materials	4,212	4,401
Services	12,915	12,811
Corporate, other operations	563	607
	36,201	**35,803**

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 2018 amounted to €11,969 thousand (2017[2]: €11,296 thousand). Provisions for bonus payments to executive board members amounting to €100 thousand were reversed 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 €1,872 thousand in 2018 (2017[2]: €11,492 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 €79,549 thousand (Dec. 31, 2017: €79,626 thousand).

The remuneration of the supervisory board for 2018 totaled €3,469 thousand (2017: €3,170 thousand).

[1] www.evonik.com/list-of-shareholdings
[2] The remuneration of the executive board for 2017 includes two members who left the executive board during that year.

10.4 Declaration on the German Corporate Governance Code

In December 2018, 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.[1]

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 implementation of new financial reporting standards, 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. The other services were principally project-related consultancy services in connection with the optimization and management of business processes.

Auditor's fees T148

	Germany		Other countries		Total fees	
in € million	**2018**	2017	**2018**	2017	**2018**	2017
Auditing of financial statements	4.7	4.8	4.3	7.8	9.0	12.6
Other audit-related services	0.7	0.1	–	–	0.7	0.1
Tax consultation services	–	–	–	–	–	–
Other services	1.6	2.2	–	–	1.6	2.2
	7.0	**7.1**	**4.3**	**7.8**	**11.3**	**14.9**

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 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 Group, together with a description of the material opportunities and risks associated with the expected development of the Group.

Essen, February 18, 2019

Evonik Industries AG
The Executive Board

Kullmann Dr. Schwager

Wessel Wolf

[1] www.evonik.com/declaration-on-corporate-governance

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 2018, and the income statement, statement of comprehensive income, statement of changes in equity and statement of cash flows for the financial year from 1 January to 31 December 2018, 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 2018. 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 2018, and of its financial performance for the financial year from 1 January to 31 December 2018 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 January 1 to December 31, 2018. 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:

1. Recoverability of goodwill
2. Pension provisions
3. Restructuring provision

Our presentation of these key audit matters has been structured in each case as follows:
① Matter and issue
② Audit approach and findings
③ 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 4.75 billion is reported under the "Intangible assets" balance sheet item, representing 23 % 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 2018, 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 6.4 "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 3.73 billion are reported. For all defined benefit pension plans, the present value of the obligations amounts to EUR 11.67 billion, the fair value of the plan assets to EUR 8.04 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 0.06 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 note 6.9 "Provisions for pensions and other post-employment benefits" of the notes to the consolidated financial statements.

3 Restructuring provision

1 Evonik Industries AG has resolved to implement a strategic program to reduce overhead cost. That strategic program is designed to permanently reduce administration and sales expenses. In this context, among others, the number of employees is going to be reduced. In financial year 2018, the Company reached agreement with the employee representative committees on a program of severance offers as well as on a reconciliation of interests and a social plan. These binding agreements form the basis for the targeted headcount reduction at the Group. In order for a restructuring provision to be recognized, the general recognition criteria for provisions pursuant to IAS 37.14 must be satisfied, which are further specified for restructuring measures within the meaning of IAS 37.10 by the regulations in IAS 37.70 et seq. If the provision is a provision for termination benefits, the requirements of IAS 19 apply. The Group has recognized a restructuring provision as an expense in the consolidated financial statements after agreeing with the employee representative committees on the strategic program and announcing that program in 2018. In our view, this matter was of particular significance for our audit, as the recognition of restructuring provisions is to a large extent based on estimates and assumptions made by the executive directors.

2 In the context of our audit, we assessed whether the individual recognition criteria were met and whether the measurement of the restructuring provision was appropriate. To that end, we obtained and evaluated relevant evidence from the executive directors of Evonik Industries AG. We were able to satisfy ourselves that the matter and the estimates and assumptions made by the executive directors in connection with the recognition and measurement of a restructuring provision were sufficiently documented and substantiated. The measurement occurred within ranges considered by us to be reasonable.

3 The Company's disclosures relating to restructuring provisions are contained in section 6.10 "Other provisions" 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

The other information comprises further the remaining parts of the finance 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 23 May 2018. We were engaged by the supervisory board on 11 September 2018. 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, 19 February 2019

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Eckhard Sprinkmeier	Antje Schlotter
Wirtschaftsprüfer	Wirtschaftsprüferin
(German Public Auditor)	(German Public Auditor)

Market positions

Market positions 2018[a]

T149

Product	Application	Global ranking[a]	Capacity in metric tons p.a.
Nutrition & Care			
Amphoteric surfactants	Shampoos, shower gels	1	[c]
Ceramides, phytosphingosines	Cosmetics	1	[c]
Oleochemical, quaternary derivatives	Fabric softeners	1	[c]
Polyurethane additives	Stabilizers and catalysts for the production of polyurethane foam	1	[c]
Organically modified silicones	Cosmetics, radiation-cured separation coatings, super-spreading agents	1–2	[c]
Superabsorbents	Diapers, incontinence products, feminine hygiene products, technical applications	3	[c]
Amino acids and amino acid derivatives	Pharmaceutical intermediates and infusion solutions	3	[c]
Exclusive synthesis	Intermediates and active substances for pharmaceuticals and specialty applications	2	[c]
Pharmaceutical polymers	Drug delivery systems (e.g., tablet coatings) and medical products (e.g., bioresorbable implants)	2	[c]
DL-methionine	Animal nutrition	1	580,000
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	[c]
Precious metal powder catalysts	Life sciences and fine chemicals, industrial chemicals	1	[c]
Oil and fat hydrogenation catalysts	Life sciences and fine chemicals, industrial chemicals	3	[c]
Amorphous polyalphaolefins	Thermoplastic hot melt adhesives	1	[c]
Polybutadienes	Automotive manufacturing (adhesives and sealants)	2	[c]
Polyester resins	Can and coil coating, reactive hot melt adhesives	1	[c]
Thermoplastic and reactive methacrylate resins	Binders for paints and coatings	1–2	[c]
Organically modified silicones	Binders for paints and printing inks	2	[c]
Isophorone chemistry	Environment-friendly coating systems, high-performance composites (crosslinkers)	1	[c]
PEEK	Special applications in the oil and gas, automotive, and aviation industries, electronics/semiconductors, specialty medical technology (e.g., implants)	3	[c]
Polyamide 12	High-performance specialty polymer applications (e.g., automotive, medical, sport, gas and offshore oil pipelines)	1	[c]
Oil additives	Viscosity modifiers	1	[c]
Organosilanes, chlorosilanes	Rubber, silicone rubber, paints and coatings, adhesives and sealants, building protection materials, pharmaceuticals, cosmetics, optical fibers	1[b]	[c]
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

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 No data available.

Market positions 2018[a] **T149**

Product	Application	Global ranking[a]	Capacity in metric tons p.a.
Performance Materials			
Butene-1	Co-monomer for polyolefins	1[b]	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	[c]
Alkoxides	Catalysts for biodiesel, pharmaceuticals, agrochemicals, and other applications	1	[c]
TAA and TAA derivatives	UV stabilizers for plastics	1	[c]
Methacrylate monomers	Coatings, construction industry, plastics (PMMA)	2	[c]
Methacrylate polymers (PMMA molding compounds and PMMA semi-finished products)	Construction materials for the automotive and electrical/electronics industries, specialty medical technology, architecture, design, and communication applications	1–2	[c]

[a] Evonik's assessment based on various individual market reports/information and in-house market research.
[b] Freely traded volumes.
[c] No data available.

Growth engines

Specialty Additives
Specialty additives improve the properties of countless everyday products—from coatings and sofas to engine oils. 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. Demand for specialty additives is growing steadily. These specialty chemicals enhance the quality and durability of end-products and the energy efficiency of production processes. Margins in this market make it particularly attractive.

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. That means more land is required for farming and also increases emissions of methane gases by cattle. 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. Evonik is active in this area as well: It develops probiotics for livestock farming and produces omega-3 fatty acids from natural microalgae as a substitute for fish oil and fishmeal in salmon farming.

Smart Materials
Smart materials have specially tailored functionalities that help to optimize the properties of products. One example is silica, which is used in many applications in the consumer goods industry. These tiny silicon dioxide particles make an important contribution to products such as toothpaste, paper, and modern tire treads. By reducing the rolling resistance of tires, silica particles cut fuel consumption. Smart materials are also used in 3D printing. Here, it is particularly important to make sure the materials used have the right properties. Evonik markets high-performance polyamide 12 for 3D printing. This powder enhances the speed and precision of 3D printing—even for complex components—so it is driving forward industrial application of this technology.

Health & Care
The Health & Care 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. Along with rising health awareness, fitness and beauty are becoming more important. Many people want to stay young and keep their looks for as long as possible. Anti-aging products have long been a billion dollar market. Evonik serves this industry—with innovative active ingredients that take account of regional differences as well as sustainability. Consumers want cosmetics they can use with a good conscience, so developing and using alternatives to petroleum-based raw materials are becoming more important.

Glossary

Technical terms

Accident frequency (occupational safety indicator)
All work-related accidents (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, leading to less contamination, so they facilitate 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, for example, as butadiene for tires and butene-1 for the plastics industry. Isobutene is processed into methyl tertiary butylether (MTBE), which is used as an anti-knock agent in fuel. In further processing steps, it is used to manufacture high-chain alcohols and plasticizers for flexible PVC. Evonik's integrated C_4 technology platform ensures excellent product yields. All hydrocarbons contained in C_4 crack are processed cost-effectively.

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.

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, or 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 one of the cleanest and most versatile chemicals. Because of its positive properties, it is used in a wide range of applications, from environmentally benign bleaching agents in the pulp and textile industries to etching agents in the electronics industry, active pharmaceutical ingredients and cosmetic applications, sterilization and disinfection agents in food processing, oxidizing agents in chemical and pharmaceutical synthesis, and the production of peracetic acid, which is an important derivative. H_2O_2 is also used in many industrial-scale syntheses. For example, it is used in the innovative hydrogen-peroxide-to-propylene-oxide (HPPO) process developed by Evonik and ThyssenKrupp Industrial Solutions for the direct chemical synthesis of propylene oxide, an important precursor for polyurethanes, and for the production of caprolactam and epoxidized soybean oil.

Incident frequency (plant safety indicator)
Number of incidents involving the release of substances or energy, fire, or explosion per 1 million working hours.

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.

Monomers
Monomers are low-molecular-weight, reactive molecules that can build polymers.

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.

PMMA
Abbreviation for polymethylmethacrylate. This is a colorless polymer (acrylic glass) that can be colored in a range of shades. Properties: high light transmittance, good moldability, exceptionally high weather resistance. Applications: automotive and aviation engineering, architecture, lighting, design, electronics, and communications technology. Best-known brand: PLEXIGLAS®, which is marketed as ACRYLITE® in the Americas. Form supplied: thermoplastic molding compounds, cast or extruded semi-finished goods (sheet, film, tubes, rods).

Polymers
Long-chain, short-chain, or crosslinked molecules (macromolecules) produced from smaller molecules (monomers).

REACH
REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) is the European chemicals regulation (1907/2006).

Responsible Care®
Responsible Care® is the global initiative of the chemical industry to bring about a continuous improvement in environmental protection, health, and safety. As well as complying with legislation and other regulations, the industry cooperates with government agencies and other stakeholders in various voluntary initiatives.

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. 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 hydro gels. The liquid is not released even under pressure. Consequently, these polymers are mainly used in diapers. Special forms of superabsorbent 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 fall 2015, the United Nations published 17 Global Sustainable Development Goals (SDGs), to be achieved by 2030.

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.

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. 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 T150

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Financial calendar

Financial calendar 2019 T151

Event	Date
Interim report Q1 2019	May 7, 2019
Annual shareholders' meeting 2019	May 28, 2019
Interim report Q2 2019	August 1, 2019
Interim report Q3 2019	November 5, 2019

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