



BASF Factbook

Information for investors
and analysts

Published June 2018

 **BASF**

We create chemistry

Forward-looking statements

This publication contains forward-looking statements. These statements are based on current estimates and projections of the Board of Executive Directors and currently available information. Forward-looking statements are not guarantees of the future developments and results outlined therein. These are dependent on a number of factors; they involve various risks and uncertainties; and they are based on assumptions that may not prove to be accurate. Such risk factors include those discussed in the Opportunities and Risks Report from page 111 to 118 of the BASF Report 2017. BASF does not assume any obligation to update the forward-looking statements contained in this publication above and beyond the legal requirements.



Lab employees observe the effects of individual active ingredients on plants. At regular intervals, they measure the size of the plants' leaves to monitor their growth. Here, BASF is conducting research on new active ingredients for innovative crop protection products. The aim is to reduce the concentration of test substances so that farming has less impact on the soil.

1 BASF Group 2

At a glance	4	Innovation	12
Management Board	6	Portfolio management	16
Corporate governance and compliance	8	Investments	20
Working at BASF	9	Operational excellence	21
Strategy	10	Verbund concept	22
Corporate strategy	10	Sustainability	24
		Goals	26

2 Business segments 28

Business segments	30	Functional Materials & Solutions	50
Chemicals	32	Catalysts	52
Petrochemicals	34	Construction Chemicals	54
Monomers	36	Coatings	56
Intermediates	38	Performance Materials	58
Performance Products	40	Agricultural Solutions	60
Dispersions & Pigments	42	Crop Protection	62
Care Chemicals	44	Oil & Gas	64
Nutrition & Health	46	Other	70
Performance Chemicals	48		

3 Financials 71

BASF on the capital market	72	Financing	77
Business review by segment	74	Ten-year summary	78
Regional results	75	Investor Relations team	80
Factors influencing sales and sensitivities	76		

1

BASF Group

At a glance	4
Management Board	6
Corporate governance and compliance	8
Working at BASF	9
Strategy	10
Corporate strategy	10
Innovation	12
Portfolio management	16
Investments	20
Operational excellence	21
Verbund concept	22
Sustainability	24
Goals	26

At a glance

Verbund concept

Intelligent networking of production, technologies, employees and partners

In 80+ countries

Employees contribute to our success and that of our customers worldwide

Broad portfolio

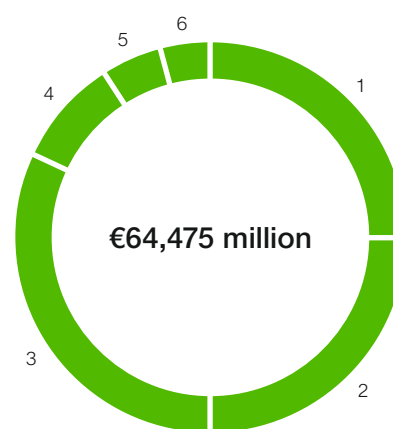
5 segments
13 operating divisions
86 strategic business units

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 115,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is arranged into five segments: Chemicals, Performance Products, Functional Materials & Solutions, Agricultural Solutions and Oil & Gas.

Well-balanced portfolio

Percentage of sales in 2017

1	Chemicals	– Petrochemicals – Monomers – Intermediates	25%
2	Performance Products	– Dispersions & Pigments – Care Chemicals – Nutrition & Health – Performance Chemicals	25%
3	Functional Materials & Solutions	– Catalysts – Construction Chemicals – Coatings – Performance Materials	32%
4	Agricultural Solutions	– Crop Protection	9%
5	Oil & Gas	– Oil & Gas	5%
6	Other		4%



Key figures

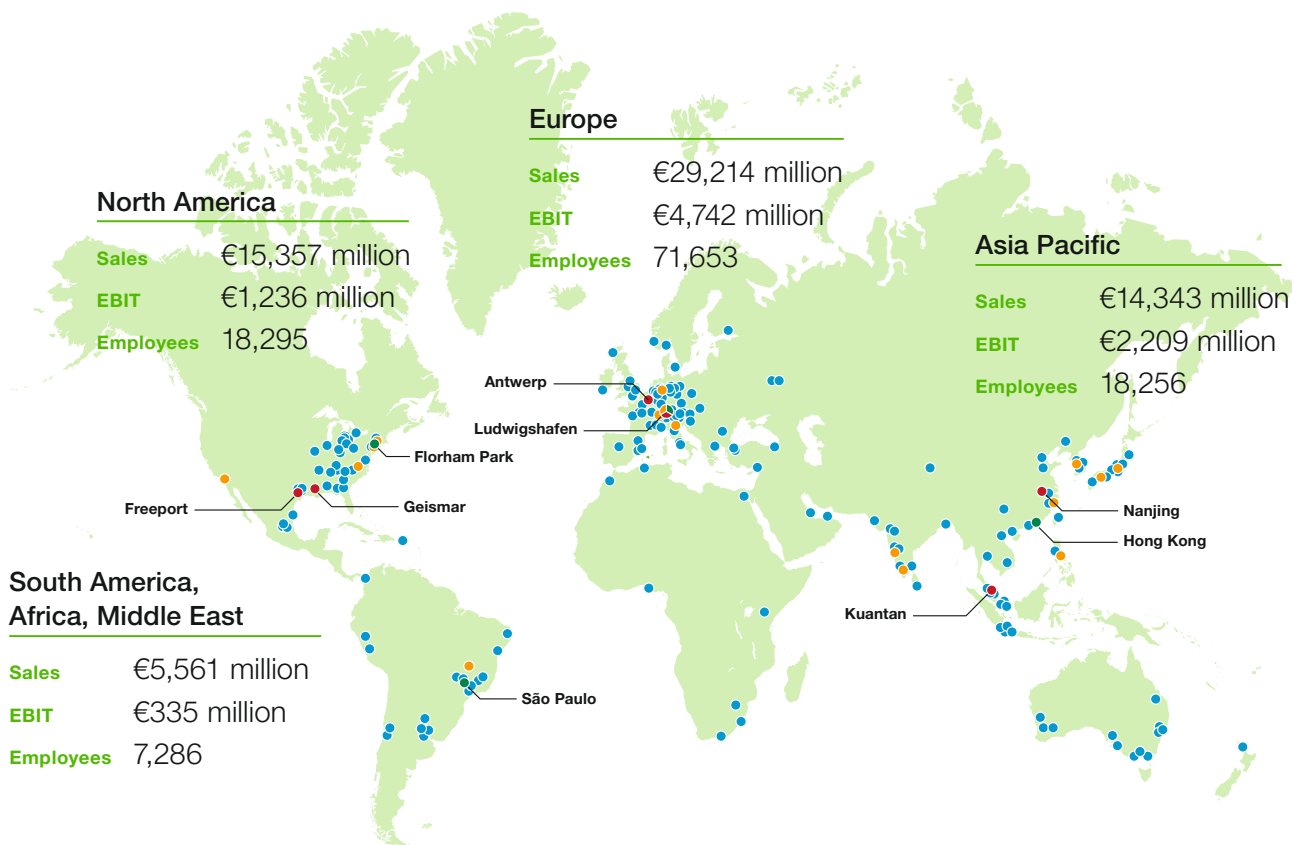
Million €	2013	2014	2015	2016	2017
Sales	73,973	74,326	70,449	57,550	64,475
Income from operations before depreciation and amortization (EBITDA)	10,432	11,043	10,649	10,526	12,724
Income from operations (EBIT) before special items	7,077	7,357	6,739	6,309	8,328
Income from operations (EBIT)	7,160	7,626	6,248	6,275	8,522
Net income	4,792	5,155	3,987	4,056	6,078
EBIT after cost of capital	1,768	1,368	194	1,136	2,727
Earnings per share (EPS)	€ 5.22	€ 5.61	€ 4.34	€ 4.42	€ 6.62
Adjusted earnings per share (EPS)	€ 5.31	€ 5.44	€ 5.00	€ 4.83	€ 6.44
Dividend per share	€ 2.70	€ 2.80	€ 2.90	€ 3.00	€ 3.10
Dividend yield ¹	% 3.5	% 4.0	% 4.1	% 3.4	% 3.4
Cash provided by operating activities	8,100	6,958	9,446	7,717	8,785
Free cash flow	3,227	1,662	3,634	3,572	4,789

¹ Based on year-end share price

Key facts

- Approximately 115,000 employees worldwide – including around 10,000 in research and development
- Customers in nearly all countries and virtually all industries
- Top three market positions in about 75% of our business areas
- Unique Verbund concept: production plants linked intelligently to save resources and energy; six world-scale Verbund sites around the globe
- Know-How Verbund with about 600 excellent universities, research institutes and companies; around 3,000 research projects with customers, academia and partners; around 800 new patents filed in 2017

Regional footprint 2017



Sales by industry

> 20%	10–20%	5–10%	< 5%
<ul style="list-style-type: none"> ▪ Chemicals and plastics 	<ul style="list-style-type: none"> ▪ Consumer goods ▪ Transportation 	<ul style="list-style-type: none"> ▪ Agriculture ▪ Construction ▪ Energy and resources 	<ul style="list-style-type: none"> ▪ Health and nutrition ▪ Electronics

Management Board

<p>Board of Executive Directors</p> <p>Manages company and represents BASF SE in business with third parties</p>	<p>Supervisory Board</p> <p>Appoints, monitors and advises Board of Executive Directors</p>	<p>Shareholders</p> <p>Exercise rights of co-administration and supervision at Annual Shareholders' Meeting</p>
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Board of Executive Directors of BASF SE



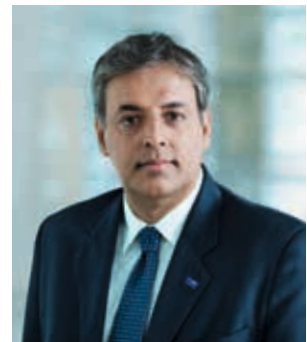
Dr. Martin Bruder Müller
 Chairman of the Board of Executive Directors and Chief Technology Officer
 57 years old, 30 years at BASF
 Responsibilities:
 Legal, Taxes, Insurance & Intellectual Property; Corporate Development; Corporate Communications & Government Relations; Senior Executive Human Resources; Investor Relations; Compliance; BASF 4.0; Corporate Technology & Operational Excellence; Digitalization in R&D; Innovation Management



Dr. Hans-Ulrich Engel
 Vice Chairman of the Board of Executive Directors and Chief Financial Officer
 59 years old, 30 years at BASF
 Responsibilities:
 Finance; Oil & Gas; Procurement; Supply Chain Operations & Information Services; Corporate Controlling; Corporate Audit



Saori Dubourg
 46 years old, 21 years at BASF
 Responsibilities:
 Construction Chemicals; Crop Protection; Bioscience Research; Region Europe



Sanjeev Gandhi
 51 years old, 24 years at BASF
 Responsibilities:
 Petrochemicals; Monomers; Intermediates; Greater China & Functions Asia Pacific; South & East Asia, ASEAN & Australia/New Zealand



Michael Heinz
 Industrial Relations Director
 54 years old, 34 years at BASF
 Responsibilities:
 Engineering & Maintenance; Environmental Protection, Health & Safety; European Site & Verbund Management; Human Resources



Dr. Markus Kamieth
 47 years old, 19 years at BASF
 Responsibilities:
 Dispersions & Pigments; Care Chemicals; Nutrition & Health; Performance Chemicals; Advanced Materials & Systems Research; BASF New Business; Region South America



Wayne T. Smith
 58 years old, 14 years at BASF
 Responsibilities:
 Catalysts; Coatings; Performance Materials; Market & Business Development, Site & Verbund Management North America; Regional Functions & Country Platforms North America; Process Research & Chemical Engineering

Supervisory Board of BASF SE

Shareholder representatives		Employee representatives	
<p>Dr. Jürgen Hambrecht Chairman of the Supervisory Board of BASF SE Former Chairman of the Board of Executive Directors of BASF SE</p>	<p>Michael Diekmann Vice Chairman of the Supervisory Board of BASF SE Chairman of the Supervisory Board of Allianz SE</p>	<p>Sinischa Horvat Vice Chairman of the Supervisory Board of BASF SE Chairman of the Works Council of the Ludwigshafen site of BASF SE and of BASF's Joint Works Council</p>	<p>Roland Strasser Regional Manager of the Rhineland-Palatinate/Saarland branch of the Mining, Chemical and Energy Industries Union (IG BCE)</p>
<p>Dame Alison J. Carnwath DBE Senior Advisor Evercore Partners</p>	<p>Franz Fehrenbach Chairman of the Supervisory Board of Robert Bosch GmbH</p>	<p>Tatjana Diether Member of the Works Council of the Ludwigshafen site of BASF SE</p>	<p>Denise Schellemans Full-time trade union delegate at BASF Antwerpen N.V.</p>
<p>Prof. Dr. François Diederich Professor at the Swiss Federal Institute of Technology, Zurich, Switzerland</p>	<p>Anke Schäferkordt Member of the Executive Board of Bertelsmann SE & Co. KGaA Chief Executive Officer of Medien-gruppe RTL Deutschland GmbH</p>	<p>Waldemar Helber Deputy Chairman of the Works Council of the Ludwigshafen site of BASF SE</p>	<p>Michael Vassiliadis Chairman of the Mining, Chemical and Energy Industries Union (IG BCE)</p>

For further information, please refer to basf.com/share/supervisory-board

Two-tier management system of BASF SE

Board of Executive Directors



7 members

appointed by the Supervisory Board

Chairman

appointed by the Supervisory Board



Supervisory Board



12 members

6 shareholder representatives elected at the Annual Shareholders' Meeting and 6 employee representatives

Chairman

elected by the Supervisory Board

Corporate governance and compliance

<p>Code of Conduct</p> <p>Forms core of our Compliance Program</p>	<p>More than 33,500</p> <p>Participants in compliance training</p>	<p>75 audits</p> <p>Conducted internally on compliance</p>
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Our Group-wide Compliance Program aims to ensure adherence to legal regulations and the company’s internal guidelines. This topic has been integrated into our “We create chemistry” strategy. Our employee Code of Conduct firmly embeds these mandatory standards into day-to-day business. Members of the Board of Executive Directors are also expressly obligated to follow these principles.

Compliance Program and Code of Conduct

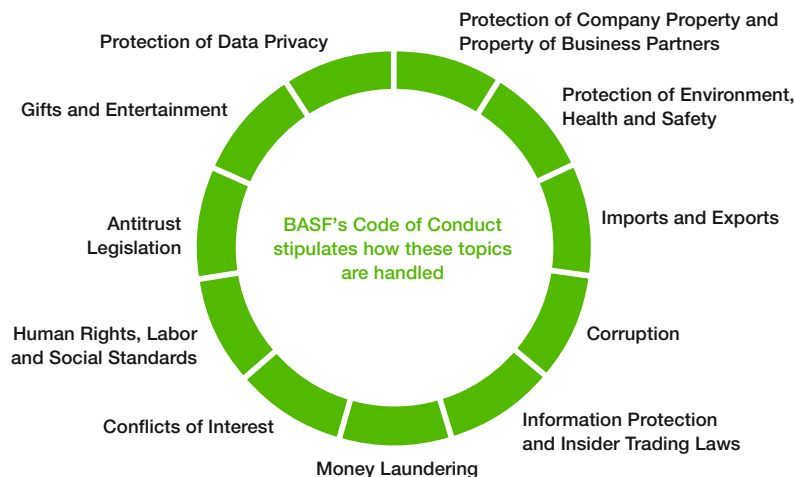
Based on international standards, BASF’s Compliance Program combines important laws and company-internal policies – often exceeding legal requirements – with external voluntary commitments to create a framework that regulates how all BASF employees interact with business partners, officials, colleagues and society. At the core of our Compliance Program is the global, standardized Code of Conduct received by every employee. All employees and managers are obligated to adhere to its guidelines, which describe our principles for proper conduct and cover topics ranging from corruption and antitrust laws to human rights, labor and social standards, conflicts of interest and trade control, and protection of data privacy.

Abiding by compliance standards is the foundation of responsible leadership. This has been expressly embedded in our values, where we state: “We strictly adhere to our compliance standards.” We are convinced that compliance with these standards will not only prevent the disadvantages associated with violations, such as penalties and fines; we also view compliance as the right path toward securing our company’s long-term success.

Our efforts are principally aimed at preventing violations from the outset. We perform systematic risk assessments to identify the risk of compliance violations, including corruption risks. These are conducted at division, regional and country level. The regular compliance audits performed by the Corporate Audit department are another source for the systematic identification of risks. These risks are documented in each risk or audit report. The same applies to specific risk minimization measures as well as the time frame for their implementation. One key element in the prevention of compliance violations is compulsory training and workshops held as classroom or online courses. All employees are required within a prescribed time frame to take part in basic compliance training, refresher courses and special tutorials dealing with, for example, antitrust legislation, taxes or trade control regulations. Course materials and formats are constantly updated, taking into account the specific risks of individual target groups and business areas. In total, more than 33,500 participants worldwide received around 54,000 hours of compliance training in 2017.

For further information, please refer to the BASF Report 2017, pages 135–136.

BASF’s Code of Conduct



Working at BASF

115,490

Employees
around the world

Life-long learning

On center stage

3,103

Apprentices¹ in
around 50 occupations

Our employees are key to implementing the “We create chemistry” strategy. We want to attract and retain talented people for our company and support them in their development. To do so, we cultivate a working environment that inspires and connects people. It is founded on inclusive leadership based on mutual trust, respect and dedication to top performance.

Strategy

The Best Team Strategy is derived from our corporate strategy and plays a key role in achieving our goals. We want to form the best team. To achieve this, we focus on three strategic directions: excellent people, excellent place to work and excellent leaders. Emphasis is placed on our attractiveness in worldwide labor markets, personal and professional development, life-long learning, and supporting and developing our leaders. We are committed to complying with internationally recognized labor and social standards worldwide. In addition, BASF reacts early to external trends and challenges such as a rapidly changing environment, particularly due to the digitalization of work.

Number of employees

At the end of 2017, BASF had 115,490 employees (2016: 113,830); of these, 3,103 were apprentices (2016: 3,120). The higher headcount was primarily due to the acquisitions of Grupo Thermotek, Monterrey, Mexico; Rolic AG, Allschwil, Switzerland; and the western European building material business for professional users from the Henkel group.

BASF Group employees by region

	December 31, 2017	%
Europe	71,653	62.1
Thereof Germany	54,020	46.8
North America	18,295	15.8
Asia Pacific	18,256	15.8
South America, Africa, Middle East	7,286	6.3

The BASF Group hired 8,916 new employees in 2017. The average percentage of employees who resigned during their first three years of employment was 1.3% worldwide in 2017. This turnover rate was 0.7% in Europe, 1.9% in North America, 3.0% in Asia Pacific and 2.1% in South America, Africa, Middle East. Our early turnover rate is therefore at a desirable low level.

Compensation and benefits

We want to attract committed and qualified employees, retain them and motivate them to achieve top performance with an attractive package including market-oriented compensation, individual development opportunities and a good working environment. Our employees' compensation is based on market-, position- and performance-related global compensation principles. By linking compensation to both company and individual performance, employees can participate in the company's success and be rewarded for their individual performance. As a rule, compensation comprises fixed and variable components as well as benefits that often exceed legal requirements. In many countries, these include company pension benefits, supplementary health insurance and share programs. We regularly review our compensation systems at local and regional levels.

BASF Group personnel expenses (million €)

	2017	2016	Change in %
Wages and salaries	8,471	8,170	3.7
Social security contributions and expenses for pensions and assistance	2,139	1,995	7.2
Thereof for pension benefits	705	627	12.4
Total personnel expenses	10,610	10,165	4.4

In 2017, the BASF Group spent €10,610 million on wages and salaries, social security contributions and expenses for pensions and assistance (2016: €10,165 million). Personnel expenses thus rose by 4.4%. As well as wage and salary increases, this was primarily attributable to a higher average headcount following the acquisition of Chemetall in December 2016. The partial release of provisions for the long-term incentive program and currency effects had an offsetting effect.

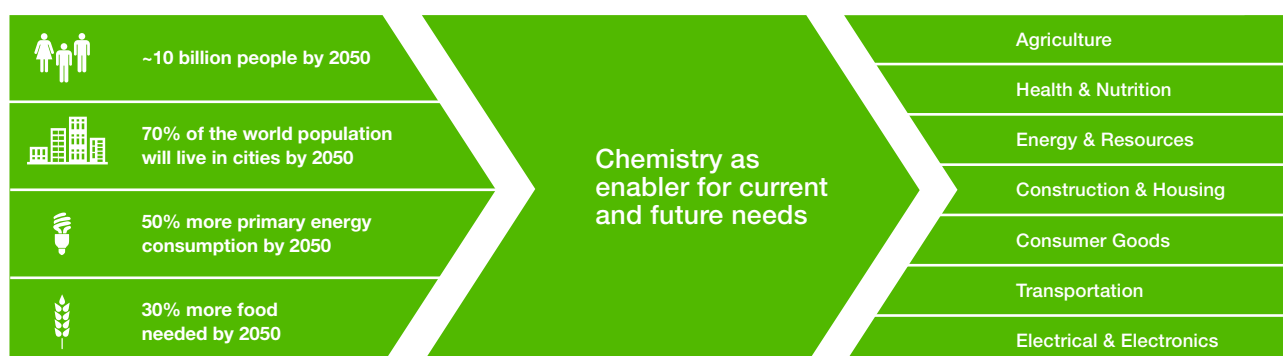
¹ At BASF, the apprenticeship program trains students for technical, scientific and business vocations as well as for trade and craft professions.

Strategy

Corporate strategy

With the “We create chemistry” strategy, BASF has set itself ambitious goals. We want to contribute to a sustainable future and have embedded this into our corporate purpose: “We create chemistry for a sustainable future.”

Chemicals – a growth industry



Chemistry is an enabler for solutions to the current and future needs of our society. While the world’s population and its demands will keep growing, the planet’s resources are finite. In order to protect our planet and to cope with the resources it provides us, the way people live has to become more sustainable. Chemistry will provide the products and technologies that will enable us to consume less input materials, be more efficient and produce better products for everyone.

We assume that global chemical production (excluding pharmaceuticals) will grow slightly faster than global gross domestic product over the next five years and be slightly below the previous five-year average. Through our market-oriented and broad portfolio, which we will continue to strengthen through investments in new production capacities, research and development activities and acquisitions, we aim to grow sales slightly faster than global chemical production. Should global economic growth unexpectedly decelerate, we would still expect our growth to be above the market average as a result of our high degree of diversification.

Our priorities

We aim to grow sales and earnings faster than global chemical production in the coming years, driven by:

- Innovations for a sustainable future
- Portfolio management
- Investments in organic growth
- Operational excellence

Innovations for a sustainable future

Innovations in chemistry are indispensable to meeting the needs of the growing world population on a long-term basis. The development of innovative products and solutions is, therefore, of vital significance for BASF. In the long term, we aim to continue to significantly increase sales and earnings with new and improved products. Effective and efficient research lays the foundation for this. We believe that the digitalization in research offers great potential and are driving this forward around the world.

We are engaged in intensive research and development activities in our established business areas. One focus of our research is on the enhancement and innovative application of specific key technologies. They pool the diverse competencies of our international Research and Development Verbund to strengthen our competitive ability in the long term. In addition, we are addressing clearly defined topics to drive forward innovation in new business fields and with new technologies above and beyond the current focus areas of our divisions. We are also working on overarching projects with high technological, social or regulatory relevance. With our research, we aim to make a decisive contribution to innovative solutions for global challenges and contribute to sustainable development.

Our three global technology platforms are based in our key regions – Europe, Asia Pacific and North America. We want to continue expanding our research and development activities on a global level. Our stronger research and development presence in key markets opens up new opportunities to find appropriate solutions for regional markets, actively participate in worldwide innovation processes and gain access to talent.

Portfolio management

We continue to develop our portfolio through acquisitions and have defined a set of strategic criteria. We want to acquire businesses which generate profitable growth above the industry average. They should be innovation-driven, offer a special value proposition to customers and reduce earnings cyclicality for the BASF Group. Acquisitions also have to fulfill our strict financial criteria. They should be EPS accretive by year three at the latest and should provide a return on investment above the WACC. The minimum hurdle rate increases if the acquisition is made in countries which belong to a higher risk category.

Investments in organic growth

By investing in our production plants, we create the conditions for our desired growth while constantly improving the efficiency of our processes. In the years 2011 to 2015, we increased our capital expenditures while at the same time reducing our spending on acquisitions. In 2015, capital expenditures peaked at over €5 billion. With several large projects in place, we are now ramping down capital expenditures to levels slightly above depreciation. In 2017, we invested €4.0 billion in property, plant and equipment. For the period from 2018 to 2022, we have planned investments in property, plant and equipment¹ totaling €19.0 billion. In the differentiated commodity businesses, we will invest in new assets where we benefit either from proprietary technologies or Verbund advantages. In the specialties and solutions businesses, we will build plants to accompany the growth of innovative products. Furthermore, we will continue to broaden our regional base.

¹ Excluding additions to property, plant and equipment resulting from acquisitions, capitalized exploration, restoration obligations and IT investments

Operational excellence

In recent years, we have further improved our operational excellence. Our current program, called DrivE, will enhance efficiency. It runs from 2016 to 2018 and aims to achieve a yearly earnings contribution of €1 billion from the end of 2018 onward (baseline 2015). DrivE includes efficiency measures in production, engineering, maintenance, logistics, procurement and administration. With around €850 million in earnings contributions at the end of 2017 (run rate), DrivE is well on track. By the end of 2018, we are confident of achieving the targeted run rate of €1.0 billion.

Financial targets for the coming years

Sales growth

Slightly faster than global chemical production

EBITDA growth

Well above global chemical production

Deliver attractive returns

Earn a significant premium on cost of capital

Remain a strong cash provider

Continuously generate high levels of free cash flow

Progressive dividend policy

We want to grow or at least maintain our dividend

In 2018, the global economy is expected to grow by 3.0%, about as fast as in 2017 (+3.1%). We expect economic momentum in the European Union to ease slightly. The United States will presumably grow at a slightly stronger rate. We anticipate a weakening of the high growth in China. This will probably negatively impact the Japanese economy as well. We forecast a continuation of the recovery already underway in Brazil and Russia. Global chemical production is forecast to grow by 3.4% in 2018, roughly at the same rate as in 2017 (+3.5%). For 2018, we predict an average price of \$65 per barrel for Brent crude oil and an exchange rate of \$1.20 per euro.

Innovation

A growing need for food, energy and clean water, limited resources and a booming world population – reconciling all these factors is the greatest challenge of our time. Innovations based on chemistry play a key role here, as they contribute decisively to new solutions. Effective and efficient research and development is a prerequisite for innovation as well as an important growth engine for BASF. We develop innovative processes and products for a sustainable future and drive forward digitalization in research worldwide. This is how we ensure our long-term business success with chemistry-based solutions for almost all sectors of industry.

For BASF, innovation is the key to successfully standing out from the competition in a challenging market environment. Our innovative strength is based on a global team of highly qualified employees with various specializations.

R&D expenses 2017 as percentage of sales

~3%

We had around 10,000 employees in research and development in 2017. Our three global technology platforms are run from our key regions – Europe, Asia Pacific and North America: Process Research & Chemical Engineering (Ludwigshafen, Germany), Advanced Materials & Systems Research (Shanghai, China) and Bioscience Research (Research Triangle Park, North Carolina). Together with the development units in our operating divisions, they form the core of our global Know-How Verbund. BASF New Business GmbH and BASF Venture Capital GmbH supplement this network with the task of using new technologies to tap into attractive markets and new business models for BASF.

In 2017, we generated sales of over €9 billion with products launched in the past five years that stemmed from research and development activities. In the long term, we aim to continue significantly increasing sales and earnings with new and improved products.

Global network in science and industry

Our global network of about 600 universities, research institutes and companies forms an important part of our Know-How Verbund. We collaborate with them in many different disciplines. For instance, we are working on innovative materials for electrochemical energy storage with the Karlsruhe Institute of Technology (KIT) at the BELLA (Battery and Electrochemistry Laboratory) joint laboratory.

In our excellence program UNIQUE – The BASF Academic Partnership Program, we are working with 15 leading universities around the world. BASF also runs four postdoctoral centers that pool collaborations with several research groups on a regional level. The North American Center for Research on Advanced Materials (NORA) and the California Research

Alliance (CARA) postdoctoral centers are located in the United States. The Joint Research Network on Advanced Materials and Systems (JONAS) postdoctoral center is active in Europe, while the Network for Asian Open Research (NAO) covers the Asia Pacific region.

Strategic focus

In 2017, our **research pipeline** comprised approximately 3,000 projects. **Expenses** for research and development amounted to around €1,888 million, just above the prior-year level (€1,863 million). The operating divisions accounted for 80% of total research and development expenses in 2017. The remaining 20% related to cross-divisional corporate research focusing on long-term topics of strategic importance to the BASF Group. We strive to maintain a high level of spending on research and development.

The needs of our customers are the starting point for chemistry-based innovations, requiring market-driven research and development. Creativity, efficiency and collaboration with external partners are among the most important success factors.

The aim of our **innovation approach** is to increase BASF's power of innovation and to secure our long-term competitiveness. We aim to achieve this by concentrating our research focus on topics that are strategically relevant for our business, strengthening our existing scientific processes and optimizing our organizational structures.

We continued to refine our innovation approach in 2017 and have identified additional, far-sighted topics that go above and beyond the current focus areas of our divisions to drive innovation in new business fields and with new technologies. We are also working on overarching projects that are relevant from a technological, societal or regulatory point of view. For example, we continued to work on the systematic application of digital technologies in research and development.

Our **global research and development** presence is vital to our success. We want to further advance our activities, particularly in Asia as well as in North America, and are adapting this to growth in regional markets. A stronger presence outside Europe creates new opportunities for developing and

expanding customer relationships and scientific collaborations as well as for gaining access to talented employees. This strengthens our Research and Development Verbund and makes BASF an even more attractive partner and employer.

In addition to the expanded Innovation Campus Shanghai which opened in 2015 (previously Innovation Campus Asia Pacific), we inaugurated the Innovation Campus Mumbai in 2017. The new Campus brings together existing and new research and development activities in Mumbai, India, under one roof, where up to 300 scientists focus on crop protection and process development.

The number and quality of our patents also attest to our power of innovation and long-term competitiveness. We filed around 800 new patents worldwide in 2017. We once again ranked among the leading companies in the Patent Asset Index, a method that compares patent portfolios across the industry.

R&D facts and figures 2017

- Around 10,000 employees worldwide in research and development
- Pipeline with around 3,000 projects
- Global Know-How Verbund with about 600 excellent universities, research institutes and companies
- Approximately 800 new patents filed

Digitalization

For BASF, digitalization presents great opportunities along the entire value chain. Using digital technologies and data, we are creating additional value, ranging from higher efficiency in our plants to accelerated innovation processes and innovative business models.

Research and development

Digital technologies have a rapidly expanding influence on research and development. Managing large quantities of data has become a decisive factor for future scientific and economic success. In BASF's digital approach, virtual modeling and computer simulation go hand in hand with physical experiments in the lab. Simulations help with the design of experiments and facilitate forecasting, while experiments deliver measurable results and evaluate the computer models. This results in a better understanding of chemical products and processes, and thus enables greater innovation in a shorter period of time. A key element is our new supercomputer "Curiosity," which was put into operation in October 2017 in Ludwigshafen. With 1.75 petaflops¹, it offers around 10 times the computing power that BASF previously had for scientific computing.

¹ One petaflop is equal to one thousand trillion (10¹⁵) operations per second.



Researchers around the world benefit from digitalization to effectively develop their creative ideas and to collaborate intensively with others. Knowledge systems enable quick assessments of BASF's pre-existing know-how, simulations compare different ideas and guide the costly experiments, and data science creates new insights from BASF's unique proprietary data. All this is integrated into the daily work of the researchers.

Manufacturing

There is significant potential to increase efficiency in manufacturing with digital applications. One example is predictive maintenance, which provides methods for detection and prediction of anomalies of critical production assets, based on big data analytics. With predictive maintenance, we reduce unexpected shutdowns and thus increase available capacity.

Supply chain

A tightly integrated and truly connected supply chain improves transparency, agility and speed. Most importantly, it enhances our supply chain service to our customers. Our global maritime and air shipments are now transparent thanks to the successful implementation of a global logistics visibility platform with connections to 600 carriers.

Business models

New technologies and data are helping us change the way we approach markets and collaborate with customers. We are creating new digital offerings, as well as gaining access to new customer groups. We have now developed 50 innovative digital business models and are currently launching the first ones in the market.

Innovations in the segments – examples

Research and development expenses 2017 by segment

1	Chemicals	7%
2	Performance Products	21%
3	Functional Materials & Solutions	23%
4	Agricultural Solutions	27%
5	Oil & Gas	2%
6	Corporate research, Other	20%



Chemicals

Our specialty monomers enable innovation in our customers' downstream applications. These include a new application with **tertiary butylacrylate (tBA)** in decorative paints. tBA is primarily used as a functional component in water-based exterior paints. Our customers can use tBA to formulate dispersions that improve the specific properties of their exterior paints – such as weathering and surface adhesion – without increasing production costs.

BASF's constant stream of new ideas has secured its position as the technology leader and largest supplier of hydrosulfites for over 100 years. These bleaching and reducing agents are used in paper production, for example. The new **Adlite®**, a hydrosulfite for the paper industry, testifies to our innovative strength. Adlite® improves the entire paper production process and makes it more flexible. It enables our customers to achieve a higher degree of whiteness with the same raw materials and in this way, manufacture higher quality paper. At the same time, Adlite® saves energy and mitigates the impact on the environment, resulting in lower wastewater residues.

Performance Products

Acronal® 6292 is a new styrene acrylic binder that enables the production of more environmentally friendly scrub resistant interior wall paints. The polymer's high pigment binding power also means that less binder is required to produce a scrub resistant paint. This offers a cost advantage for paint manufacturers. Acronal® 6292 can also be used to produce low-emission paints without biocides – preservatives needed to prevent bacterial growth in traditional water-based paints.

Pronovum is a new BASF technology in the area of omega-3 food supplements. Intake of omega-3 can help improve consumers' coronary and cognitive health. Independent studies have shown that the body processes omega-3 fatty acids formulated with Pronovum four times better than conventional, highly concentrated omega-3 fatty acids in the form of the chemical compound ethyl ester. Pronovum is a patented mixture of omega-3 oils in a new formulation that can be accessed much better by digestive enzymes.

Functional Materials & Solutions

Thanks to the biomass balance method developed by BASF, we are able to flexibly replace fossil resources in our current Verbund system with sustainably generated bio-based raw materials by feeding biogas and bionaphtha directly into the value chain at the very beginning. The first **biomass-balanced products** have now been introduced in the area of automotive refinish coatings. The share of raw materials replaced by renewable raw materials in the Production Verbund is allocated to certain refinish coating products according to certified methods. Coatings in this category add ecological value by saving on fossil-based raw materials while maintaining their usual qualities.

Refineries use fluid catalytic cracking (FCC) catalysts to extract high-value products such as gasoline, diesel or liquid gas from the residues of crude oil distillation. **Borocat®**, our new generation of FCC catalysts, increases the yield of valuable hydrocarbons – especially from heavy crude oil with metal contaminants. The metals contained in crude oil present a particular challenge to further processing. Our new boron-based catalyst technology hampers chemical by-reactions so that up to 25% less hydrogen is produced. This enables refineries to process heavier, more contaminated crude oil and use these resources more efficiently.

Agricultural Solutions

Our well-stocked innovation pipeline comprises products with a launch date between 2017 and 2027. The first market launches of **Revysol®**, our new fungicide, are scheduled for the 2019 growing season following registration with the relevant authorities. A new herbicide with a unique mode of action to control key weeds in cereal should come on the market in 2019. The market introduction of the new insecticide **Inscalis®** to combat piercing-sucking pests is planned for 2018. Another new insecticide, **Broflanilide**, which helps farmers control chewing insects like potato beetles and caterpillars in specialty and field crops, should be on the market from 2020. In Functional Crop Care, we are pushing ahead with the market introduction of **Velondis®**, a biological fungicide for seed treatment. This is planned for 2018.

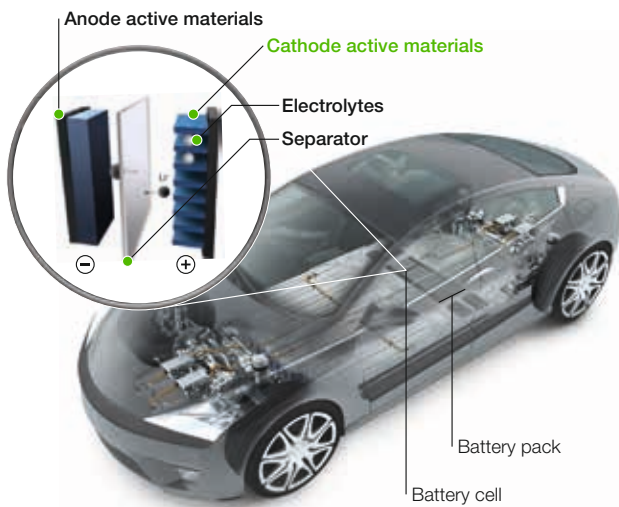
Growth opportunity battery materials

The global automotive industry is undergoing a fundamental shift from traditional vehicles, powered solely by internal combustion engines, towards electrified power train concepts that include hybrid cars and battery electric vehicles.

BASF is the largest chemicals supplier to the automotive industry, with €11.4 billion in sales in 2017 and leading market positions in OEM coatings, engineering plastics and mobile emissions catalysts. Given its unmatched access to OEMs and their tier suppliers, BASF is ideally positioned to leverage its strong technology position and global reach to serve the fast-growing demand for battery materials.

Technology focus on cathode active materials

In battery materials, BASF's focus is on high-energy cathode active materials. In this area, innovation in chemistry has the biggest potential to improve battery performance. Electromobility triggers demand for batteries with improved performance. The key parameters are energy density, reliability, safety and cost. Innovative cathode active materials, where BASF has a strong intellectual property and technology portfolio, can help pave the way towards higher performance batteries and thus enable the success of electromobility.



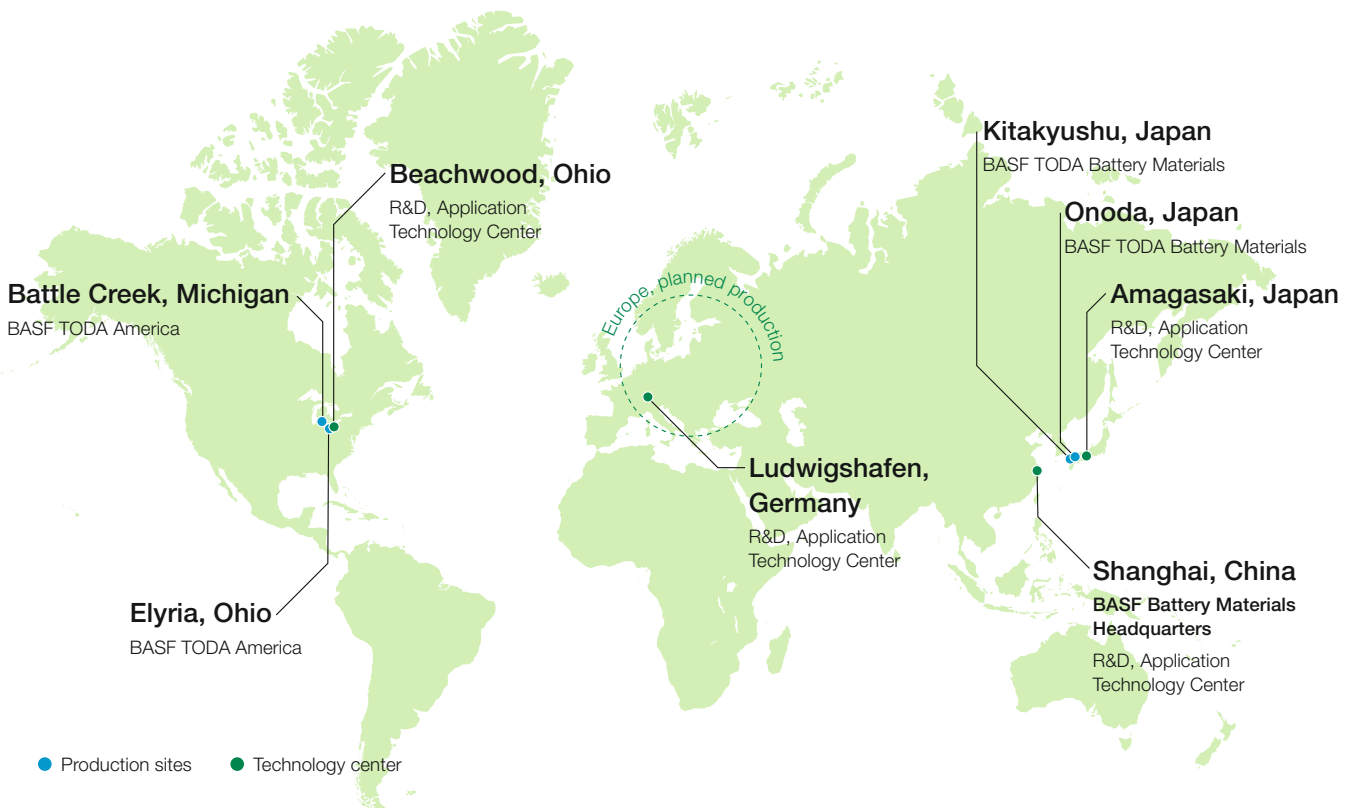
Business and future growth

Headquartered in Shanghai, BASF's business unit battery materials generates annual sales in the triple-digit million euro range. Market estimates concerning the future growth of electromobility cover a wide range. BASF anticipates that electromobility applications will cause demand for cathode active materials to roughly quadruple compared with 2016 to reach ~400,000 metric tons in 2020. By 2025, we expect this demand to increase to 600,000–900,000 metric tons, equating to a market value of between €18 billion and €24 billion.

Asset network

A growing network of R&D and production assets in all major regions – Asia Pacific, Europe, North America – enables BASF's business growth in battery materials. To complement its own assets, BASF has entered a collaboration with TODA KOGYO. The partners jointly established two BASF majority-owned and controlled companies, BASF TODA Battery Materials LLC in Japan and BASF TODA America LLC in the United States. Founded in 2015 with a focus on Asia Pacific, BASF TODA Battery Materials tripled its capacity at the Onoda site in Japan in 2017. BASF TODA America combines BASF's and TODA KOGYO's North American production assets and was established in March 2018. BASF continues to look into opportunities for further expansion of its global asset footprint and has announced its intention to invest up to €400 million to build industry-leading production plants for cathode materials in Europe.

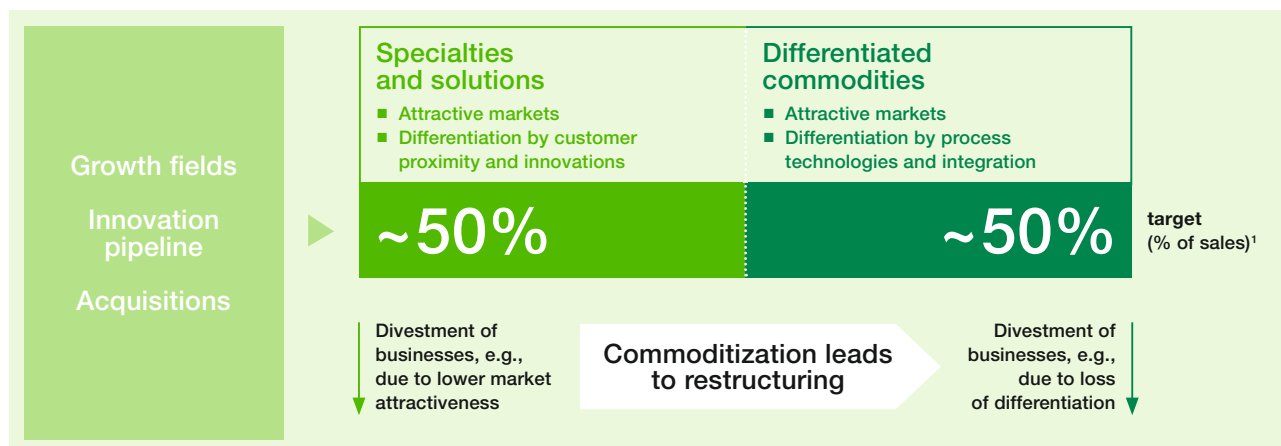
BASF battery materials – global presence



Portfolio management

BASF actively manages its portfolio. In recent years, we have continuously optimized our portfolio through acquisitions, divestitures and partnerships.

Maintaining a balanced portfolio



¹ Excluding Oil & Gas sales

Maintaining a balanced portfolio

Our portfolio consists of two primary businesses: specialties and solutions as well as differentiated commodities.

Specialties and solutions

In the specialties and solutions product lines, we operate in growing markets that are driven by innovations and customers' willingness to pay for customized product solutions. We often enter into partnerships with customers to jointly develop innovations which help them optimize their processes and applications. Typical examples for such products are crop protection products, battery materials or BASF's Infinergy® material, which was jointly developed with our customer adidas.

Differentiated commodities

In commodities, we focus on growing and structurally sound markets. We stand out from our competition by producing under highly competitive conditions, driven by best-in-class technologies and Verbund benefits. A good example is acrylic acid. In this established product class, we were able to improve the production process, leading to a superior cost position. We have protected our competitive edge with patents for the advanced acrylic acid process.

In recent years, we have seen an increasing trend towards the commoditization of numerous products. In order to maintain the balance between specialties and commodities, we will continue to actively manage our portfolio. Through our growth fields, our innovation pipeline and acquisitions, we will add new specialty and solutions businesses to BASF's

portfolio. As in the past, we will also look for better owners of both commodity and specialty businesses that only provide a low strategic fit.

Active portfolio management

Since 2010, we have divested businesses with sales of around €21.1 billion. These were mainly activities with only a limited strategic fit or minor differentiation potential. This includes the gas trading and storage business that contributed €10.1 billion to sales in 2015, as well as divestitures of polyolefin catalysts and industrial coatings. On the other hand, we acquired growing and innovation-driven businesses with sales of around €5.5 billion. Most of the acquired businesses complement our portfolio, helping to improve our position in the relevant markets. Our latest major addition was the acquisition of Chemetall, a global leader in surface treatment products and services.

Strategic acquisition criteria

We want to acquire businesses which

- generate profitable growth above the industry average
- are innovation-driven
- offer a special value proposition to customers
- reduce earnings cyclicality

Financial acquisition criteria

We want to acquire businesses which

- provide a return on investment above the WACC
- are EPS accretive by year three at the latest

Active portfolio management



¹ Including transactions that were closed by May 2018

On May 3, 2018, **BASF and Solenis** announced that they had signed an agreement to join forces by combining BASF's paper wet-end and water chemicals business with Solenis. Solenis is a global producer of specialty chemicals for water intensive industries. The combined business had pro forma sales of around €2.4 billion and around 5,000 employees in 2017. BASF will hold a 49% share of the combined entity, which will operate under the Solenis name and be headquartered in Wilmington, Delaware. 51% of the shares will be held by funds managed by Clayton, Dubilier & Rice. Pending approval by the relevant authorities, closing is anticipated for the end of 2018 at the earliest.

On April 26, 2018, **BASF and Bayer** announced the signing of an agreement on the acquisition of additional businesses and assets by BASF, which Bayer offered to divest in the context of its planned acquisition of Monsanto. The expanded scope includes Bayer's entire vegetable seeds business, operating under the global trademark Nunhems®, as well as seed treatment products sold under the Poncho®, VOTiVO®, COPeO® and ILeVO® brands. The transaction also includes the R&D platform for hybrid wheat, the digital farming platform xarvio™ and further businesses and research projects. On October 13, 2017, BASF had signed an agreement on the acquisition of the global glufosinate-ammonium non-selective herbicide business, the seeds businesses for key row crops in select markets and trait research and breeding capabilities for these crops along with the LibertyLink® trait and trademark. The transactions, with combined 2017 sales of €2.2 billion, complement BASF's crop protection business and biotechnology activities, adding new capabilities and opportunities for growth and innovation. The all-cash purchase price for the combined acquisition is €7.6 billion, subject to certain adjustments at closing. In 2016, the combined businesses generated EBITDA

of €550 million (on a pro forma adjusted basis). The transactions remain subject to the approval by further authorities. We expect to close our acquisition in the second or third quarter of 2018.

On December 7, 2017, we signed a letter of intent with the LetterOne group on the merger of our respective oil and gas businesses, including BASF's gas transportation business, in a joint venture, which would operate under the name **Wintershall DEA**. BASF would initially hold 67% and LetterOne 33% of the shares in Wintershall DEA.² Following the closing of the transaction, we expect to account for our interest in the joint venture using the equity method in the Consolidated Financial Statements. In the medium term, BASF and LetterOne aim to list Wintershall DEA on the stock markets by way of an initial public offering. The definitive transaction agreements are to be negotiated over the coming months. There is no assurance that we will reach an agreement with LetterOne and that the intended transaction will be consummated.

On September 18, 2017, we signed an agreement with Solvay on the acquisition of **Solvay's global polyamide business**. The aim is to close the transaction in the third quarter of 2018 after regulatory approvals have been obtained and the consent of a joint venture partner has been received. The acquisition would complement our engineering plastics portfolio and expand our position as a solutions provider for the transportation, construction and consumer goods industries as well as for other industrial applications. The purchase price excluding adjustments is €1.6 billion.

² BASF's gas transportation business is not included in this shareholding ratio. As of closing, Wintershall DEA would issue a mandatory convertible bond to BASF reflecting the value of BASF's gas transportation business.

Example: Integration of Chemetall into BASF's Coatings division

A leading global supplier of surface treatment technologies with a strong focus on profitable growth



When BASF acquired Chemetall in December 2016, it became part of BASF's Coatings division. With this acquisition, we supplemented our portfolio with tailor-made technology and system solutions for surface treatment.

Key facts

- Globally leading in surface treatment technologies
- Number of customers: ~35,000
- Continued growth above GDP
- Production sites: more than 20, located close to customers (including joint ventures)
- Employees: ~2,500 globally

Chemetall was founded in 1881, as part of Metallgesellschaft, in Frankfurt am Main, Germany. The company developed organically over time through continuous investments and process optimization as well as several acquisitions. It has a long-standing record of growth well above GDP. Today, Chemetall is a leading global provider of surface treatment solutions. It differentiates itself through strong market and technical expertise.

Customized technology and system solutions for surface treatment are offered to protect metals from corrosion, facilitate forming and machining, allow parts to be optimally prepared for the painting process and ensure proper coating adhesion. These solutions are used in a wide range of industries such as automotive, aerospace, coil production and metal forming.

Over the past years, Chemetall developed a comprehensive portfolio of advanced and eco-friendly products. These products are tailored to support specific steps in the production processes of its customers:

- Corrosion inhibitors and conversion coatings as metal pretreatment
- Cleaners for metals and plastics
- Sealants for aerospace solutions
- Lubricants for metal forming
- Metal working fluids for cutting and grinding
- Non-destructive testing solutions for material control

Chemetall's business strategy is built on cultivating long-term, strong customer relationships. The ambition is to be the partner of choice through expertise, service, reliability and dedication to serve customers' needs. Chemetall's integrated solutions enable customers to make their processes more productive and environmentally sound. As a global company with a decentralized production and sales footprint, Chemetall is able to deliver products, expertise and services to customers worldwide.

The integration of Chemetall's business into BASF's Coatings division is proceeding according to plan. Sales to third parties are growing consistently following the acquisition. All business areas contribute to this positive development.

The chosen integration concept builds on the strengths of Chemetall: It keeps the decentralized company structure to maintain high customer proximity and flexibility, and promotes its renowned brand together with the BASF corporate brand. At the same time, Chemetall benefits from the integration into some of BASF's global functions, such as procurement, finance and IT. BASF's Responsible Care Management System will be introduced to ensure adherence to BASF's global EHS standards.

With the integration into BASF's Coatings division, we aim to realize growth synergies. Several projects have already been launched. We are beginning to reap benefits from incor-

porating Chemetall's expertise into BASF's Know-How Verbund. Key focus areas for joint technological development include the interaction of e-coat and pre-treatment, corrosion protection, innovative sealants, polymer technologies, surfactants and analytical techniques. By combining the expertise of BASF's OEM coatings business and Chemetall's experience in e-coat applications, we aim to increase our market penetration.



Products and solutions for a wide range of customer industries

Target customer industry	Percentage of sales	Solution offerings
General industry	~30%	Broad portfolio of specialty chemicals to machine, form, pretreat and protect steel, aluminum, galvanized steel, magnesium and for the cleaning and conditioning of plastic substrates
Automotive	~30%	Technologies for multi-metal applications (e.g., steel, aluminum), including cleaners, conversion coatings, activating and passivating agents, inhibitors and maintenance chemicals
Aerospace	~15%	Sealants, sealant removers, non-destructive testing products and equipment, corrosion protection, cleaners, pretreatment and paint strippers for airframe, aircraft operation and aero-engine applications
Coil production	~10%	A variety of products for coil coating and galvanizing processes to produce pre-painted metal sheets used in automotive, architectural, construction, electrical and packaging industries
Metal forming	~10%	High-performing technologies for high-strength materials, complex forming operations and high surface-quality products
Other	~5%	Including products for aluminum finishing and glass treatment

Investments

Investments make a decisive contribution toward achieving our ambitious growth goals. By investing in our plants, we create the conditions for our desired growth while constantly improving the efficiency of our production processes. Investments are prepared by interdisciplinary teams and assessed using diverse criteria. In this way, we ensure that economic, environmental and social concerns are included in strategic decision-making.

In 2017, we invested €4,020 million in property, plant and equipment. Total investments were therefore €202 million lower than in the previous year and €434 million above the level of depreciation¹ in 2017. Our investments in 2017 focused on the Chemicals, Functional Materials & Solutions and Oil & Gas segments.

In Europe, we largely concluded the investment in our integrated TDI complex at the Ludwigshafen site. We will strengthen the Ludwigshafen Verbund site by replacing our acetylene plant, which occupies a central role for many products and value chains, with a modern, highly efficient plant by 2019. We are also constructing another production plant for special zeolites in Ludwigshafen. Special zeolites are used to produce state-of-the-art exhaust catalysts for commercial vehicles and passenger cars with diesel engines. Production startup is scheduled for 2019. At the site in Antwerp, Belgium, we completed the technical retrofitting of the superabsorbent plant, where the superabsorbent products Saviva® and HySorb® can now be produced. The plant was started up at the end of 2017.

In North America, we constructed an ammonia production plant in Freeport, Texas, together with Yara International ASA, headquartered in Oslo, Norway. Startup of production was in April 2018. The expansion of the production facility for dicamba in Beaumont, Texas, is also complete and operational.

In Asia, we started up two large-scale plants in Shanghai, China, in 2017: one for chemical catalysts and another for automotive coatings together with our partner Shanghai Huayi Fine Chemical Co. Ltd., based in Shanghai, China. We built a new aroma ingredients complex at the integrated chemical site in Kuantan, Malaysia, together with our partner PETRONAS Chemicals Group Berhad, headquartered in Kuala Lumpur, Malaysia. It is in the ramp-up process for the individual products. In Gimcheon, South Korea, we are constructing a new plant for Ultraform® together with our partner Kolon Plastics Inc., headquartered in Gimcheon, South Korea. The new plant is scheduled for completion in 2018. With these investments, we are expanding our presence in Asia.

In the Oil & Gas segment, we invested primarily in field development projects in Argentina, Norway and Russia in 2017.

Investments in property, plant and equipment by segment, 2018–2022

1	Chemicals	25%
2	Performance Products	16%
3	Functional Materials & Solutions	19%
4	Agricultural Solutions	4%
5	Oil & Gas	18%
6	Other (infrastructure, R&D)	18%



Investments in property, plant and equipment by region, 2018–2022

1	Europe	54%
2	North America	19%
3	Asia Pacific	14%
4	South America, Africa, Middle East	8%
5	Alternative sites currently being investigated	5%



We are planning total capital expenditures of around €4.0 billion for the BASF Group in 2018. For the period from 2018 to 2022, we have planned investments in property, plant and equipment² totaling €19.0 billion. Projects currently being planned or underway include:

Capital expenditures: Selected projects

Location	Project
Geismar, Louisiana	Capacity expansion: MDI plant
Ludwigshafen, Germany	Replacement: acetylene plant
	Construction: production plant for vitamin A
	Construction: production plant for ibuprofen
Shanghai, China	Construction: production plant for plastic additives
Środa Śląska, Poland	Capacity expansion: plant for emissions catalysts

In the Oil & Gas segment, our currently planned investments of around €3.5 billion between 2018 and 2022 will focus mainly on the development of proven gas and oil deposits in Argentina, Norway and Russia. If the merger of our oil and gas activities with the business of DEA Deutsche Erdoel AG and its subsidiaries is consummated as intended, these expenditures will no longer be reported as investments by the BASF Group.

¹ Including impairments and reversals of impairments

² Excluding additions to property, plant and equipment resulting from acquisitions, capitalized exploration, restoration obligations and IT investments

Operational excellence

To remain competitive, we continuously improve our operations and reduce costs.

We constantly work on improving our sites, plants and production processes, and are implementing further restructuring and cost-cutting measures. At the same time, we enhance our operational excellence by harmonizing our business processes worldwide and improving their efficiency.

DrivE – targeted annual earnings contribution from the end of 2018 onward

~€1 billion

Our current program, called DrivE – Drive Efficiency, runs from 2016 to 2018 and aims to achieve a yearly earnings contribution of €1 billion from the end of 2018 onward (baseline 2015). DrivE includes efficiency measures in production, engineering, maintenance, logistics, procurement and administration. With around €850 million earnings contributions at the end of 2017 (run rate), DrivE is well on track. By the end of 2018, we are confident we will achieve the targeted run rate of €1 billion.

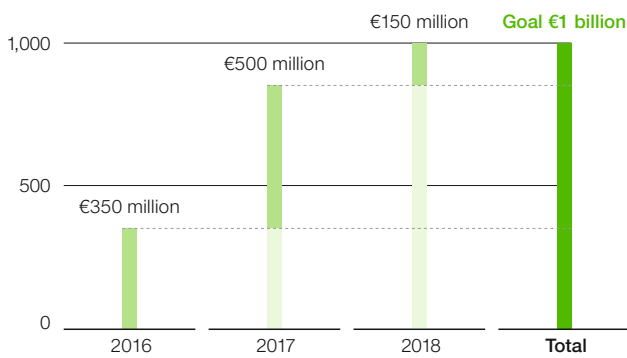


DrivE case study: process optimization

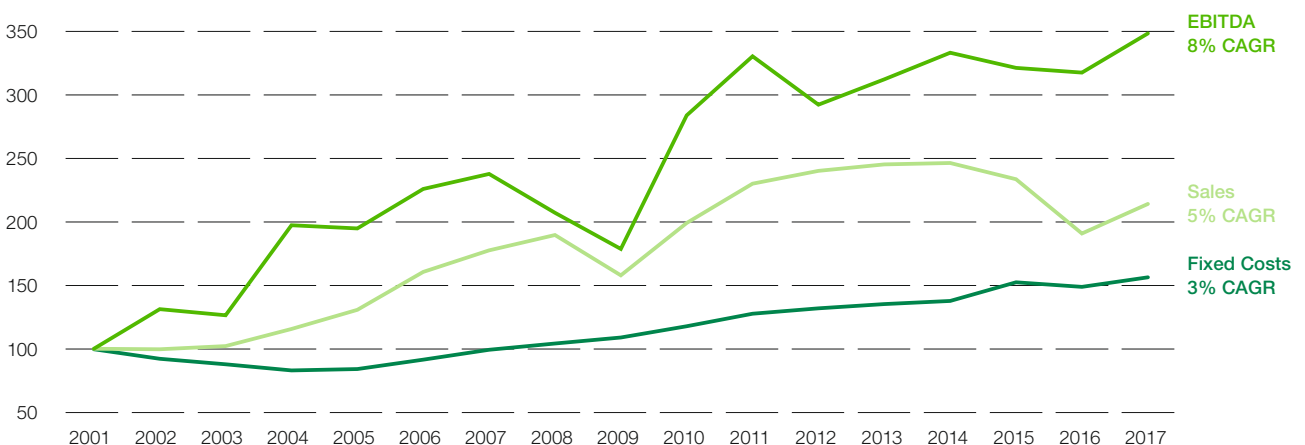
BASF's Care Chemicals division achieved technical process optimizations at its superabsorbents production facilities in Antwerp, Belgium, and Freeport, Texas. In 2017 and 2018, yield and reliability improvements, energy savings and product quality enhancement have been achieved at these sites, leading to significant savings.

With its global network of research, production and service sites, BASF is a leading partner of the global hygiene industry. Superabsorbent solutions from BASF are a key component of many hygiene products, such as baby diapers, adult incontinence products and feminine care products, and ensure that skin stays dry and healthy.

Annual earnings contribution DrivE



BASF Group¹ 2001–2017 (indexed; compound annual growth rate (CAGR) 2001–2017)



¹ Excluding companies with major IFRS 10/11 restatements, i.e., BASF YPC Nanjing, Libya onshore, other Oil & Gas and Catalysts companies

Verbund concept

Our unique Verbund concept is one of BASF's greatest assets. The Verbund principle enables us to add value as one company through the efficient use of resources. At our Verbund sites, production plants, energy and material flows, logistics, and site infrastructure are all integrated. BASF operates six Verbund sites worldwide: two in Europe, two in North America and two in Asia.



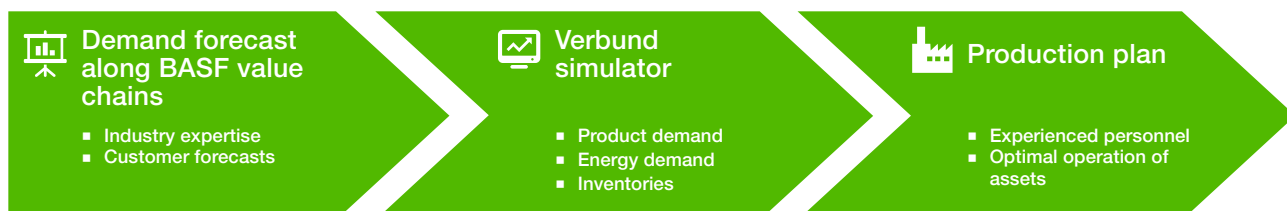
A system that creates efficient value chains

The Verbund system creates efficient value chains that extend from basic chemicals right through to consumer products and system solutions. In this system, chemical processes consume less energy, achieve higher product yields, and conserve resources. We thus save on raw materials and energy, minimize emissions, cut logistics costs and exploit synergies. On a global scale, BASF realizes annual savings of more than €1 billion through its Verbund concept.

Sustainability through the Verbund

The Verbund creates opportunities to reduce emissions and waste and lower resource consumption. It also minimizes transport distances. The Verbund is therefore not just an important economic asset but also generates environmental benefits. With the Energy Verbund, we avoid around 6 million metric tons of greenhouse gas emissions per year, and the Logistics Verbund results in the equivalent of approximately 280,000 fewer truckloads per year.

Managing the Verbund



Production Verbund

The Production Verbund is BASF's traditional core competency and starting point for multiple value chains. By linking plants, we can create efficient value chains from basic chemicals right through to high value-added products such as aroma chemicals and crop protection products. In addition, by-products from one plant can be used as raw materials elsewhere. With our interlinked production system, we reduce raw material and energy use, lower waste and emissions and cut costs.

Logistics Verbund

Production plants are connected by an extensive network of pipes, which provides an environmentally friendly method of transporting raw materials and energy quickly and safely. As a result, BASF significantly reduces its need to use transport by road, rail, river and sea. This provides not only a significant cost saving for BASF, but also reduces fuel consumption and greenhouse gas emissions. In addition, the associated costs of handling and storage are eliminated.

Energy Verbund

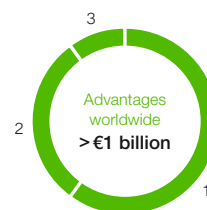
Our Verbund system makes a major contribution to energy efficiency. Waste heat from production processes is not discharged into the environment, but is captured and converted into steam to be used as an energy source at other production plants. The Verbund system resulted in a reduction in carbon emissions of 3.9 million metric tons in 2017. In addition, BASF is continuously investing in highly efficient energy generation technologies such as combined heat and power (CHP) plants. The use of these environmentally friendly CHP plants further reduced carbon emissions by 2.6 million metric tons in 2017.

Infrastructure Verbund

At our Verbund sites, we achieve critical mass to run world-scale utility plants (heat and power generation, waste incineration, water treatment, and more). These plants use resources very efficiently and are highly cost competitive. Therefore, they are not only environmentally friendly, but also provide significant cost savings. Furthermore, we also benefit from shared use of on-site facilities such as the fire department, security, maintenance and engineering and analytics.

Verbund cost advantages – breakdown

1	Logistics Verbund	60%
2	Energy Verbund	30%
3	Infrastructure Verbund	10%



Verbund flexibility and adaptability

Despite its complexity, the Production Verbund can respond flexibly to fluctuating demand. The Verbund Simulator is a proprietary IT tool that helps us steer the Verbund. The economic crisis in 2008/2009 was an outstanding example. We were able to reduce utilization of our crackers to exceptionally low levels and thus remain operational. Furthermore, we can add new plants to our Verbund sites, take other plants out of service, or significantly adjust production volumes.

People and Know-How Verbund

BASF has extended the Verbund concept beyond technology, applying it in many other areas such as the "People Verbund." We seek to attract and retain the best talent as well as to connect people and use networks as accelerators for know-how exchange and creativity. We know that the experience of our employees is one of our greatest assets and strengths. Therefore, we encourage and facilitate communication, networking and collaboration between employees in our "People Verbund." The introduction of digital tools, platforms and internal social media has enabled us to more easily build global networks and use these to cooperate and boost innovation.

Our production community benefits not only from intelligent interlinking of production plants, energy flows and infrastructure, but also from the invaluable know-how that experienced plant managers share with their colleagues all over the world.

In the R&D community, an ongoing exchange of experience and ideas between the individual experts is pivotal to leveraging the full power of innovation. For instance, when the experts for polystyrene insulating foams met the experts for polyurethane systems, this created the spark of inspiration for Infinergy® – a groundbreaking innovation for sport shoe soles and a perfect example of how our "People Verbund" can drive real innovation.

BASF's company culture fosters creativity, entrepreneurship and open exchange between people in and across all units.

Sustainability

Sustainability is an integral part of our corporate strategy. Using the various tools of our sustainability management, we carry out our company purpose: “We create chemistry for a sustainable future.” We incorporate sustainability into our business. This is how we seize business opportunities and minimize risks along the value chain.

We have created structures to promote sustainable, entrepreneurial actions all the way from strategy to implementation. The Corporate Sustainability Board is BASF's central steering committee for sustainable development. It comprises heads of our business, corporate and functional units as well as of the regions. The Chairwoman of the Corporate Sustainability Board is Saori Dubourg, member of the Board of Executive Directors. We have also established an external, independent Stakeholder Advisory Council. Here, international experts from science and society contribute important external perspectives to discussions with BASF's Board of Executive Directors, thereby helping us expand our strengths and identify our potential for improvement.

Through our constant dialog with stakeholders, our internal analysis methods and our many years of experience, we are continuously refining our understanding of significant topics and trends as well as potential opportunities and risks along our value chain. For example, we have defined sustainability focus areas within our corporate strategy. These formulate the commitments with which BASF positions itself in the market and how it aims to meet the growing challenges along the value chain:

- We source responsibly.
- We produce safely for people and the environment.
- We produce efficiently.
- We value people and treat them with respect.
- We drive sustainable products and solutions.

Relevant topics resulting from these commitments – such as supply chain responsibility, responsible production, resource efficiency, energy and climate protection, water, product stewardship, employment and employability, and portfolio management – form the focal points of our reporting.

We take advantage of business opportunities by offering our customers innovative products and solutions that contribute to sustainable development. We ensure that sustainability criteria are integrated into our business units' development and implementation of strategies, research projects and innovation processes. Our risk management supports our long-term business success. We aim to reduce potential risks in the areas of environment, safety and security, health protection, product stewardship, compliance, and labor and social standards by setting ourselves globally uniform requirements that frequently go beyond legal requirements. Our investment decisions for property, plant and equipment and financial assets also involve sustainability criteria. Our decision-making

is supported by expert appraisals that assess economic implications as well as potential effects on the environment, human rights or local communities.

Engaging stakeholders

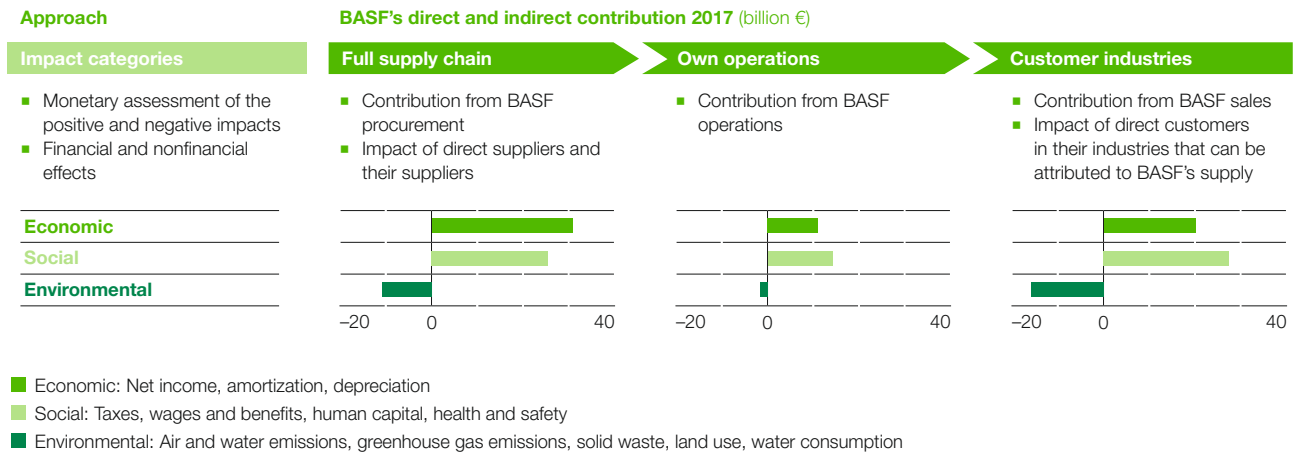
Our stakeholders include customers, employees, suppliers and shareholders, as well as representatives from science, industry, politics, society and media. Parts of our business activities, such as the use of new technologies, are frequently viewed by our stakeholders with a critical eye. In order to increase societal acceptance for our business activities, we take on critical questions, assess our business activities in terms of their sustainability, and communicate transparently. Such dialogs help us to even better understand society's expectations of us and which measures we need to pursue in order to establish trust and build partnerships.

BASF is involved in worldwide initiatives with various stakeholder groups, such as the U.N. Global Compact. As a member of the U.N. Global Compact LEAD initiative, we support the implementation of the Agenda 2030 and its Sustainable Development Goals. BASF is also active in local Global Compact networks. We are also engaged in the World Business Council for Sustainable Development and in CSR Europe. These memberships offer the benefits of knowledge sharing with other leading companies about how to integrate sustainability in core processes of our business. We are also a member of selected networks specifically dedicated to important aspects of integrating sustainability. One example is our membership in the Global Business Initiative on Human Rights (GBI). This group of globally operating companies from various industries aims to ensure the implementation of the U.N. Guiding Principles on Business and Human Rights. Another example is our partnership with the Ellen MacArthur Foundation. This partnership provides us with important impulses in order to embrace the topic of an ever more circular economy. We are also participating in the Embankment Project of the Coalition for Inclusive Capitalism. The Embankment Project brings together the complete investment chain to elaborate how a more comprehensive and long-term value contribution of companies can be measured and demonstrated in a meaningful way to investors.

Creating value along the value chain

In order to live up to BASF's purpose “We create chemistry for a sustainable future,” we aim to increase our positive contribution to society and the environment and to minimize the negative consequences of our business activities.

Value-to-Society: BASF's economic, social and environmental contribution



Together with external experts, we have developed and implemented a method to evaluate our economic, social and environmental impacts along the value chain. To reflect our value contribution, we assess how our business activities change the well-being of people. The financial and nonfinancial benefits and costs we are generating and enabling along the value chain are expressed in monetary terms. The results for 2017 demonstrate the positive and negative impacts of our business activities on society in each assessed step of our value chain. Compared to 2016, our total positive impact increased by 9%. The main driver is volume growth, leading to higher purchase volumes as well.

This Value-to-Society approach is aligned with existing international frameworks such as the Natural Capital Protocol and the Social and Human Capital Protocol. In its application, it is pragmatic, scalable, transferable and auditable. To measure the impact of our business activities, BASF-specific data and industry data are used. In combination with a set of coefficients provided by external experts, the effect on the well-being of people is valued in monetary terms.

The methodology allows for the direct comparison of economic, social and environmental impacts. It enables a better understanding of the relevance and interdependency of the assessed categories. The evaluation supports our decision-making processes and the identification of business risks and opportunities. We are proactively sharing our approach with other companies in cross-industry networks, such as the Impact Valuation Roundtable, and with international institutions, academia and impact valuation experts in order to drive convergence, to operationalize the aligned concepts and to improve our understanding.

A significant lever for the targeted steering of our product portfolio, based on the sustainability performance of our products, is the **Sustainable Solution Steering®** method. By the end of the 2017 business year, BASF had conducted sustainability assessments and ratings for 97.5% of its entire relevant portfolio of more than 60,000 specific product applications. Those accounted for €58.4 billion in sales in 2017. We consider the products' applications in various markets and industries. Because of increasing sustainability requirements on the market, we regularly conduct reassessments of existing product categories as well as of the relevant portfolio. "Accelerator" products make a particular contribution to sustainability in the value chain. That is why we want to increase the proportion of sales from Accelerator products to 28% by 2020. In 2017, this figure was at 27.3%. Transitioners are products with specific sustainability challenges that are being actively tackled. We are developing plans of action for all products classified as challenged, even in the case of portfolio revisions and product reassessments. These action plans include research projects, reformulations or even replacing one product with an alternative product. At the end of 2017, action plans had been created for 100% of challenged products.

2020 Goal
 Increase proportion of sales generated by Accelerator products
 to **28%**

Contributing our many years of expertise in the application of the Sustainable Solution Steering® method, we played a leading role in the development of a cross-industry framework for portfolio sustainability assessments published by the World Business Council for Sustainable Development (WBCSD) in November 2017.

For an overview of Sustainable Solution Steering®, see page 27.

Goals

We carry out our corporate purpose, “We create chemistry for a sustainable future,” by pursuing ambitious goals along our entire value chain. In this way, we aim to achieve profitable

growth and take on social and environmental responsibility. We are focusing on issues where we as a company can make a significant contribution.

Goal areas along the value chain



Procurement

	2020 Goal	Status at end of 2017
Assessment of sustainability performance of relevant suppliers ¹ ; development of action plans where improvement is necessary	70%	56%

¹ Our suppliers are evaluated based on risk due to the size and scale of our supplier portfolio. We define relevant suppliers as those showing an elevated sustainability risk potential as identified by our risk matrices and our purchasers' assessments. We also use further sources of information to identify relevant suppliers such as evaluations from Together for Sustainability (TfS), a joint initiative of chemical companies for sustainable supply chains.

Employees

	2021 Goal	Status at end of 2017
Proportion of women in leadership positions with disciplinary responsibility	22 – 24%	20.5%
	Long-term goals	
International representation among senior executives ¹	Increase in proportion of non-German senior executives (baseline 2003: 30%)	38.9%
Senior executives with international experience	Proportion over 80%	84.6%
Employee development	Systematic, global employee development as shared responsibility of employees and leaders based on relevant processes and tools	Project implemented worldwide

¹ The term "senior executives" refers to leadership levels 1 to 4, whereby level 1 denotes the Board of Executive Directors. In addition, individual employees can attain senior executive status by virtue of special expertise.

Production

	2025 Goals	Status at end of 2017
Reduction of worldwide lost-time injury rate per one million working hours	≤ 0.5	1.4
Reduction of worldwide process safety incidents per one million working hours	≤ 0.5	2.0
	Annual goal	
Health Performance Index	> 0.9	0.97

Product stewardship

	2020 Goal	Status at end of 2017
Risk assessment of products that we sell in quantities of more than one metric ton per year worldwide	>99%	76.2%

Energy and climate protection

	2020 Goals	Status at end of 2017
Coverage of our primary energy demand by introducing certified energy management systems (ISO 50001) at all relevant sites ¹	90%	54.3%
Reduction of greenhouse gas emissions per metric ton of sales product (excluding Oil & Gas, baseline 2002)	(40%)	(35.5%)

¹ The selection of relevant sites is determined by the amount of primary energy used and local energy prices.

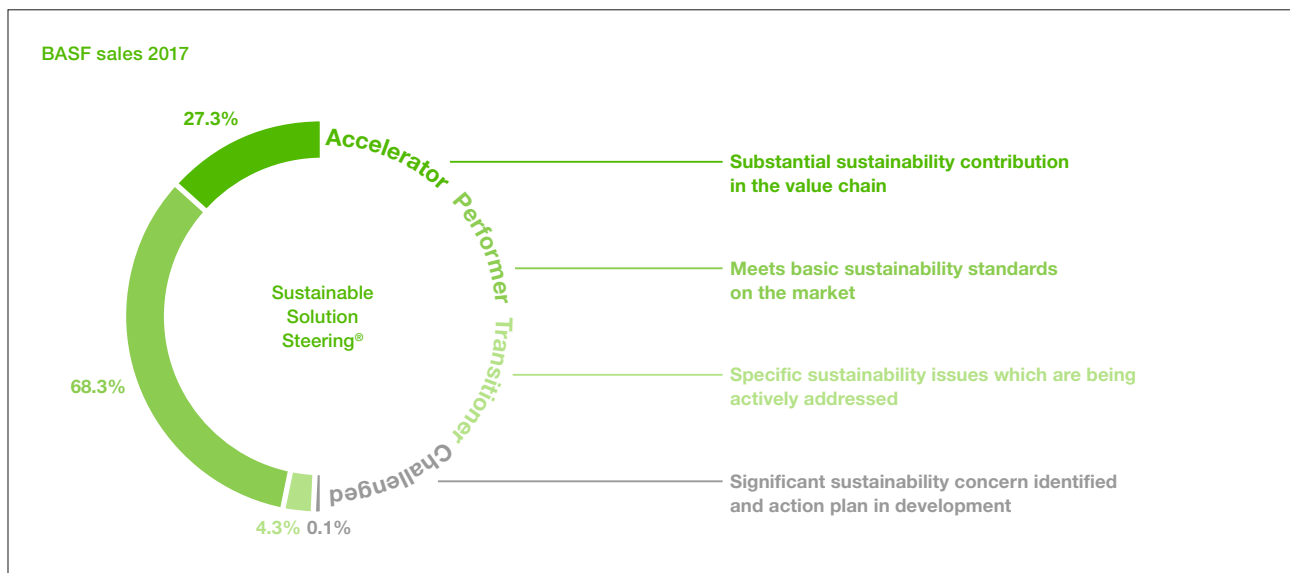
Water

	2020 Goal	Status at end of 2017
Introduction of sustainable water management at all production sites in water stress areas and at all Verbund sites (excluding Oil & Gas)	100%	45.2%

Products and solutions

	2020 Goal	Status at end of 2017
Increase the proportion of sales generated by products that make a particular contribution to sustainable development (Accelerator products)	28%	27.3%

Sustainable Solution Steering®: How BASF's products contribute to sustainability



For more on Sustainable Solution Steering®, see page 25.

2 Business segments

Business segments	30
Chemicals	32
Petrochemicals	34
Monomers	36
Intermediates	38
Performance Products	40
Dispersions & Pigments	42
Care Chemicals	44
Nutrition & Health	46
Performance Chemicals	48
Functional Materials & Solutions	50
Catalysts	52
Construction Chemicals	54
Coatings	56
Performance Materials	58
Agricultural Solutions	60
Crop Protection	62
Oil & Gas	64
Other	70

Key facts

- 5 segments comprising 13 operating divisions with 86 strategic business units
- Our portfolio ranges from basic petrochemicals to agricultural solutions
- The divisions and strategic business units are organized according to sectors or product groups
- In around 75% of our businesses, we are in a top three position
- Regional organizations contribute to the local development of our businesses and help to tap into market opportunities

Chemicals



Performance Products



Functional Materials & Solutions



Agricultural Solutions



Oil & Gas



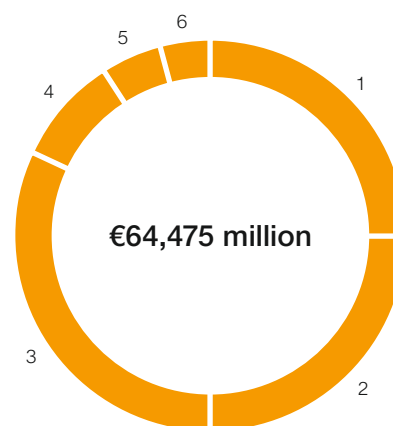
Business segments

Our portfolio is well balanced and offers strong growth opportunities. It consists of five segments with 13 operating divisions. Our segments are based on related products, customer industries and production processes. This enables us to more effectively combine our competencies and knowledge and bring our products and system solutions to the market faster.

BASF Group

Percentage of sales in 2017

1	Chemicals	– Petrochemicals – Monomers – Intermediates	25%
2	Performance Products	– Dispersions & Pigments – Care Chemicals – Nutrition & Health – Performance Chemicals	25%
3	Functional Materials & Solutions	– Catalysts – Construction Chemicals – Coatings – Performance Materials	32%
4	Agricultural Solutions	– Crop Protection	9%
5	Oil & Gas	– Oil & Gas	5%
6	Other		4%



EBIT before special items 2017

Chemicals

€4,233 million

Performance Products

€1,416 million

Functional Materials & Solutions

€1,617 million

Agricultural Solutions

€1,033 million

Oil & Gas

€793 million

Other

€(764) million

Chemicals

The Chemicals segment consists of the Petrochemicals, Monomers and Intermediates divisions. In our integrated production facilities – our Verbund – we produce a broad range of basic chemicals and intermediates in Europe, Asia and North and South America.

New ammonia plant

The new world-scale ammonia plant in Freeport, Texas, is owned by Yara International and BASF. The plant, located at BASF's site in Freeport, has a capacity of 750,000 metric tons of ammonia per year. The state-of-the-art facility uses a cost-efficient and sustainable production process, based on the by-product hydrogen instead of natural gas.



Divisions

Petrochemicals

Broad range of basic products and specialties for sectors such as the chemical and plastics industries

📖 page 34

Monomers

Isocyanates and polyamides as well as inorganic basic products and specialties for various sectors, such as the plastics, automotive, construction and electronics industries

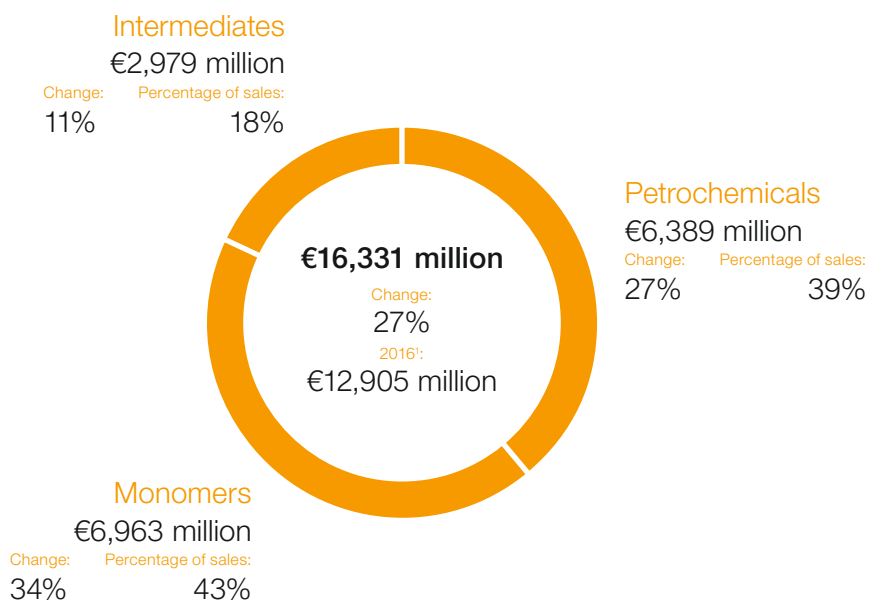
📖 page 36

Intermediates

Most comprehensive intermediates portfolio in the world, including precursors for coatings, plastics, textile fibers and crop protection products

📖 page 38

Sales 2017



Factors influencing sales

Volumes	5%	
Prices	23%	
Portfolio	0%	
Currencies	(1%)	
Sales	27%	

EBIT before special items (million €)

2017	4,233	
2016 ¹	2,032	
		Change: plus €2,201 million

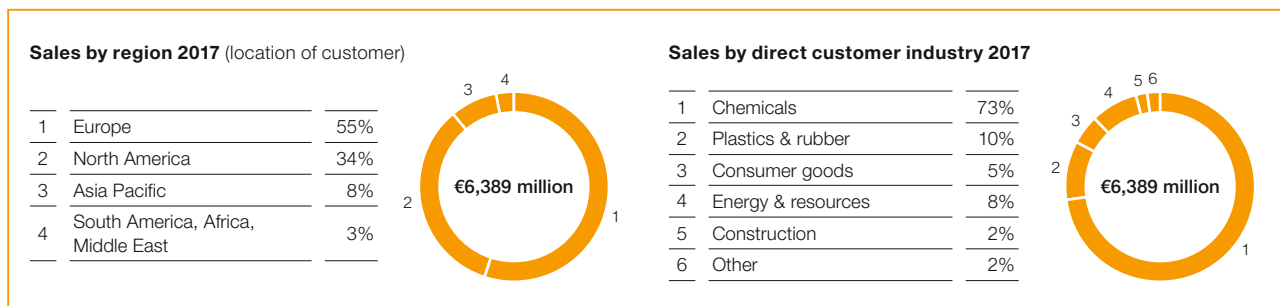
Segment data Chemicals (million €)

	2013	2014	2015	2016 ¹	2017	
Sales to third parties	16,994	16,968	14,670	12,905	16,331	
Share of total BASF sales	%	23.0	22.8	20.8	22.4	25.3
Thereof Petrochemicals		7,785	7,832	5,728	5,035	6,389
Monomers		6,385	6,337	6,093	5,189	6,963
Intermediates		2,824	2,799	2,849	2,681	2,979
Income from operations before depreciation and amortization (EBITDA)		2,956	3,212	3,090	3,114	5,374
EBITDA margin	%	17.4	18.9	21.1	24.1	32.9
Income from operations (EBIT) before special items		2,182	2,367	2,156	2,032	4,233
EBIT before special items margin	%	12.8	13.9	14.7	15.7	25.9
Income from operations (EBIT)		2,086	2,396	2,131	1,953	4,208
EBIT margin	%	12.3	14.1	14.5	15.1	25.8

¹ On January 1, 2017, the Monomers and Dispersions & Pigments divisions' activities for the electronics industry were merged into the global Electronic Materials business unit and allocated to the Dispersions & Pigments division. For better comparability, the affected figures for 2016 have been adjusted accordingly.

Petrochemicals

The Petrochemicals division is the cornerstone of BASF's petrochemical-based value chains throughout the regions. The division manufactures and markets a broad portfolio of high-quality basic chemicals and tailored specialties for internal and external customers.



Portfolio

Cracker products

BASF produces the entire range of cracker products from ethylene and propylene to butadiene, butenes and benzene. Of these, propylene is the most important starting product for BASF's value chains.

Acrylic monomers

BASF is a technology leader in acrylic acid and the world's largest and most widespread producer of acrylic monomers, which are sold to internal and external customers in the form of acrylic acid, acrylic esters and specialty acrylates. Acrylic monomers are used as precursors to manufacture acrylic polymers and polymer dispersions for various applications such as:

- Superabsorbent polymers
- Flocculants
- Surfactants
- Adhesives
- Coatings

Alkylene oxides and glycols

Ethylene oxide derived from ethylene is used mainly to produce surfactants, ethanolamines, glycols, glycol ethers and polyols. Ethylene glycol is a product used in antifreeze applications and for the production of fibers, films and PET (polyethylene terephthalate) plastic bottles. Propylene oxide is synthesized from propylene and serves as a base for a wide variety of products, including hydraulic fluids, propylene glycol and polyols. Polyols are used mainly for the production of polyurethanes.

Alcohols and solvents

BASF is the world's largest producer of oxo alcohols and is also a major producer of oxygenated solvents in Europe, including acetates, glycol ethers, glycol ether acetates and specialty solvents. Our major customer industries are:

- Paints and coatings
- Pharmaceuticals
- Cosmetics

Plasticizers

BASF manufactures general purpose and special purpose plasticizers, which are used to make rigid PVC flexible. One product is the plasticizer Hexamoll® DINCH, whose excellent toxicological profile makes it ideal for applications with close human contact, such as toys and medical products. In 2017, BASF started production of another toxicologically advantaged plasticizer, Palatinol® DOTP, in Pasadena, Texas, to meet market demand in North America.

BASF's market position

- Acrylic monomers: No. 1 globally
- Oxo alcohols: No. 1 globally
- Ethylene oxide and ethylene glycols: No. 2 in Europe
- Solvents: No. 2 in Europe
- Plasticizers: No. 3 in Europe
- Propylene oxide and propylene glycols: No. 3 in Europe

Main competitors

- Cracker products: SABIC, DowDuPont, ExxonMobil Chemical, Sinopec, LyondellBasell
- Acrylic monomers: DowDuPont, Nippon Shokubai, Arkema
- Ethylene oxide and glycols: DowDuPont, SABIC, Sinopec, INEOS Oxide, Shell Chemicals
- Propylene oxide and glycols: DowDuPont, LyondellBasell, Shell Chemicals, Sumitomo Chemical
- Alcohols and solvents: DowDuPont, Eastman, ExxonMobil Chemical, Oxea, Evonik, Sinopec
- Plasticizers: ExxonMobil Chemical, Eastman, Evonik

Focus of research and development

The focus is on developing new and improved processes by adapting and optimizing feedstocks to supply our Verbund value chains at competitive costs. One focus in product innovation lies on the development of specialty acrylates for specific customer needs.

Key capabilities of BASF

- Strong Verbund sites with world-scale production facilities
- Leading process technology and operational excellence
- Strong global market position with regional production
- Highly qualified and experienced personnel
- Outstanding market knowledge and technical capabilities

Major nameplate capacities of BASF (thousand metric tons per year)

Product group	Location												Total
	Antwerp, Belgium	Camaçari, Brazil	Cornwall, Canada	Freeport, Texas	Geismar, Louisiana	Kuantan, Malaysia	Ludwigshafen, Germany	Moerdijk, Netherlands	Nanjing, China	Pasadena, Texas	Port Arthur, Texas	Tarragona, Spain	
Ethylene	1,080	–	–	–	–	–	620	–	740 ¹	–	1,040 ⁶	–	3,480
Propylene	650	–	–	–	–	–	350	–	370 ¹	–	890 ⁶	350 ³	2,610
Propylene oxide	300 ⁴	–	–	–	–	–	125	250 ⁵	–	–	–	–	675
Butadiene	155	–	–	–	–	–	105	–	130 ¹	–	290 ⁶	–	680
Benzene	280	–	–	–	–	–	300	–	130 ¹	–	200 ⁶	–	910
Cyclohexane	–	–	–	–	–	–	130	–	–	–	–	–	130
Ethylene oxide (equivalents)	500	–	–	–	220	–	345	–	380 ¹	–	–	–	1,445
Oxo C4 alcohols	–	–	–	300	–	330 ²	560	–	305 ¹	130	–	–	1,625
Plasticizers (incl. Hexamol® DINCH)	–	–	35	–	–	–	500	–	–	60	–	–	595
Acrylic acid	320	160	–	230	–	160 ²	320	–	320 ¹	–	–	–	1,510

All capacities in the table illustrate 100% capacity of the operations. BASF's share might be lower.

¹ BASF 50%; Sinopec 50%

² BASF 60%; PETRONAS 40%

³ BASF 51%; Sonatrach 49%

⁴ BASF 50%; DowDuPont 50%

⁵ BASF 50%; Shell 50%

⁶ BASF 60%; Total 40%

Acquisitions/JVs/investments/divestitures (from 2015 onward)

Product group	Description	Year
Acrylic acid	New acrylic acid and butyl acrylate complex in Camaçari, Brazil	2015
Synthesis gas	Extension of hydrogen plant in Ludwigshafen, Germany	2015
Isononanol	New isononanol plant in Maoming, China	2015
Palatino® DOTP	Conversion of plasticizer production in Pasadena, Texas, to DOTP	2017
Ethylene, propylene	Feedstock flexibilization of steam cracker in Antwerp, Belgium	2019

Innovation

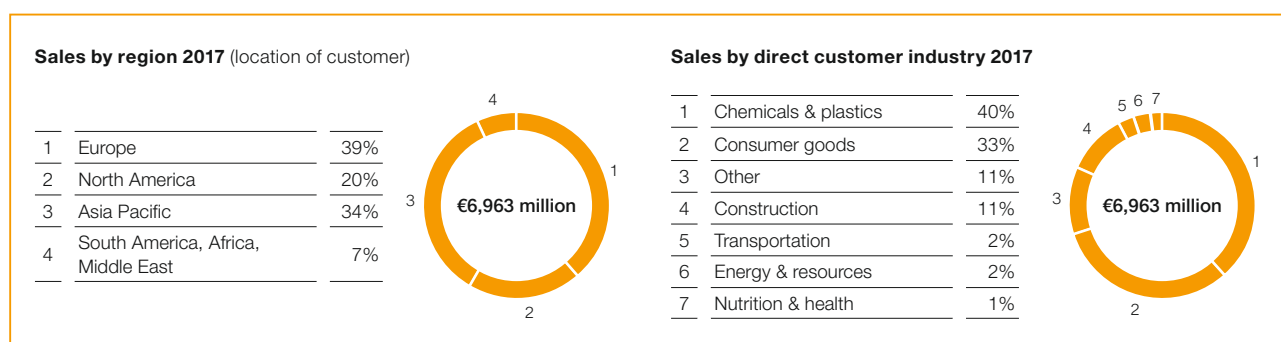


Improving product properties without increasing production costs

Our specialty monomers enable innovation in our customers' downstream applications. These include a new application of tertiary butylacrylate (tBA) in decorative paints. tBA is primarily used as a functional component in water-based exterior paints. Our customers can use tBA to formulate dispersions that improve the specific properties of their exterior paints – such as weathering and surface adhesion – without increasing production costs.

Monomers

The Monomers division supplies a broad portfolio of large-volume monomers, basic polymers and inorganic chemicals. Major products include MDI (methylene diphenyl diisocyanate), TDI (toluene diisocyanate), caprolactam, adipic acid, polyamide 6 and 6.6, ammonia, nitric acid, sulfur and chlorine products, inorganic salts, urea, melamine, glues and impregnating resins. The products are used in a broad spectrum of industries, such as the automotive, furniture, building and construction, woodworking, food, solar, packaging and textile industries.



Portfolio

Isocyanates

The portfolio of isocyanates includes MDI and TDI. BASF is the world leader in isocyanates, which are key components to produce soft or rigid foams. MDI is a versatile isocyanate that can be used to make flexible foams as well as semi-rigid and rigid polyurethane plastics. Its primary applications are construction, consumer appliances, automotive components and shoe soles. TDI is an isocyanate used primarily in the manufacturing of flexible foams. Its main applications include mattresses and cushions for furniture and automotive seating.

Polyamides and precursors

BASF is the world's leading supplier of high-quality polyamides and polyamide intermediates for extrusion, engineering plastics and fibers. Ultramid®, BASF's high-quality polyamide brand, is the material of choice for many applications:

- Films for food packaging
- Carpets and textiles
- Monofilaments (industrial wires, fishing lines, weed trimmers, etc.)

BASF also manufactures intermediate products such as caprolactam for polyamide 6 and adipic acid for polyamide 6.6.

Inorganic chemicals

Inorganic chemicals are mainly used as precursors for plastics, amines and other high-value chemicals. The product portfolio ranges from basic chemicals to inorganic salts:

- Ammonia
- Chlorine
- Caustic soda
- Nitric acid
- Sulfuric acid
- Standard alcoholates
- Ammonium salts

More than half of these products are for captive use within BASF's Verbund. The remaining products are sold primarily to other chemical companies. Additionally, we are one of the leading suppliers of sodium nitrate (used as a component for solar thermal power plant storage media), sodium methylate (a catalyst used for the production of biodiesel) and a variety of inorganic salts for different industries such as food, feed, textiles and paper.

Glues and impregnating resins

BASF offers a wide variety of tailor-made glues and impregnating resins, which are used to manufacture many different types of panel boards and laminated flooring for the woodworking industry. Additionally, the unit produces AdBlue®, a high-purity urea solution that is used in trucks and passenger cars to reduce NO_x emissions from diesel engines.

BASF's market position

- Isocyanates (TDI/MDI): No. 1 globally
- Polyamide film: No. 1 globally
- Glues and impregnating resins: No. 1 in glues in Europe
- Inorganic chemicals: No. 1 in inorganic salts in Europe and South America

Main competitors

- Isocyanates: Covestro, Wanhua, MCNS, DowDuPont, Huntsman
- Polyamide film: DSM, Ube, Zig Sheng
- Glues and impregnating resins: Dynea, Sadepan
- Inorganic chemicals: Evonik, Esseco
- Polyols: DowDuPont, Covestro, Shell

Focus of research and development

The main aim of process innovation is to optimize existing production technologies and develop new, highly efficient processes offering considerable cost advantages.

Key capabilities of BASF

- World-scale plants based on leading process technology
- Competitive raw material sourcing and/or backward integration
- Operational, logistical as well as commercial excellence
- Strong market position with regional setup
- Highly qualified and experienced personnel

Acquisitions/JVs/investments (from 2015 onward)

Product group	Description	Year
Ammonia	New world-scale ammonia plant in Freeport, Texas, JV with Yara	2018
Polyamide and intermediates	Startup of polyamide plant in Caojing, China	2015
	Agreed acquisition of Solvay's global polyamide business	2018
MDI	New MDI complex in Chongqing, China	2015
	Expansion of MDI JV in Caojing, China	2018
	New MDI synthesis unit in Geismar, Louisiana	2020
TDI and precursors	New world-scale TDI plant in Ludwigshafen, Germany, including expanded backward integration into chlorine and nitric acid	2015–2017

Divestitures/shutdowns (from 2015 onward)

Product group	Description	Year
Polyamide	Shutdown of Anchieta site, Brazil	2015
Caprolactam	Capacity reduction by 100,000 metric tons per year, Ludwigshafen, Germany	2017

Major nameplate capacities of BASF

(thousand metric tons per year)

Product group	Capacity
Ammonia	1,765
Caustic soda	360
Chlorine	385
Glues and impregnating resins	750
Sulfuric acid	920
Urea	545
Caprolactam	700
Polyamide	820
MDI	1,830
TDI	780 ¹

¹ Includes startup of Ludwigshafen and shutdown of Schwarzeide plant in Germany

Innovation

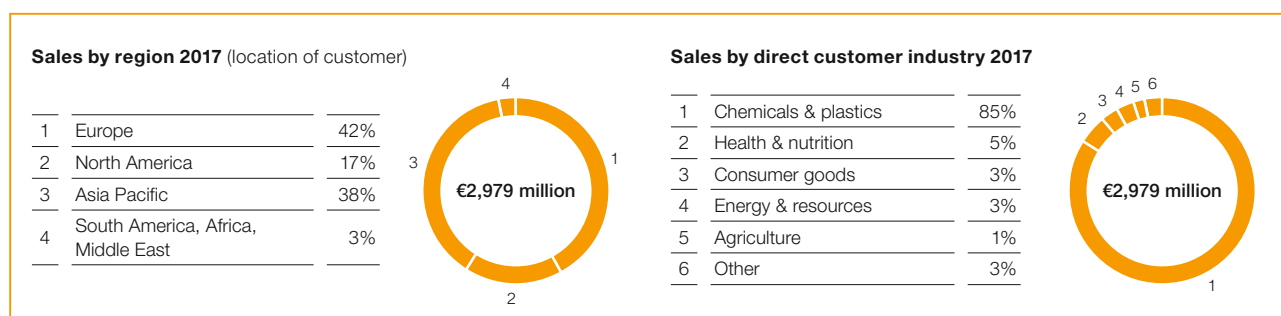


New online simulation program successfully introduced

BASF has developed a program for polyamide plants that allows us to simulate production processes, predict product properties and optimize production process parameters. The simulation program is based on a dynamic, non-linear physical model. It facilitates product changes and eliminates the need for expensive tests in operating plants. The simulation program has been successfully implemented at BASF's biggest polyamide plant in China. It is gradually being put into operation at other BASF polyamide plants.

Intermediates

The Intermediates division manufactures about 700 products, which are sold worldwide. These include butanediol and its derivatives, amines, organic acids, polyalcohols, life science intermediates, solvents and OASE® gas treatment solutions. They are generally quite resilient to economic cycles and are often the result of multi-step production processes within BASF. Customers typically purchase them as precursors for their downstream chemicals. The Intermediates division focuses primarily on the C1 and C2 value chains.



Portfolio

Butanediol and its derivatives

BASF is the world's largest manufacturer of 1,4-butanediol, which is a chemical building block for products such as polyesters and polyurethanes. Its derivatives are used to manufacture products ranging from fibers to paints and pharmaceuticals, and include captive produced products such as polybutylene terephthalate (PBT), tetrahydrofuran (THF), PolyTHF®, gamma-butyrolactone and N-methylpyrrolidone.

Amines

With about 300 different amines, we have the world's most diverse portfolio of this type of chemical intermediates. Along with alkyl-, alkanol-, alkoxyalkylamines and ethylene amines, we offer heterocyclic and aromatic as well as specialty amines. The range is completed by a portfolio of chiral amines of high optical and chemical purity. The versatile products are used mainly to manufacture process chemicals, pharmaceuticals and crop protection agents, as well as cosmetic products and detergents. They also serve to produce coatings, specialty plastics, composites and specialty fibers.

Acids and polyalcohols

BASF is the world's leading manufacturer of polyalcohols such as neopentylglycol and 1,6 hexanediol, carbonates and carboxylic acids, such as formic and propionic acid. Carboxylic acids are used as preservatives for the feed and food industries, as auxiliaries for textile and leather applications and as de-icing agents. The acids portfolio also includes higher carboxylic acids (HCAs) such as 2-ethylhexanoic acid and isononanoic acid, which are primarily utilized in synthetic lubricants, paint dryer and PVB plasticizer applications. Polyalcohols are mainly offered for the production of a wide range of coatings, and carbonates are primarily sold to the battery industry for the production of electrolytes.

Acetylenics and carbonyl derivatives

These specialty intermediates are based on raw materials from BASF's Verbund such as acetylene and chlorine. Among the specialty acetylenics are vinyl monomers, acetylenic alcohols, and higher alkyrrolidones. Chlorine-based intermediates include acid chlorides and chloroformates. Further specialty intermediates are glyoxal, glutaraldehyde, cyclododecanone (CDon), imidazoles and triphenylphosphine. The products serve as building blocks for crop protection agents and pharmaceuticals or as monomers and performance additives for polymers, coatings and printing inks.

Intermediates innovation pipeline

The Intermediates division follows a clear innovation strategy, which is key for all product lines to further grow the businesses and improve profitability. Its innovation pipeline has an estimated net present value of approximately €765 million (not risk adjusted, 2018 view). The strategy is based on three pillars:

- **New and improved processes:** We are continuously benchmarking our production processes in order to secure and expand our position and to remain best in class. One recent example is the improved process to be used in our new acetylene plant in Ludwigshafen. Compared to other processes, we will use raw materials and by-products more efficiently. The excess heat will be used to generate energy and the yield will be higher.
- **New applications:** We are continuously looking for new applications for our existing intermediates, such as the de-icing of residential areas with salts of our formic acid. These formates are more readily biodegradable than conventional products. As they are non-corrosive and not hazardous to animals and plants, formates are a highly efficient and proven de-icing solution on airport runways.

- New products: We develop new products, such as OASE® Yellow enriched, used for the desulfurization of natural gas. Several reference plants in West Asia and the Middle East, where OASE® Yellow enriched is used, were successfully started up in 2017 or are being commissioned.

BASF's market position

BASF's Intermediates division is among the top three producers worldwide of its products in all strategic business units.

Main competitors

- Amines: DowDuPont, Eastman, AkzoNobel
- Butanediol and derivatives: Ashland, LyondellBasell, Changchun/Dairen
- Acids and polyalcohols: Eastman, Perstorp, Oxea
- Acetylenics and carbonyl derivatives: Ashland, Altivia, Evonik, Weychem

Focus of research and development

Innovation focuses on process improvements as well as new product and process developments built on value chain integration while leveraging our broad technological strengths and close customer partnerships.

Key capabilities of BASF

- Strong global market position with regional production
- Strong Verbund sites with backward integration
- Leading process technology
- Highly qualified and experienced personnel
- Strong innovation pipeline

Acquisitions/JVs/investments (from 2015 onward)

Product group	Description	Year
Formic acid	New plant in Geismar, Louisiana	2015
1,6-hexanediol	Capacity expansion in Freeport, Texas, and Ludwigshafen, Germany	2015–2016
Neopentylglycol (NPG)	New plant in Nanjing, China (50% BASF)	2015
Dimethylaminopropylamine, polyetheramines	New plant in Nanjing, China (100% BASF)	2015
Specialty amines	New plant in Ludwigshafen, Germany	2015
1,4-Butanediol (BDO) and PolyTHF®	BASF and Markor established two JVs in Korla, China	2015–2016
	BDO capacity expansion in Geismar, Louisiana	2016
2-Ethylhexanoic acid	New plant in Kuantan, Malaysia	2016
Acetylene	Replacement of plant in Ludwigshafen, Germany	2019
Propionic acid	Capacity expansion in Nanjing, China	2019
Specialty amines	New plant in Nanjing, China	2019

Divestitures/shutdowns (from 2015 onward)

Product group	Description	Year
Inorganic specialties	Divestiture incl. site in Evans City, Pennsylvania	2017

Major nameplate capacities of BASF

(thousand metric tons per year)

Product group	Capacity
Alkylamines	250
Ethanolamines and derivatives	430
Butanediol equivalents	670
PolyTHF®	350
Neopentylglycol (Neol®)	205
Formic acid	305
Propionic acid	150
Polybutylene terephthalate	160
Specialty amines	>300

Innovation



OASE® connect

BASF is one of the leading global providers in the field of gas treatment. Our OASE® brand portfolio ranges from gas treatment agents to licensing for gas treatment processes and the planning of plants. The new OASE® connect online platform is particularly attractive for customers at remote locations. Special software enables them to find the optimum technical settings for their plants and manage them more efficiently, achieving energy savings of up to 20%.

Performance Products

The Performance Products segment consists of the Dispersions & Pigments, Care Chemicals, Nutrition & Health and Performance Chemicals divisions. Our offerings enhance the performance of industrial and consumer products worldwide. With our tailor-made solutions, our customers can make their production processes more efficient and give their products improved application properties.



BASF's laundry laboratory
Fresh and clean laundry, easy to dose, effective at low temperatures and sustainable – modern laundry detergents have to meet all of these criteria. Here, a biology laboratory technician is equipping BASF's high-throughput robot to test different detergent ingredients.

Divisions

Dispersions & Pigments

Raw materials used to formulate products in the construction, automotive, adhesives, printing, packaging, electronics and paper industries

📖 page 42

Care Chemicals

Ingredients for the hygiene, cosmetics, detergent and cleaner industries as well as for applications in the chemical industry

📖 page 44

Nutrition & Health

Products for the food and feed industries, the flavor and fragrance industry and the pharmaceutical industry

📖 page 46

Performance Chemicals

Customized products for many sectors, from mining and the fuel industry to plastics processing

📖 page 48

Sales 2017

Performance Chemicals

€3,896 million

Change: 2%
Percentage of sales: 24%

Dispersions & Pigments

€5,398 million

Change: 6%
Percentage of sales: 33%

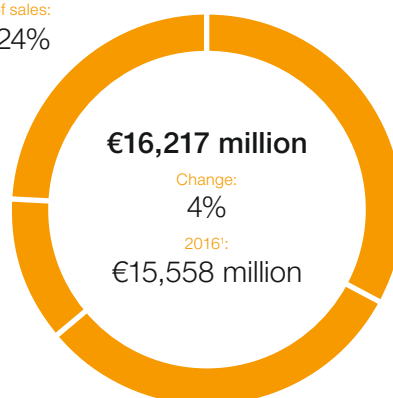
Nutrition & Health

€1,844 million

Change: -5%
Percentage of sales: 12%

Care Chemicals

€5,079 million

Change: 7%
Percentage of sales: 31%¹ Restated figures

Factors influencing sales

Volumes	5%		
Prices	1%		
Portfolio	(1%)		
Currencies	(1%)		
Sales	4%		

EBIT before special items (million €)

2017	1,416	
2016 ¹	1,777	
		Change: minus €361 million

¹ Restated figures

Segment data Performance Products (million €)

	2013	2014	2015	2016 ¹	2017
Sales to third parties	15,534	15,433	15,648	15,558	16,217
Share of total BASF sales	% 21.0	20.8	22.2	27.0	25.2
Thereof Dispersions & Pigments	3,851 ²	3,869	4,629	5,086	5,398
Care Chemicals	4,871	4,835	4,900	4,735	5,079
Nutrition & Health	2,088	2,029	1,998	1,932	1,844
Paper Chemicals ³	1,442	1,371	-	-	-
Performance Chemicals	3,282 ²	3,329	4,121	3,805	3,896
Income from operations before depreciation and amortization (EBITDA)	1,987	2,232	2,289	2,577	2,427
EBITDA margin	% 12.8	14.5	14.6	16.6	15.0
Income from operations (EBIT) before special items	1,365	1,455	1,366	1,777	1,416
EBIT before special items margin	% 8.8	9.4	8.7	11.4	8.7
Income from operations (EBIT)	1,100	1,417	1,340	1,678	1,510
EBIT margin	% 7.1	9.2	8.6	10.8	9.3

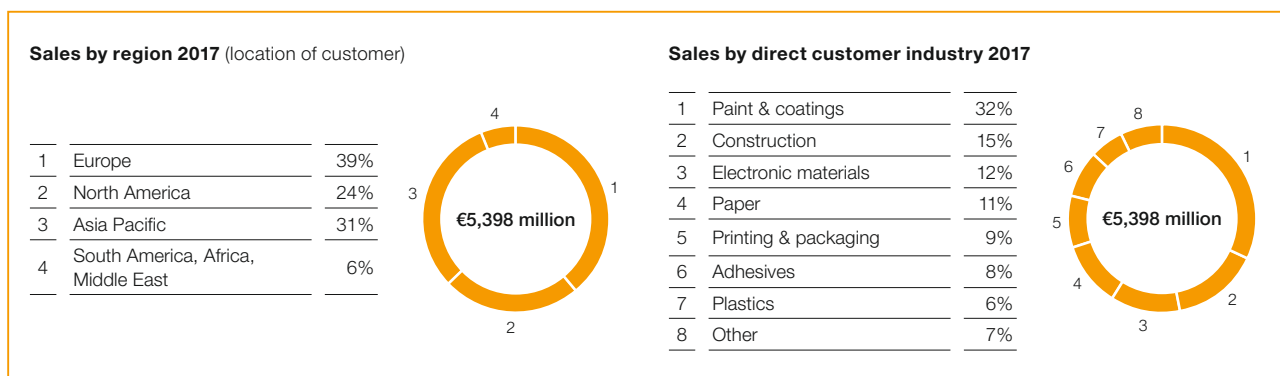
¹ On January 1, 2017, the Monomers and Dispersions & Pigments divisions' activities for the electronics industry were merged into the global Electronic Materials business unit and allocated to the Dispersions & Pigments division. For better comparability, the affected figures for 2016 have been adjusted accordingly.

² Previously conducted in the Performance Chemicals division, our business with pigments in the plastic additives business area was allocated to the Dispersions & Pigments division at the beginning of 2014. The 2013 figures for both divisions have been adjusted to ensure better comparability.

³ The Paper Chemicals division was dissolved as of January 1, 2015. The business continues as part of the Performance Chemicals and Dispersions & Pigments divisions, and is integrated into existing value chains. Restated 2014 net sales to third parties for Dispersions & Pigments and Performance Chemicals account for €4,501 million and €4,068 million, respectively.

Dispersions & Pigments

The Dispersions & Pigments division is the leading global supplier of raw materials used in formulations for a number of industries, including paints and coatings, construction, automotive, adhesives, printing and packaging, plastics, electronics and paper. While our portfolio encompasses dispersions, pigments, resins and a broad range of additives, such as performance and formulation additives as well as electronic materials, it puts a strong emphasis on environmentally friendly systems, such as low-VOC (volatile organic compound) water-based coatings.



Portfolio

Dispersions

Polymer dispersions are water-based systems used in the production of adhesives, sealants, architectural coatings, paper coatings, construction chemicals and nonwoven materials. Our strength lies in our backward integration into acrylics, strong technical expertise and application know-how. In addition, our worldwide presence is a key advantage in serving our global customer base.

Pigments

Pigments are insoluble coloring and iridescent materials used in paints, inks and special applications. BASF is the leading pigment supplier worldwide, with a particular strength in high-performance pigments. Our product portfolio comprises a wide range of organic and inorganic pigments, effect pigments and pigment preparations.

Resins

Resins are film-forming components used in energy-curable coatings, urethane or melamine water-based coatings and inks. The comprehensive product portfolio includes water-based resins, acrylic oligomers, polyisocyanates, amino resins, aldehyde resins, vinyl chloride copolymers and high-solid polyols. We offer our customers solutions that fulfill regulatory requirements regarding VOC.

Additives

BASF offers a broad range of additives that significantly improve the quality and performance of many paints and coatings. BASF is the market leader for performance additives,

particularly in light stabilizers. Light stabilizers protect polymers against ultraviolet light and its negative effects. Formulation additives provide a broad technology base of dispersing agents, wetting agents and surface modifiers, defoamers, rheology modifiers and film-forming agents. Our unique portfolio helps performance-driven products to meet the latest and most stringent environmental regulations.

Electronic materials

BASF is able to deliver fully customized solutions for next-generation semiconductor and display manufacturing processes, photovoltaics, lighting, and metal systems. Its portfolio includes ultra-pure process chemicals, advanced materials for semiconductor manufacturing, high-end formulations for displays, as well as Catamold® and carbon iron powder for metal systems. It provides reliable services and innovative solutions to its customers in the fast-paced electronics industry.

BASF's market position

- Dispersions: No. 1 globally for water-based dispersions in the focus industries architectural coatings, adhesives, construction chemicals, fiber bonding materials and paper coatings
- Pigments: No. 1 globally; broadest portfolio of colors and effect pigments
- Resins: No. 3 globally in high-performance resins technologies
- Additives: No. 3 globally in performance and formulation additives
- Electronic materials: leading market position in ultra-pure materials for the semiconductor industry

Main competitors

- Dispersions: DowDuPont, Celanese, Arkema
- Pigments: Clariant, DIC, ALTANA, various Chinese and Indian companies
- Resins: Covestro, Allnex, DSM, Arkema
- Additives: ALTANA, Evonik, Elementis
- Electronic materials: DowDuPont, Entegris

Focus of research and development

We invest in research and development to create innovative, differentiating and more sustainable products and solutions. Our innovations allow our customers to offer environmentally friendly solutions with dispersions for applications in the coatings, printing, adhesives and construction industries. In addition, customers benefit from new and improved resins, pigments and formulation additives. For electronic materials, the focus is on developing innovative solutions for the semiconductor and display industries.

Key capabilities of BASF

- Leading technology and cost position enable consistent product quality, reliability and competitiveness
- Comprehensive portfolio of raw materials for coatings, printing and packaging inks, adhesives and construction materials
- Strong technical and application know-how, professional service, close to our customers
- Global production footprint close to relevant markets

Acquisitions/JVs/investments (from 2015 onward)

Product group	Description	Year
Dispersions	New plant in Pasir Gudang, Malaysia	2015
	Capacity expansion in Ludwigshafen, Germany	2018
Pigments	Capacity expansion in Ludwigshafen, Germany	2016
	Capacity expansion in Besigheim, Germany	2017
Resins	Capacity expansion in Ludwigshafen, Germany	2016–2018
Electronic materials	Acquisition of Rolic AG, Allschwil, Switzerland	2017
	New plant in Yeosu, South Korea	2017

Divestitures/shutdowns (from 2015 onward)

Product group	Description	Year
Dispersions	Divestiture of the Pischelsdorf site, Austria	2018
Pigments	Closure of plant in Paisley, Scotland	2015
Resins	Closure of plant in Kankakee, Illinois	2016
Additives	Divestiture of the photoinitiator business	2016
Micronal® PCM	Divestiture of the Micronal® PCM business	2017
Masterbatch for synthetic fibers	Divestiture of magenta master fibers business	2015

Major production sites

BASF's dispersions, pigments, resins, additives and electronic materials are produced at 46 sites worldwide. Our most important sites for each product group are listed below.

Product group	Site
Dispersions	Ludwigshafen, Germany; Monaca, Pennsylvania; Shanghai, China; Guaratinguetá, Brazil; Cengkareng, Indonesia; Chattanooga, Tennessee; Wyandotte, Michigan; Heerenveen, Netherlands; Hamina, Finland; Dagang, China; Freeport, Texas
Pigments	Ludwigshafen and Besigheim, Germany; Monthey, Switzerland; Newport, Delaware; Ulsan, South Korea
Resins	Ludwigshafen, Germany; Shanghai, China
Additives	Heerenveen, Netherlands; Schweizerhalle, Switzerland; Nanjing, China
Electronic materials	Ludwigshafen, Germany; Singapore; Taichung and Kuan Yin, Taiwan; Shanghai, China; Yeosu, South Korea

Innovation

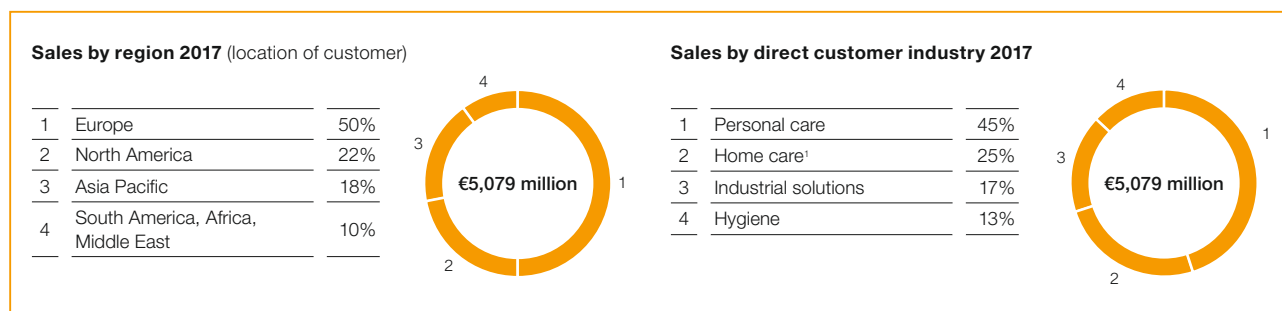


Cutting-edge coatings for the furniture industry

One of the greatest challenges in the furniture industry is how to make white furniture coatings resistant to stains such as coffee or red wine. To address this issue, BASF has developed cutting-edge waterborne coatings. This platform enables furniture producers to make their coatings resistant against stains and therefore extend the lifespan of the furniture. This will also accelerate the conversion from solvent-borne coatings to more environmentally friendly and low-VOC waterborne systems.

Care Chemicals

BASF's Care Chemicals division is the leading global supplier to the hygiene, cosmetics, detergent and cleaner industries, including technical applications. Together with our customers, we create innovative solutions to meet the current and future needs of society more sustainably. We contribute to the long-term success of our customers' brands with a broad range of products and concepts via our global network of production and development sites.



¹ Includes industrial & institutional cleaning

Portfolio

Personal care

We offer high-quality, added-value ingredients for the personal care industry. Our focus on consumer trends and our ability to innovate and bring new products rapidly to market contribute strongly to the success of our customers. We take into consideration the entire value chain in order to develop sustainable solutions. The personal care product range includes surfactants and emulsifiers, polymers, emollients, cosmetic active ingredients and UV filters.

Our business approach draws its inspiration for products and concepts from consumers and society. This is exemplified by our Care Creations™ brand, which clearly expresses our strengths of scientific excellence and market knowledge, making BASF's personal care business a valued partner for the industry.

Hygiene

We supply innovative hygiene solutions globally that contribute to sustainable development. Superabsorbent polymers (SAP) are used in various hygiene applications, such as baby diapers, adult incontinence products and feminine hygiene articles. With our global network of research, production and service sites, we are close to our customers. Through our market knowledge and R&D expertise, we aim to foster trusted relationships with customers and partners in the global hygiene industry.

Home care and industrial & institutional cleaning

We develop, produce and market a wide range of products for detergents and cleaning solutions worldwide. As the innovation leader in this market, we offer choices to our customers and provide the best-possible solutions to successfully cater to today's and tomorrow's market needs and changing regulatory requirements. Our strong R&D base and in-depth market and application expertise sets us apart from the competition and makes us the partner of choice for formulators of efficient, convenient, sustainable and safe-to-use detergents and other cleaning products. Our portfolio, which is constantly being further developed, includes surfactants, enzymes, polymers, chelating agents, biocides, optical effect products, stabilizers and methane sulfonic acid.

Industrial solutions

We develop and commercialize a broad portfolio of processing aids, differentiating additives and surface-active building blocks for a wide range of industrial applications and further downstream processing. With our formulation know-how and understanding of the physio-chemical properties of our products, we enable customer-specific solutions. In addition, we market an extensive portfolio of performance enhancers to crop protection and plant nutrition specialists. Our product portfolio includes dispersants, emulsifiers, surface modifiers, solvents, chelating agents, micronutrients and methane sulfonic acid.

BASF's market position

We are the leading supplier globally for the personal care, hygiene and home care industries.

Main competitors

- Personal care: Ashland, Croda, Stepan, Evonik, Solvay, Sasol
- Hygiene: Evonik, Nippon Shokubai, SanDia, LG Chem
- Home care and industrial & institutional cleaning: DowDuPont, AkzoNobel, Clariant
- Industrial solutions: DowDuPont, Clariant, Arkema, Solvay, Huntsman

Focus of research and development

We systematically generate ideas for new products in close collaboration with our customers, achieving innovation leadership in key market segments. In our core technologies, process innovation targets continuous cost, capacity and yield improvement for existing products to ensure cost leadership for our major product lines. Additionally, we strive to identify and establish new technologies to best support our customers in driving innovation to consumers.

Key capabilities of BASF

- Solid understanding of unmet market needs along the value chain
- Customer proximity and market focus
- Innovative and sustainable solutions through BASF's global R&D network
- State-of-the-art formulation technologies
- Strong production position and market presence in major emerging markets and regions

Acquisitions/JVs/investments (from 2015 onward)

Product group	Description	Year
Chelating agents	New plant for chelating agent Trilon® M in Theodore, Alabama	2015
Superabsorbents	New plant in Camaçari, Brazil	2015
	New superabsorbent technology SAVIVA® in Antwerp, Belgium	2017
Emollients and waxes	New plant in Shanghai, China	2017

Divestitures/shutdowns (from 2015 onward)

Product group	Description	Year
Surfactants	Plant closure Avellaneda, Argentina	2015
	Transfer of production of surfactants and other products manufactured in Washington, New Jersey, to Geismar, Louisiana; closure Washington site	2017
	Divestiture of oleochemical surfactants business in Mexico, including production site in Ecatepec, Mexico	2018

Major nameplate capacities of BASF

(thousand metric tons per year)

Product group	Location	Capacity ¹
Chelating agents	Europe, North America, South America	170
Methane sulfonic acid	Europe	30
Non-ionic surfactants	Europe, North America, Asia Pacific	630
Anionic surfactants	Europe, North America, South America, Asia Pacific	600
Superabsorbents	Europe, North America, South America, Asia Pacific	590

¹ All capacities (including joint ventures) included at 100%.

Innovation

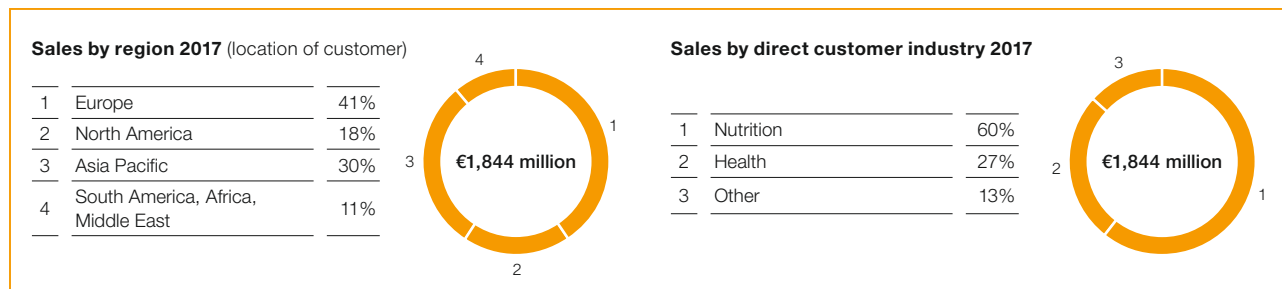


Tinosorb® S Lite Aqua

Reliable sun protection with a light, non-greasy feel – Tinosorb® S Lite Aqua enables both with its patented water-encapsulating technology. The water-dispersible UV filter allows cosmetic manufacturers to reduce the oil share in their products for more formulation flexibility and lighter formulations. Due to its unique properties, Tinosorb® S Lite Aqua offers water resistance in the end consumer product, while being water-dispersible in the formulation.

Nutrition & Health

BASF's Nutrition & Health division develops, produces and markets a comprehensive range of ingredients and solutions for the nutrition and health industry. Our products fulfill the highest safety, regulatory and sustainability standards. Together with our customers, we play an active part in enhancing the nutrition and health of consumers all over the world.



Portfolio

Aroma ingredients

BASF offers a wide variety of aroma ingredients, such as geraniol, citronellol and linalool, which are part of our citral value chain. In 2012, we enhanced this value chain by starting up the manufacturing of L-menthol in Ludwigshafen. Currently, we are ramping up a new aroma ingredients complex in Kuantan, Malaysia, together with our joint venture partner PETRONAS Chemicals Group. Our aroma ingredients are sold to the flavor and fragrance industry for use mainly in home and personal care products, in fine fragrances and in the food industry:

- Rose scents: geraniol, citronellol, dihydrorosan
- Citrus scents: citral, citronellal
- Mint scents: L-menthol, DL-menthol
- Lavender scents: linalool, tetrahydrolinalool
- Muguet scents: lysmeral, pyranol

By combining science with passion, we support our customers with high-quality fragrances and flavors. Furthermore, we sustainably increase our contribution to bring attractive fragrances and flavors to our daily lives.

Animal nutrition

BASF is a leading global supplier of feed additives for animal nutrition. Our product portfolio for livestock and companion animals includes:

- Vitamins
- Carotenoids
- Enzymes
- Organic acids
- Mycotoxin binders
- Organically bound trace elements
- Omega-6 fatty acids and more

High-quality feed additives, pioneering innovations and global presence close to our customers have made BASF a leader in the animal nutrition industry. In addition to its innovative

performance ingredients with proven efficiency gains, BASF animal nutrition offers a high-quality vitamin portfolio.

Human nutrition

Newtrition® is BASF's dedicated health solutions brand. Our premium health ingredients are based on the most solid scientific foundations and contribute to a long, healthy and active life. Our ingredients are used in several dietary supplements applications as well as in numerous industries, such as infant, medical or functional nutrition. We offer health ingredients such as:

- High-concentrated omega-3 fatty acids
- Plant sterols and sterol esters
- Vitamins
- Carotenoids

Furthermore, we offer a comprehensive performance ingredients portfolio for the beverage and food industry. Our products are used as stabilizers or colorants in various applications. Our performance ingredients portfolio includes:

- Emulsifiers
- Enzymes
- Specialty compounds
- Filtration aids

Our Newtrition® experts support our customers from consultation to implementation, enabling them to react quickly to changes in the market. Newtrition® Labs around the world combine global expert knowledge with a deep understanding of local needs, preferences and habits. In addition, we offer our customers and partners technical application service and development as well as tailor-made training in Newtrition® Labs.

Pharma solutions

BASF has been offering intelligent solutions to the pharmaceutical industry for more than 75 years. With its expertise in polymer chemistry and oleo chemistry, its research and development capabilities around the globe and the

company's clear commitment to developing pharmaceutical excipients, BASF enables solutions that contribute to its customers' success. BASF's high-quality ingredients and services can specifically support customers' formulation challenges related to instant and modified release, solubilization, softgels, skin delivery and biologics solutions. BASF also is the market leader for active pharmaceutical ingredients such as ibuprofen and omega-3 fatty acids.

Sustainability concept for our partners

Applied sustainability is a unique concept, designed as a value-adding partnership program. It makes sustainability measurable and helps companies in the nutrition and health industry to increase the sustainability of their products and brands. Applied sustainability encompasses the entire value chain: from the first step in the production process to the final use of the consumer product. The solutions provided by applied sustainability help our customers to use resources more efficiently, reduce environmental impact and increase output while improving social factors and affordability.

BASF's market position

BASF's Nutrition & Health division is among the top three leaders in all important product groups worldwide.

Main competitors

- Aroma ingredients: DSM, NHU, Symrise, IFF
- Animal nutrition: various Chinese companies, DSM, DowDuPont
- Human nutrition: DSM, DowDuPont, various Chinese companies
- Pharma solutions: Evonik, Ashland, KD Pharma, Shasun

Focus of research and development

Together with our partners, we continuously work on translating ideas into innovations. Ongoing process innovation ensures technological and cost leadership in our major product lines.

Innovation



Key capabilities of BASF

- Cost leadership through integration into the Verbund
- Value-driven innovation to support customer and consumer needs
- Deep understanding of the nutrition and health market
- High expertise in a complex regulatory environment
- Sustainability and quality management

Acquisitions/JVs/investments (from 2015 onward)

Product group	Description	Year
Aroma ingredients	New integrated aroma ingredients complex in Kuantan, Malaysia	2017–2018
Animal nutrition	New vitamin A production plant in Ludwigshafen, Germany	2020
Human nutrition	Expansion of high-grade vitamin E in Ludwigshafen, Germany	2018
Pharma solutions	Expansion of PVP value chain/extension of capacities in Ludwigshafen, Germany; Shanghai, China; Geismar, Louisiana	2016–2019
	Expansion of ibuprofen production in Bishop, Texas	2017–2018
	New ibuprofen production plant in Ludwigshafen, Germany	2021

Divestitures/shutdowns (from 2015 onward)

Product group	Description	Year
Human nutrition	Divestiture of former sterols manufacturing site in Pasadena, Texas	2016
Pharma solutions	Divestiture of custom synthesis and parts of its active pharmaceutical ingredients (API) business	2015

Major production sites

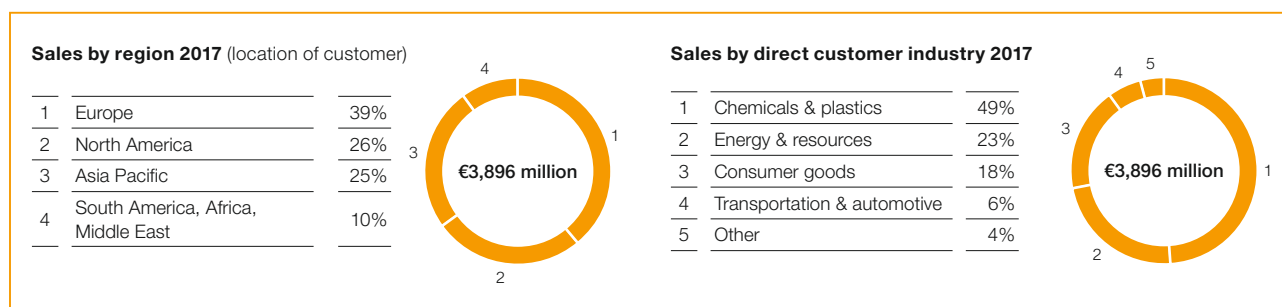
Product group	Site
Human nutrition	Illertissen and Ludwigshafen, Germany; Ballerup, Denmark; Boussens, France; Kankakee, Illinois; Hutt Lagoon, Whyalla and Cheltenham, Australia; Gunsan, South Korea
Animal nutrition	Ludwigshafen, Germany; Shenyang, China; Gunsan, South Korea
Pharma solutions	Sandefjord, Norway; Callanish, United Kingdom; Bishop, Texas
Aroma ingredients	Ludwigshafen, Germany; Kuantan, Malaysia

Lutavit® A NXT EQ-free vitamin A

BASF's animal nutrition business unit is the industry leader in animal feed safety. In June 2017, the European Commission prohibited the use of ethoxyquin (EQ) as an animal feed additive for all species, establishing a certain transitional period. We proactively took steps to handle this transition period and ensure the use of vitamin A is in full compliance with health and regulatory concerns: Lutavit® A NXT is an EQ-free vitamin A that enables our customers to comply with all the relevant regulatory restrictions.

Performance Chemicals

As an innovative partner, BASF's Performance Chemicals division offers chemicals for various customer industries, such as plastics, automotive, refineries, lubricants, oilfield, mining and water treatment as well as paper.



Portfolio

Plastic additives

BASF is a global leading supplier for stabilizers and additive blends to the plastics and rubber industries. The product range includes high-performance light stabilizers, antioxidants, process stabilizers and other specialty additives for those industries. The main fields of application are:

- Automotive molded parts
- Agricultural films
- Construction materials
- Packaging
- Electronics and consumer goods

Fuel and lubricant solutions

BASF is one of the leading suppliers of performance chemicals for the automotive and mineral oil industries. Our portfolio includes:

- Brake fluids and engine coolants
- Fuel and refinery additives, lubricant additives and additive packages, base stocks, compounded lubricants
- Low, medium and high molecular weight polyisobutene (PIB)

Paper and water chemicals

For the paper industry, we offer a comprehensive range of chemicals for innovative paper and packaging concepts. This includes:

- Retention and drainage aids
- Dry and wet strength agents, fixing agents
- Water management, flocculants and coagulants
- Basic and direct dyes, pigment preparations
- Color developers for thermal paper

In the water industry, our products are used in the key processes of industrial and municipal water treatment. The main fields of application are:

- Purification of raw water for drinking water production
- Treatment of wastewater and industrial process water
- Protection of desalination plants, cooling towers and boilers

Kaolin minerals

Kaolin is a naturally occurring white mineral that BASF converts to a high-performance material for automotive, construction, printing and agricultural applications. BASF is one of the largest calcined kaolin producers and a global leader in segments such as paints, inks, coatings, plastics and rubber, thermal paper and catalytic substrates.

Oilfield and mining solutions

For the oilfield industry, we offer a wide range of products that help our customers develop efficient formulations for the oil and gas industry. Our product portfolio includes:

- Additives for drilling, cementing and stimulation for the completion of production wells
- Production additives to ensure an efficient flow of valuable oil and gas resources
- Standard surfactants and polymers as well as next-generation products for enhanced oil recovery

For the mining industry, our offer includes reagents, equipment and process technologies focusing on applications such as solid/liquid separation, solvent extraction, tailings management, flotation, materials handling and grinding. Our mineral processing expertise can help to achieve operational, economic and environmental benefits.

BASF's market position

BASF holds a leading market position in most industry segments.

Main competitors

- Plastic additives: Songwon, Sabo, Solvay
- Fuel and lubricant solutions: Afton Chemical, Old World Industries, ExxonMobil
- Paper and water chemicals: Kemira, Nalco, SNF, Solenis
- Kaolin minerals: KaMin, Burgess, Imerys
- Oilfield and mining solutions: Nalco, Solvay, SNF

Focus of research and development

Developing solutions together with our customers and ensuring technology leadership to improve our cost position are key to the success of the Performance Chemicals division. We utilize advances in modeling and automation to accelerate development and enable faster implementation of innovations. We aim at fast-growing markets where we can leverage the breadth of our competencies.

Key capabilities of BASF

- Excellent innovation platform and application know-how
- Customer proximity and market focus
- Highly qualified and experienced team with outstanding market knowledge
- Technological competence to provide excellent solutions to our customers
- Continuous improvements in cost competitiveness in production

Major production sites

Product group	Site
Fuel and lubricant solutions	Ludwigshafen and Lampertheim, Germany; Kaisten, Switzerland; Antwerp, Belgium; McIntosh, Alabama; Puebla, Mexico; Shanghai and Nanjing, China; Thane and Mangalore, India; Singapore; Kuantan, Malaysia; Guaratinguetá, Brazil
Paper and water chemicals/oilfield and mining solutions	Bradford and Grimsby, United Kingdom; Cork, Ireland; Suffolk, Virginia; Arkansas and Middle Georgia; Altamira, Mexico; Nanjing, China; Kwinana, Australia; Ludwigshafen, Germany; Ankleshwar, India
Plastic additives	Lampertheim, Germany; Kaisten, Switzerland; Pontecchio Marconi, Italy; Puebla, Mexico; McIntosh, Alabama; Singapore; Manama, Bahrain; Shanghai, China

Acquisitions/JVs/investments (from 2015 onward)

Product group	Description	Year
Fuel and lubricant solutions	Acquisition of intellectual property for a new manufacturing process of high molecular weight polyisobutene (HM PIB) from Lanxess	2015
	New plant for highly reactive polyisobutene in Kuantan, Malaysia (together with PETRONAS Chemicals Group)	2017
	Engine coolants expansion in Shanghai, China	2018
Oilfield and mining solutions	Debottlenecking Lix® production in Cork, Ireland	2015
Plastic additives	Global investments in capacity expansions and operational excellence	2016–2021
	New plant for formgiving, packaging and blending in Jurong Island, Singapore	2017
Paper and water chemicals	Imaging chemicals (Pergafast) expansion in Ankleshwar, India	2015
	New bio-acrylamide plant in Bradford, United Kingdom	2016
	Process chemicals PVAm (polyvinylamine) capacity expansion in Ludwigshafen, Germany	2016
	New bio-acrylamide plant in Nanjing, China	2017
	New polyacrylamide plants in Bradford, United Kingdom, and Nanjing and Shanghai, China	2017–2018

Divestitures/shutdowns/reorganizations

(from 2015 onward)

Product group	Description	Year
Plastic additives	Scale-down of plastics additives in the Basel area, Switzerland	2013–2015
Paper and water chemicals	Restructuring of the water solutions business, mainly in Bradford and Grimsby, United Kingdom; West Memphis, Arkansas	2013–2016
	Kaolin business: divestiture of paper hydrous kaolin (PHK) business	2015
	Agreed combination of BASF's paper wet-end and water chemicals business with Solenis	2018–2019
Leather and textile chemicals	Divestiture of textile chemicals business	2015
	Leather chemicals business became part of the Stahl Group	2017

Innovation



Plastic additive systems keep roofs cool

“Cool roofs” are more reflective and thus do not heat up as much in direct sunlight. Roofing membranes made from thermoplastic polyolefins (TPO) are an energy-saving and cost-efficient solution here. BASF now offers plastic additive systems that are customized for such TPO roof membrane applications. Combinations of our light stabilizers, anti-oxidants and customer-specific plastic additive mixtures protect TPO membranes from the damaging effects of sunlight, extending their lifetime by up to 30 years.

Functional Materials & Solutions

The Functional Materials & Solutions segment comprises the Catalysts, Construction Chemicals, Coatings and Performance Materials divisions. They develop and market system solutions, services and innovative products, particularly for the automotive, electrics and electronics, chemical and construction industries as well as for household applications, sports and leisure.



BASF develops and supplies **functional materials and solutions** that enable vehicles to be built more efficiently and with a lower environmental impact. Chemistry is set to play an even greater role in the future as it contributes significantly to solving the mobility challenges ahead.

Divisions

Catalysts

Automotive and process catalysts, battery materials, precious metal trading

📖 page 52

Construction Chemicals

Solutions for building structures and envelopes, interior construction and infrastructure

📖 page 54

Coatings

Coatings solutions, surface treatments, decorative paints

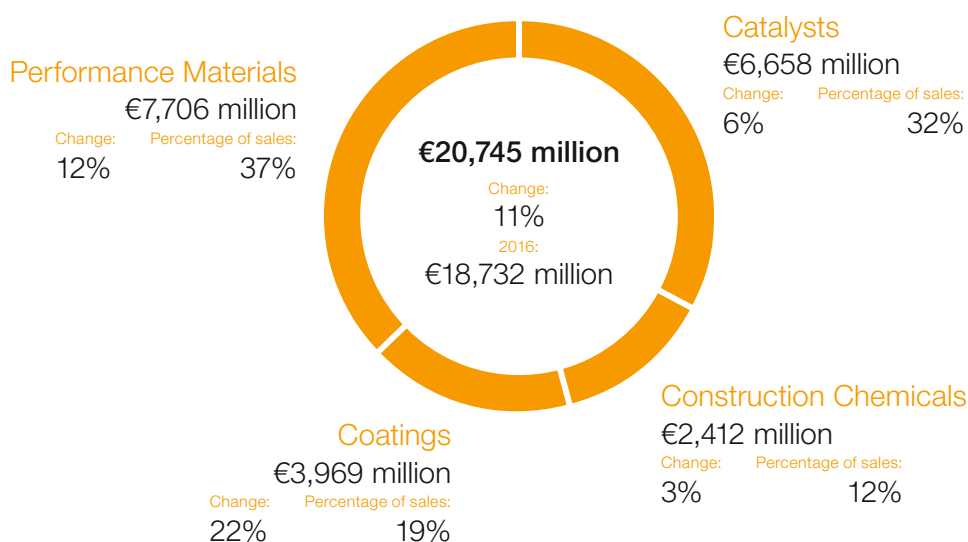
📖 page 56

Performance Materials

Polyurethanes, thermoplastics and foams

📖 page 58

Sales 2017



Factors influencing sales

Volumes	4%	
Prices	5%	
Portfolio	3%	
Currencies	(1%)	
Sales	11%	

EBIT before special items (million €)

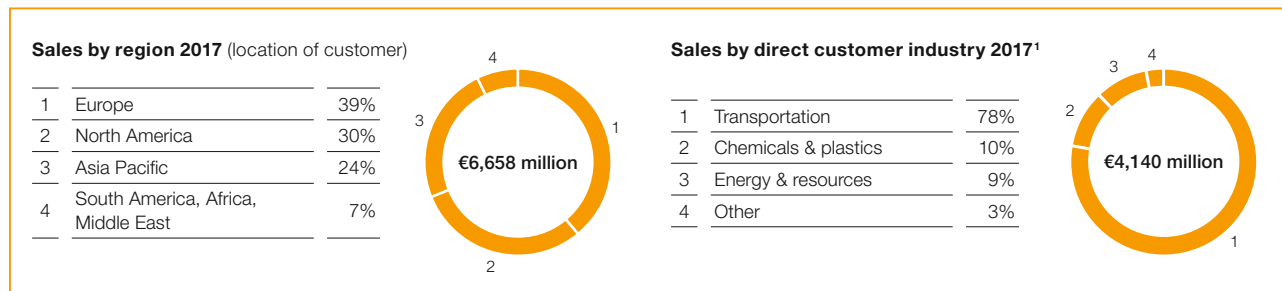
2017	1,617	
2016	1,946	
		Change: minus €329 million

Segment data Functional Materials & Solutions (million €)

	2013	2014	2015	2016	2017
Sales to third parties	17,252	17,725	18,523	18,732	20,745
Percentage of total BASF sales	% 23.3	23.8	26.3	32.5	32.2
Thereof Catalysts	5,708	6,135	6,306	6,263	6,658
Construction Chemicals	2,120	2,060	2,304	2,332	2,412
Coatings	2,927	2,984	3,166	3,249	3,969
Performance Materials	6,497	6,546	6,747	6,888	7,706
Income from operations before depreciation and amortization (EBITDA)	1,498	1,678	2,228	2,906	2,251
EBITDA margin	% 8.7	9.5	12.0	15.5	10.9
Income from operations (EBIT) before special items	1,070	1,197	1,649	1,946	1,617
EBIT before special items margin	% 6.2	6.8	8.9	10.4	7.8
Income from operations (EBIT)	1,027	1,150	1,607	2,199	1,545
EBIT margin	% 6.0	6.5	8.7	11.7	7.4

Catalysts

BASF's Catalysts division is the global market leader in catalyst technologies. The division develops and produces mobile emissions catalysts as well as process catalysts and technologies. It also provides precious metals sourcing and management services. In addition, the division is the home of BASF's battery materials business. BASF expands its leading role in catalyst technology through continuous process and product innovation.



¹ Excluding precious metal trading

Portfolio

Mobile emissions catalysts

BASF's emissions abatement catalysts enable cost-effective regulatory compliance, providing technologies that control emissions from gasoline and diesel-powered passenger cars, trucks, buses, motorcycles and off-road vehicles.

Process catalysts and technologies

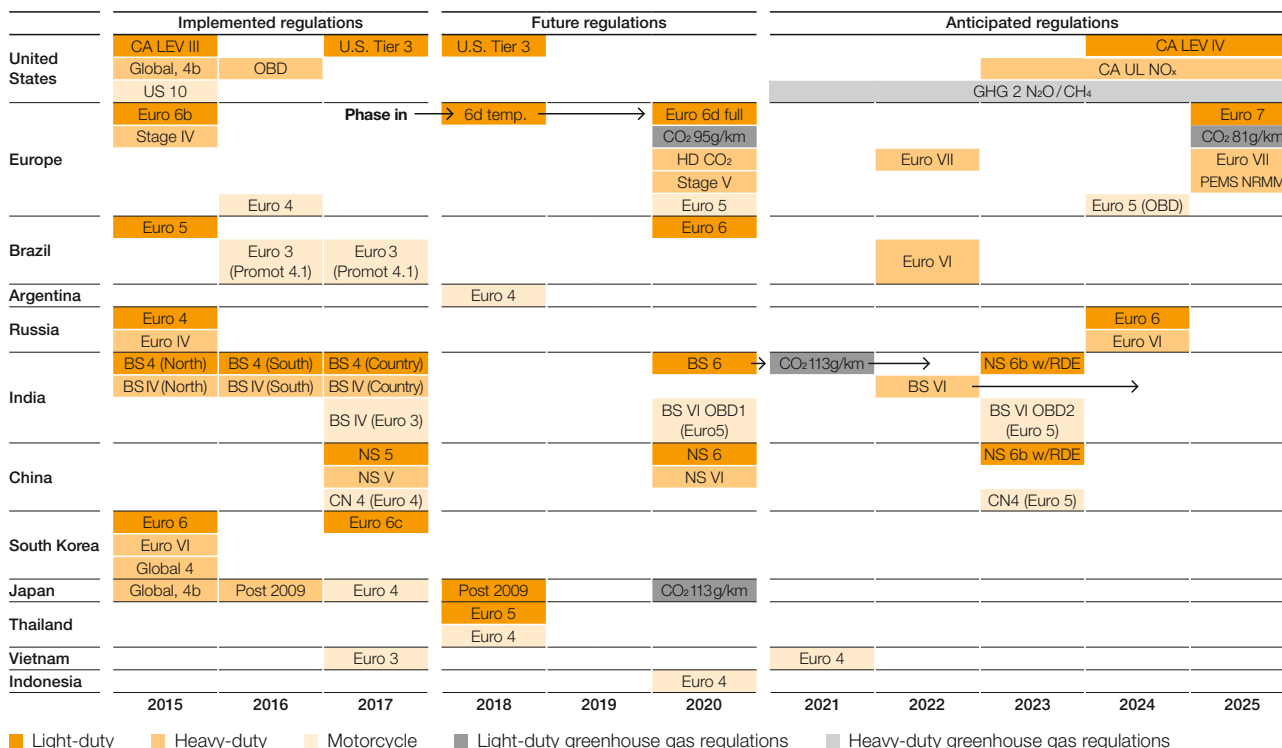
BASF is the leading global manufacturer of catalysts for the chemical industry, with solutions across the chemical value

chain. The business also provides oil refining technology catalysts, including fluid catalytic cracking (FCC) catalysts, co-catalysts and additives. It also offers adsorbents, which are used for purification, moisture control and sulfur recovery.

Battery materials

BASF is a leading global supplier of advanced cathode active materials (CAM) for the lithium-ion batteries market, providing high density CAM to the world's largest cell producers and into leading platforms of OEMs. BASF has a global presence with R&D and production capacity operating or announced in

Emissions catalysts market – regulation remains primary demand driver



all regions, often leveraging partnerships to improve competitiveness. BASF is a frontrunner in developing innovative solutions and conducting future-generation battery materials research.

Precious and base metal services

The global business unit precious and base metal services supports BASF's catalysts business and its customers with services related to precious and base metals sourcing and management. It purchases, sells, distributes, stores and offers transportation services. It also provides a variety of pricing and delivery arrangements to meet logistical, financial and price-risk management requirements. In addition, the business produces precious metal salts and solutions and is a global leader in precious metals recycling and refining.

BASF's market position

- Mobile emissions catalysts: No. 2 globally
- Chemical catalysts: No. 1 globally
- FCC refinery catalysts: No. 2 globally

Main competitors

- Mobile emissions catalysts: Johnson Matthey, Umicore
- Chemical catalysts: Clariant, Johnson Matthey
- FCC refinery catalysts: W.R. Grace, Albemarle

Focus of research and development

For mobile emissions catalysts, the focus is on improved products to meet future vehicle emission standards. In the process catalysts business, priority is given to developing new and improved products. For battery materials, the focus is on delivering solutions that can improve energy density and therefore capacity for extended range for e-mobility applications.

Key capabilities of BASF

- Global R&D footprint
- Technology leadership in mobile emissions and process catalysts
- Recognized precious metals expertise
- Strong position in Asia through joint ventures
- Operational excellence in catalyst production and use

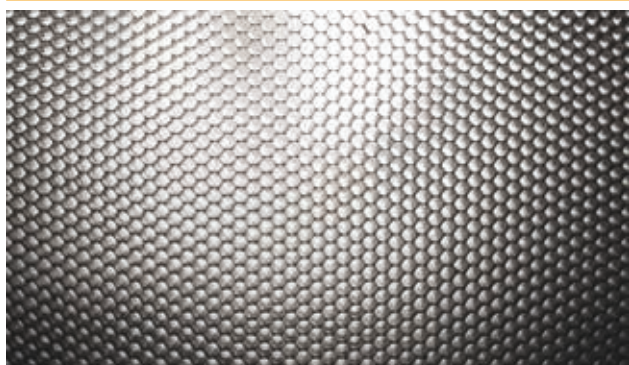
Acquisitions/JVs/investments (from 2015 onward)

Product group	Description	Year
Mobile emissions catalysts	Capacity expansion in Shanghai, China	2015
	New manufacturing plant in Chennai, India	2017
	New manufacturing plant in Rayong, Thailand	2018
	New specialty zeolites manufacturing plant in Ludwigshafen, Germany	2019
	Capacity expansion in Środa Śląska, Poland	2020
Process catalysts	New chemical catalysts manufacturing plant in Caojing, China	2017
	Battery materials	
Battery materials	Expansion of R&D laboratory in Beachwood, Ohio	2015
	BASF TODA Battery Materials LLC formed in Tokyo, Japan	2015
	License under the IP of CAMX Power for CAM-7™ cathode materials for lithium-ion batteries granted to BASF	2016
	Expansion of cathode materials plant in Onoda, Japan	2017
	BASF TODA Americas LLC formed	2018
Material services	Capacity expansion at precious metals recycling facility in Cinderford, United Kingdom	2015

Divestitures/shutdowns (from 2015 onward)

Product group	Description	Year
Process catalysts	Divestiture of the polyolefin catalysts business	2016
	Divestiture of the bleaching clay and mineral adsorbents business	2017
Battery materials	Divestiture of the electrolytes manufacturing site in Suzhou, China	2017

Innovation

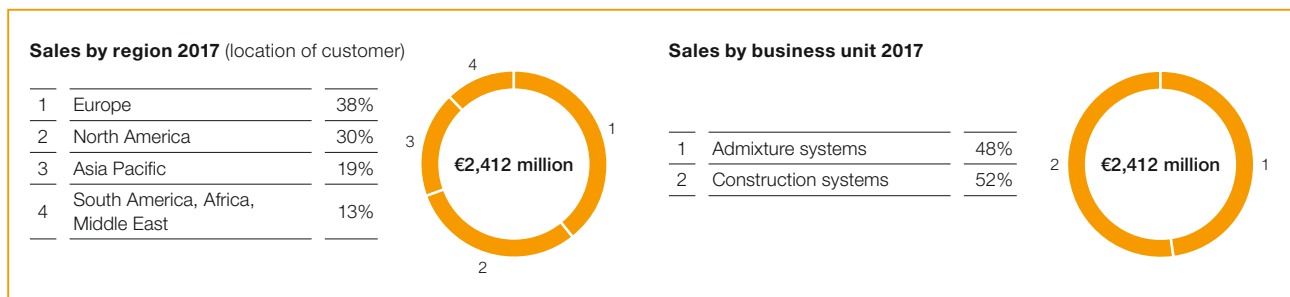


Formaldpure®

This new catalyst from BASF removes the pollutant formaldehyde at room temperature with high efficiency. It is suitable for use in a wide range of portable and large-scale air purification equipment. Formaldehyde is used in the manufacture of building materials and household products, so it is found in homes and buildings as an indoor pollutant. BASF's Formaldpure® is a thorough, long-life technology that removes formaldehyde from indoor environments and reduces the costs otherwise associated with frequent filter changes.

Construction Chemicals

BASF's Construction Chemicals division offers advanced chemical solutions for the construction industry. Our innovations help our customers to rapidly adopt sustainable construction practices and to profitably grow their businesses.



Portfolio

Admixture systems

BASF technologies for admixture systems provide solutions and add value for customers in the concrete manufacturing, cement and underground construction industries. Each of these industries is connected to the concrete value chain. Our primary focus is to improve and protect buildings by providing solutions based on additives for concrete and other cementitious materials as well as selected complementary technologies.

Construction systems

BASF serves the industry by offering construction systems with solutions to protect and repair buildings and structures. Furthermore, the construction systems help to enhance the performance of buildings and extend their service lives. Construction systems comprise: concrete repair and protection systems, performance grouts, waterproofing systems, sealants, performance flooring systems, wall systems and coatings for mulch and wood fibers.



London – going underground

Crossrail is delivering the Elizabeth line – a new railway service that will open through central London from December 2018. When fully complete in 2019, it will increase rail capacity by 10%. Eight giant tunnel boring machines burrowed below the streets to construct 42 kilometers of new tunnels with 10 newly built stations. BASF supplied admixtures to the concrete segments, soil conditioning foams and polymers for the tunnel boring machines and sprayed concrete and waterproofing systems for the tunnels. Experts from BASF's Master Builders Solutions worked closely with the main contractors providing consultancy, on-site support and training.

Our brands connecting the construction industry

Master Builders Solutions is our global brand for the construction chemicals industry and encompasses concrete admixtures, cement additives, chemical solutions for underground construction, waterproofing solutions, sealants, concrete repair and protection solutions, performance grouts and performance flooring solutions.

Besides Master Builders Solutions, Construction Chemicals also has regional specialty brands. In North America, for instance, Watson Bowman Acme produces expansion joints and offers solutions in the field of expansion control. PCI (Europe) offers a broad portfolio of tiling system products distributed through builders' merchants to professional craftsmen. Wolman (Europe) develops different solutions for wood protection, ranging from material treatment through curative treatment to fire protection.

BASF's market position

- Admixture systems: No. 1 globally
- Construction systems: No. 4 globally

Main competitors

- Admixture systems: gcp applied technologies, Mapei, Sika
- Construction systems: Sika, RPM, Mapei

Focus of research and development

The goal of our R&D activities is to enable higher productivity and enhanced sustainability in the construction industry. In particular, we develop solutions to make construction processes faster with easy-to-apply and robust products. Durability, building service life and eco-efficiency are the main drivers for innovations across all regions. We invest significantly to further strengthen and extend our technology platforms to meet the needs of our customers now and in the future.

Key capabilities of BASF

- Customized solutions matching a broad variety of customer needs
- Trusted brands with reliable product performance
- Quality of sales and technical service thanks to experienced staff
- Innovation to enable faster, safer and more durable construction
- Proximity to customers with focus on growth markets

Acquisitions/JVs/investments (from 2015 onward)

Product group	Description	Year
Admixture systems	New production plant for concrete admixtures in Lagos, Nigeria	2015
	in Colombo, Sri Lanka	2016
	in Carmona, Philippines	2016
	in St. Petersburg, Russia	2017
	in Krasnodar, Russia	2017
	in Dammam, Saudi Arabia	2018
Construction systems	Capacity expansion for flooring solutions in Klang, Malaysia	2016
	Acquisition of Henkel's professional Western European building material business	2017
	Acquisition of Grupo Thermotek, Monterrey, Mexico	2017
	Capacity expansion for sealants in Brighton, Colorado	2017

Target customer industries

Product group	Customer industries
Admixture systems	Ready-mix concrete
	Precast concrete
	Manufactured concrete products
	Cement production
	Tunnel building
	Mining
Construction systems	Construction industry, especially: <ul style="list-style-type: none"> - Contractors and applicators - Building materials suppliers - Owners of buildings

Innovation

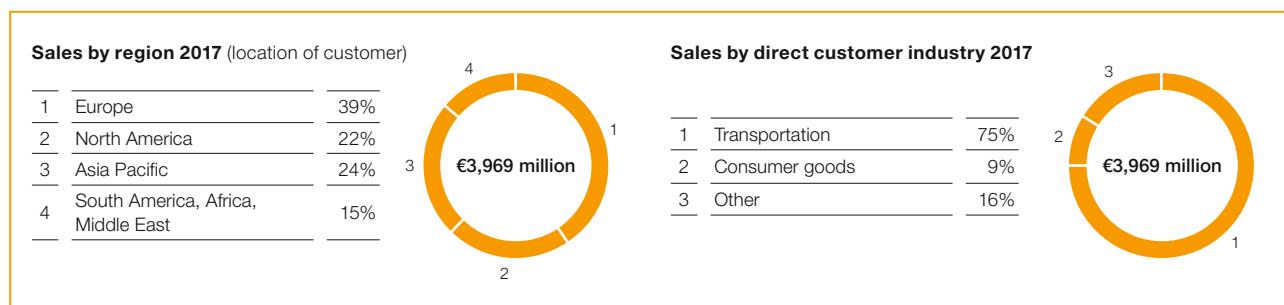


MasterSeal 7000 CR

This new waterproofing system protects concrete structures in wastewater and biogas plants exposed to high concentrations of chemicals. It bridges cracks in concrete to prevent penetration by aggressive substances. This prolongs the structure's lifetime, contributes to sustainable water management and reduces maintenance costs. MasterSeal 7000 CR is easy to work with and even adheres to humid substrates. Thanks to its rapid hardening, water contact is possible only 24 hours after application, reducing downtimes.

Coatings

BASF's Coatings division offers innovative and ecologically viable products for the automotive industry, including both the original equipment manufacturer (OEM) and refinish markets, as well as surface treatment solutions for a variety of end markets. BASF also develops and markets decorative paints in Brazil for interior and exterior use in residential and commercial buildings. We combine protection and aesthetics with eco-efficiency in tailor-made customer products and processes.



Portfolio

Automotive OEM coatings solutions

BASF provides complete automotive coatings solutions, including:

- E-coats
- Primers
- Basecoats
- Clearcoats

In addition to offering extensive technical support, BASF is a valued innovation and design partner for nearly all leading automobile manufacturers worldwide.

Automotive refinish coatings solutions

For the refinishing of passenger cars and trucks, BASF offers top- and undercoat materials sold under the global premium brands Glasurit® and R-M® as well as the value-for-money brands baslac®, LIMCO®, Norbin® and Yinfan®, which are sold to paint distributors and automotive repair shops. BASF is a leader in the fields of waterborne coatings and high-solid systems, enhanced by value-added services and tools for end users.

Surface treatment solutions

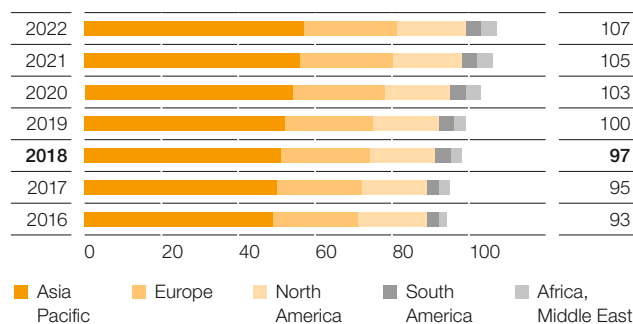
In December 2016, BASF completed the acquisition of Chemetall, a leading global supplier of applied surface treatment. With this expansion of the portfolio, BASF becomes a more complete solutions provider. BASF now offers customized technology and system solutions to protect metals from corrosion, facilitate forming and machining, allow parts to be optimally prepared for the painting process and ensure proper coating adhesion. These products are used in a wide range of industries and end markets, such as automotive, aerospace, aluminum finishing and metal forming.

For further information, please see page 18

Decorative paints

For interior and exterior use in buildings, BASF offers decorative paints, marketed, for example, under the premium brand Suvinil®, which is one of Brazil's best-known brands. With constant innovation launches, such as super-concentrated premium interior and exterior paint, Suvinil® continues to strengthen its role as a pioneer in the area of innovative paints.

Passenger car and light commercial vehicle production (million units produced)



Source: Global automotive production forecast April 2018 (LMCA)

Automotive is the most important customer industry for BASF's coatings business. The number of cars and light commercial vehicles produced globally is expected to grow by around 10 million units over the next four years. The main growth driver is Asia – in particular China – where BASF is excellently positioned to participate in the growth opportunities.

BASF's market position

- Automotive OEM coatings: No. 2 globally
- Automotive refinish coatings: No. 3 globally
- Surface treatment: No. 2 globally
- Decorative paints: No. 1 in Brazil

Main competitors

- Automotive OEM coatings: PPG, Axalta, Kansai Paint
- Automotive refinish coatings: Axalta, PPG, AkzoNobel
- Surface treatment: Henkel, PPG, Nihon Parkerizing, Nippon Paint
- Decorative paints South America: AkzoNobel, Sherwin Williams

Focus of research and development

Our innovation efforts for the automotive industry are focused on close partnerships with our customers in order to formulate, for instance, new coatings solutions for integrated processes, unique eco-efficient coatings and clearcoats with extremely improved durability by using the latest crosslinking technologies. Additional research topics include improved products for new technology markets (e.g., functional films) and environmentally friendly applications.

Key capabilities of BASF

- Innovative long-term cooperation with leading OEM customers
- Technical on-site support at customer locations, creating additional value and long-term relationships
- Services and tools within automotive industry to deal with color complexity
- Leveraging strong market position and application know-how from mature markets into growing markets
- Global production and market presence

Acquisitions/JVs/investments (from 2015 onward)

Product group	Description	Year
Automotive OEM	Resin production in Shanghai, China	2015
	Paint production in Bangpoo, Thailand	2016
	Basecoats and intermediates production in Shanghai, China	2017
	Shanghai automotive application center, China	2018
	Waterborne production capacity expansion in Tultitlán, Mexico	2018
	Expansion of e-coat production in Whitehouse, Ohio	2019
Refinish	Acquisition of the automotive refinish coatings business of Guangdong Yinfan Chemistry Co. Ltd., China	2016
	New competence center in Houston, Texas	2016
	New laboratory facilities in Münster, Germany	2019
Surface treatment	Acquisition of Chemetall	2016
	Capacity increase for aerospace in Langelsheim, Germany	2019

Divestitures/shutdowns (from 2015 onward)

Product group	Description	Year
Industrial coatings	Divestiture of the industrial coatings business	2016

Major production sites

BASF Coatings' products are manufactured at 40 sites worldwide. Our most important sites for each product group are listed below.

Product group	Site
Automotive OEM	Münster, Germany; Guadalajara, Spain; Pavlovsky Posad, Russia; Shanghai, China; Totsuka, Japan; Greenville, Ohio; Tultitlán, Mexico
Refinish	Münster, Germany; Clermont de l'Oise, France; Windsor, Canada
Surface treatment	Langelsheim, Germany; Sens, France; Guissano, Italy; Boksburg, South Africa; Shanghai, China; Blackman Township, Michigan
Decorative	São Bernardo do Campo, Brazil

Innovation

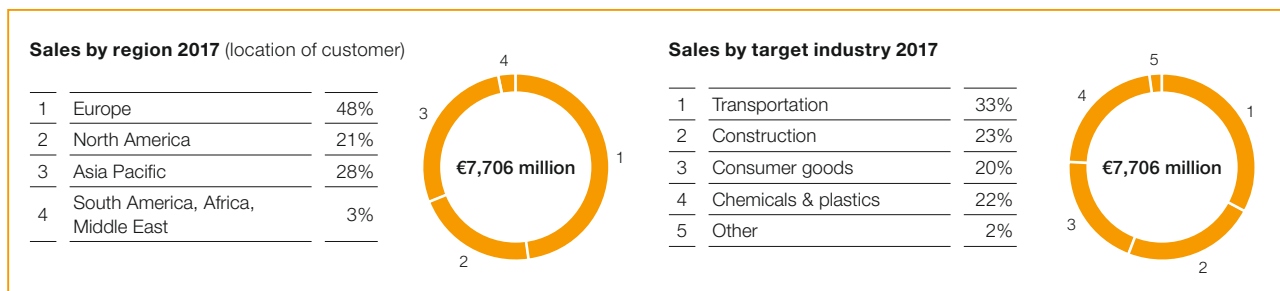


Refinish UV-A cured primer filler

BASF's UV primer filler offers an ideal approach for making work processes quicker, simpler and more economical. The use of UV-A radiation, which is the least harmful part of ultraviolet light, permits the primer filler to dry extremely quickly, without developing heat. This also prevents plastic bumpers from deforming and makes the product perfect for the repair of plastic parts, which are gaining importance in car body construction.

Performance Materials

The Performance Materials division brings together BASF's entire materials know-how regarding innovative, customized plastics under one roof. Active in four major industry sectors – transportation, construction, industrial applications and consumer goods – the division has a strong portfolio of products and services combined with a deep understanding of application-oriented system solutions.



Portfolio

Polyurethanes

Polyurethane solutions make life more comfortable, safer and more pleasant, while helping to save energy. They contribute towards improved insulation of buildings and more attractive, lightweight design of cars. Producers of shoes, cars and household goods as well as sports equipment use the unique advantage of polyurethanes provided with the knowledge and experience of BASF's polyurethane experts worldwide. This product group is composed of PU systems, TPU and MPU (Cellasto®) technologies.

Engineering plastics

Engineering plastics are used in numerous applications, such as automotive engineering, the electrical and electronics sectors, household appliances and precision technology as well as in medical technology. This product group includes Ultraform® based on polyoxymethylene (POM), Ultradur® based on polybutylene terephthalate (PBT) and Ultramid® based on polyamide (PA).

Specialty plastics

Specialty plastics include biodegradable co-polyesters, mainly used in various packaging applications and sold under the ecoflex® and ecovio® brands, as well as Ultrason®, a high temperature plastic based on polyarylsulfone (PPSU, PSU, PESU).

Functional foams

Functional foams include Basotect®, a flexible, open-cell foam made from melamine resin, and the particle foams Neopolen® P and Palusol®. Basotect® is used for sound and thermal insulation in the construction and transportation industries and as a cleaning sponge in the consumer industry.

Styrenic foams

Styrenic foams include expandable polystyrene (EPS), Styropor® and its refinement Neopor® as well as Styrodur®C (XPS). These insulating materials are at the forefront of eco-efficient construction. They help save energy and are cost-effective.

Industry focus

Performance Materials approaches the market with a strong industry orientation, focusing on innovation to address important needs of key market segments. We work jointly with our customers and stakeholders in the industries to introduce innovative solutions by combining our diverse portfolio of products with application, engineering, simulation and manufacturing know-how. Customer intimacy and close collaboration are the basis for our solution-selling approach, which is a key driver for profitable growth.

Product/ Industry	Transportation	Construction	Consumer	Industrial
PU systems	■	■	■	■
TPU	■	■	■	■
MPU	■		■	■
Engineering plastics	■	■	■	■
Polysulfones	■		■	■
Styrenic foams		■	■	
Functional foams	■	■	■	
Biodegradable plastics			■	

BASF's market position

- TPU: No. 1 globally
- MPU: No. 1 globally
- Polyamide 6 and 6.6 compounds: No. 1 globally
- PBT compounds: No. 1 globally
- Expandable polystyrene: No. 1 in Europe

Main competitors

- PU specialties: Covestro, DowDuPont, Huntsman, Lubrizol
- Polyamide 6 and 6.6 compounds: Lanxess, DowDuPont, EMS
- Expandable polystyrene: Loyal, Wuxi Xingda, INEOS Styrenics

Focus of research and development

Our innovation focus is on developing new products and applications in key target industries to improve existing solutions and find new ones. Development is driven by local market needs and is coordinated globally to ensure leveraging of key capabilities across regions. Our innovation pipeline focuses on creating solutions for unmet market needs, particularly in developing markets with strong growth potential.

Key capabilities of BASF

- Close collaboration with key customers in target industries worldwide
- Innovation in products, applications, processes and business models
- Technical, engineering and application competence
- Operational excellence ensuring reliability and consistent quality
- Focused specialty businesses

Major nameplate capacities of BASF

(thousand metric tons per year)

Product group	Capacity
Engineering plastics	735
Styropor®/Neopor®	520

Acquisitions/JVs/investments (from 2015 onward)

Product group	Description	Year
Polyurethanes	Acquisition of TWSS, Taiwan	2015
	TPU production upgrade in Wyandotte, Michigan	2015
	New PU systems plant in Geismar, Louisiana	2015
	Acquisition of polyurethane business from Polioles in Mexico	2015
	MPU capacity expansion in Shanghai, China	2016
	Upgrade of Cellasto production in Lemförde, Germany	2016
	Cellasto capacity expansion in Wyandotte, Michigan	2018
	TPU capacity expansion in Lemförde, Germany	2019
	MPU capacity expansion in Dahej, India	2019
	Engineering plastics	New compounding plant in Yesan, South Korea
Expansion of compounding capacity in Altamira, Mexico		2017
Expansion of compounding capacity in Schwarzeide, Germany		2017
Ultraform® (POM) 50-50 production JV with Kolon Plastics in Gimcheon, South Korea		2018
Agreed acquisition of Solvay's global polyamide business		2018
Specialty plastics	Acquisition of EPP assets from Polyform	2016
	Expansion of Ultrason capacity in Yeosu, South Korea	2018

Divestitures/shutdowns (from 2015 onward)

Product group	Description	Year
Functional foams	Divestiture of PET foam (Kerdyn®) business	2016
Styrenic foams	Divestiture of EPS business in the Americas	2015
	Divestiture of XPS production site in Tudela, Spain	2015
	Divestiture of XPS, Styrodur business and assets in Italy	2016
	Closure of XPS production in Schwarzeide, Germany	2017
PU systems	Closure of PU system houses in Strem, Poland; Pendik, Turkey; Elandsfontein, South Africa; Bukit Jelutong, Malaysia; Hsinchu, Taiwan	2015
	Closure of TPU production in Guaratinguetá, Brazil	2016
	Shutdown of Ultraform® (POM) production plant in Ludwigshafen, Germany	2018

Innovation



Ultramid® Deep Gloss

This specialty polyamide picks up on the trend toward higher quality and functionalized surfaces in car interiors. Ultramid® Deep Gloss is suitable for higher gloss yet robust components without the need for coating. It offers excellent resistance to scratching along with high chemical and good UV resistance. The material reproduces even the smallest structures in true detail, making haptic design elements and intuitive user interfaces possible – similar to a touch screen.

Agricultural Solutions

The Agricultural Solutions segment consists of the Crop Protection division. We develop and produce innovative solutions for the improvement of crop health and yields, and market them worldwide. Our portfolio includes solutions in the areas of chemical and biological crop protection, seed treatment and water management as well as for nutrient supply and plant stress.



Our innovative **crop protection solutions** help farmers to safeguard their harvest and increase their yield.

Indications and sectors

Fungicides

Protecting crops against harmful fungi

📖 page 62

Herbicides

Reducing competition from weeds for water and nutrients

📖 page 62

Insecticides

Combating insect pests in agriculture and beyond

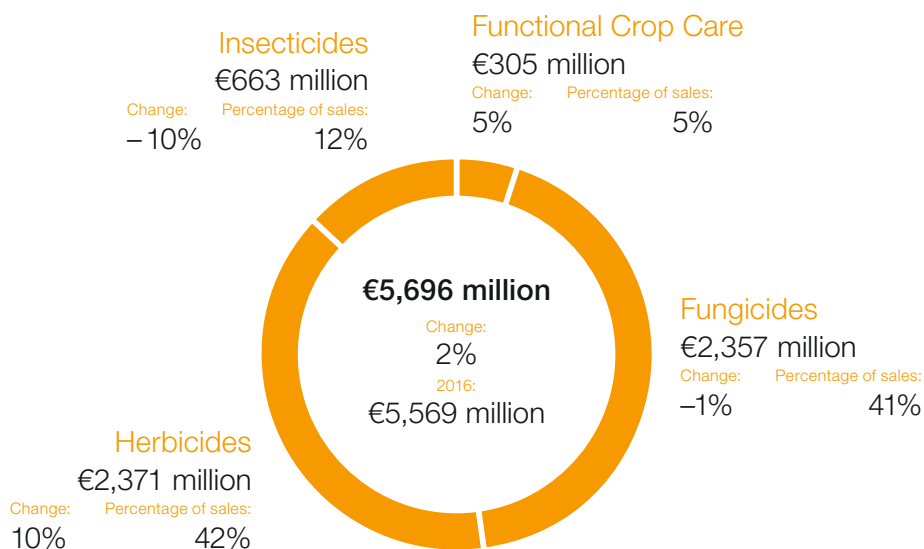
📖 page 62

Functional Crop Care

Biological crop protection, seed treatment, polymers and colorants

📖 page 63

Sales 2017



Factors influencing sales

Factor	Change
Volumes	6%
Prices	(3%)
Portfolio	0%
Currencies	(1%)
Sales	2%

EBIT before special items (million €)

Year	Value (million €)
2017	1,033
2016	1,087

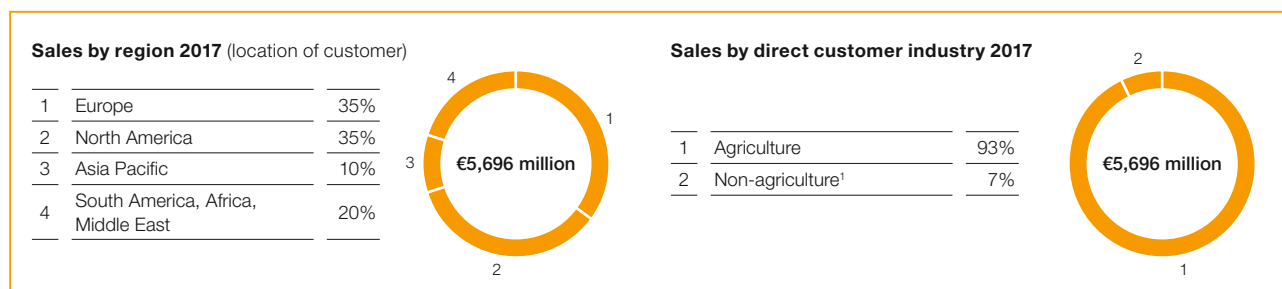
Change: minus €54 million

Segment data Agricultural Solutions (million €)

	2013	2014	2015	2016	2017
Sales to third parties	5,227	5,446	5,820	5,569	5,696
Share of total BASF sales	7.1 %	7.3 %	8.3 %	9.7 %	8.8 %
Income from operations before depreciation and amortization (EBITDA)	1,375	1,297	1,321	1,305	1,282
EBITDA margin	26.3 %	23.8 %	22.7 %	23.4 %	22.5 %
Income from operations (EBIT) before special items	1,222	1,109	1,090	1,087	1,033
EBIT before special items margin	23.4 %	20.4 %	18.7 %	19.5 %	18.1 %
Income from operations (EBIT)	1,208	1,108	1,083	1,037	1,015
EBIT margin	23.1 %	20.3 %	18.6 %	18.6 %	17.8 %

Crop Protection

As the world's population continues to grow, farmers face the challenge of increasing their crop yields with limited resources. We offer innovative solutions combined with practical, down-to-earth advice, so that our customers can produce more – and more nutritious – food as efficiently as possible. We are committed to the responsible use of our products and the preservation of a healthy environment, while investing in our development pipeline to expand our portfolio of integrated solutions.



¹ Aquaculture, forestry, home and garden, industrial weed control, ornamentals, public health, turf, urban pest control

Portfolio

Fungicides

BASF conducts pioneering research to find new active ingredients in the fight against fungal diseases. For years, our products have been setting new standards in this area.

- **Xemium®** is a key component of BASF's fungicides portfolio for broad-spectrum disease control in field and specialty crops. It has intrinsic, excellent mobility in the plant and long-lasting residual action. Xemium® is commercially available in more than 50 countries for over 100 different crops.
- **Revysol®** will play a key role in our fungicide portfolio. The first isopropanol-azole with an outstanding biological performance shows a new level of disease control and provides additional resistance management opportunities in many important crops. Revysol® will help farmers to achieve high and reliable crop vitality and optimum marketable yield and quality. Pending regulatory approval, first market launches are expected in 2019.

Herbicides

Herbicides protect crops from weeds that cause damage by competing for nutrients, water and sunlight. Our product portfolio includes:

- **Kixor®** can be used against broadleaf and difficult-to-control weeds, including those that have developed resistance to the herbicide glyphosate.
- The **Clearfield® production system** combines herbicide-tolerant seeds, which are developed using traditional plant breeding methods, together with regionally-tailored herbicides. The Clearfield® production system is currently available for canola (oil-seed rape), sunflower, corn (maize), rice, wheat and lentils.

- **Engenia®** is a new advanced dicamba formulation and a leading innovation in the herbicide field. Engenia® is designed for use in dicamba/glyphosate-tolerant cropping systems and is a highly efficient tool for the control of resistant weeds in row crops. Engenia® is currently available in North America and will also be introduced to other markets in the future.

Insecticides

Insecticides protect crops from insects that cause damage by eating parts of plants or sucking their juices and transmitting dangerous viruses.

- **Inscalis®** insecticide controls problematic pests such as aphids, whiteflies, psyllids, scales and leafhoppers. Its efficacy and unique mode of action create a valuable new tool for resistance and integrated pest management programs. Launched in 2018, Inscalis® insecticide is derived from a natural product, which exhibits a favorable environmental profile to honeybees and other insect predators. Inscalis® insecticide will be used in row crops, specialty crops and ornamentals.
- **Nealta®** miticide controls spider mites, for example, in pome fruit, grapes, strawberries, tree nuts, citrus crops and tomatoes. It is highly effective against mites that have developed resistances to other active ingredients and shows no indication of cross-resistance to other commercial miticides. This makes it an important tool for integrated pest management programs. It is safe for mammals, beneficial mites, predatory insects and pollinators such as bees.
- **Alpha-cypermethrin** controls a broad spectrum of insect pests which occur in agriculture, forestry and public health. Its formulations have been registered in 94 countries and approved for use in more than 100 crops. The formulation Fendona® is a valuable public health tool recommended by the WHO to combat malaria and other insect-borne diseases.

Functional Crop Care

Functional Crop Care solutions improve plant growth, protect seeds, help control pests and diseases, and help plants use nutrients such as nitrogen more efficiently. Our product portfolio includes:

- **Velondis®** is BASF's next-generation, seed-applied bio-fungicide that extends the window of disease protection by preparing the plant to defend itself against key soil-borne diseases. Velondis® creates a biofilm that keeps pathogens from invading the plant's root system.
- **Velifer®** biological insecticide has an extended spectrum of application against target pests and can be used for foliar applications in integrated pest management programs in both greenhouse and field settings.

BASF's market position

- Fungicides: No. 3 globally
- Herbicides: No. 5 globally
- Insecticides: No. 5 globally

Main competitors

- Fungicides: Bayer, Syngenta, DowDuPont
- Herbicides: Syngenta, Monsanto, Bayer, DowDuPont, FMC
- Insecticides: Syngenta, Bayer, DowDuPont

Powerful research and development pipeline

Our well-stocked innovation pipeline comprises products with a launch date between 2017 and 2027. With a peak sales potential of €3.5 billion, the pipeline includes innovations from all business areas. The first market launches of Revysol®, our new fungicide, are scheduled for the 2019 growing season following registration with the relevant authorities. A new herbicide with a unique mode of action to control key weeds in cereal should come on the market in 2019. The new insecticide Inscalis® to combat piercing-sucking pests is being launched in 2018. Another new insecticide, Broflaniide, which helps farmers control chewing insects like potato beetles and cater-

pillars in specialty and field crops, should be on the market from 2020. In Functional Crop Care, Velondis®, a biological fungicide for seed treatment, is being introduced onto the market in 2018. Further growth drivers are:

- Agreed acquisition of businesses and assets from Bayer, strengthening our herbicide portfolio and marking our entry into the seeds business in key agricultural markets
- Provisia™ Rice System (herbicide tolerance)
- Innovations in professional and specialty solutions

Key capabilities of BASF

- New products from research pipeline or from acquisitions
- Alignment of resources as well as products and services to customers' needs
- Strong R&D and stringent patent management
- Focus on high-value markets and innovative products
- Active portfolio management

Acquisitions/JVs/investments (from 2015 onward)

Product group	Description	Year
Functional Crop Care	Capacity expansion in Europe	2015
	New seed solutions technology and biologicals R&D center in Europe	2016
	Capacity expansion in Europe	2017
	Capacity expansion in North America	2017
Inscalis®	New production capacity in Europe	2017
Revysol®	New production capacity in North America	2018
Xemium®	Capacity expansion in Europe	2016
Dicamba	Capacity expansion in North America	2016
Kixor®	Capacity expansion in North America	2015
DMTA	Capacity expansion in North America	2016
Formulation capacities	Expansion of existing plants in Europe	2016
	Expansion of existing plants in North America	2018
Infrastructure and R&D measures	Expansion and upgrade of R&D, active ingredients and formulation capacities in North America and Europe	2018
Digital farming	Acquisition of ZedX Inc., United States	2017
Crop protection/seeds	Agreed acquisition of crop protection and seeds businesses and assets from Bayer	2018

Innovation



Maglis®

Maglis® is our brand for digital products that provide personalized agronomic knowledge for better-informed decisions linked to our core crop protection product portfolio. BASF offers several digital tools for farmers and distribution partners, as well as BASF's own sales force worldwide. The portfolio includes, for example, the Maglis Customer Navigator which provides farmers with more convenient decision support and reduces the complexity in managing crop protection product selection and purchasing activities.

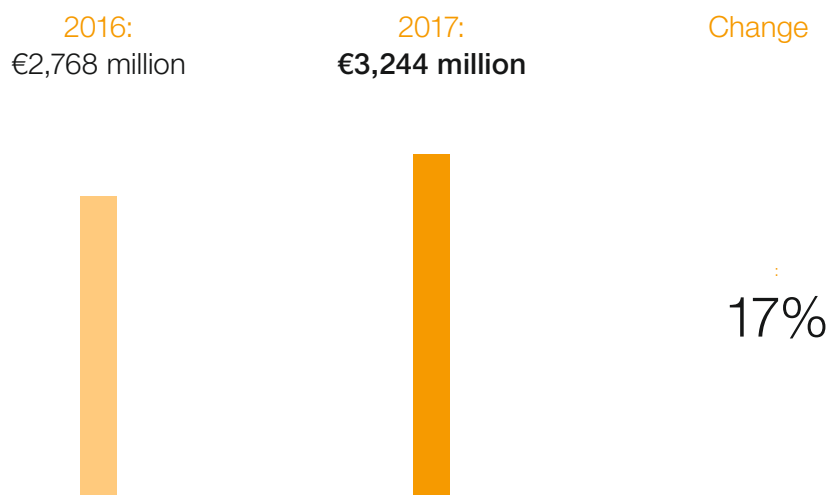
Oil & Gas

BASF's oil and gas activities are bundled in the Wintershall Group. We concentrate on exploration and production in oil and gas-rich regions in Europe, North Africa, Russia, South America and the Middle East – focus regions in which Wintershall has a high level of regional and technological expertise. We are also active in the transport of natural gas in Europe with our Russian partner Gazprom.

The **Mittelplate** offshore oil field, where Wintershall and DEA Deutsche Erdoel AG each have a 50% shareholding, is one of the main cornerstones of Germany's oil production. Over 34 million metric tons of oil have already been extracted from the reservoir. To ensure Mittelplate can also make an important contribution to domestic production in the future, Wintershall and DEA initiated another drilling campaign in 2017, which will continue until 2022.



Sales



Factors influencing sales

Volumes	4%	
Prices/Currencies	13%	
Portfolio	0%	
Sales	17%	

EBIT before special items (million €)

2017	793	
2016	517	
		Change: plus €276 million

Segment data Oil & Gas (million €)

	2013 ¹	2014	2015	2016	2017
Sales to third parties	14,776	15,145	12,998	2,768	3,244
Share of total BASF sales	% 20.0	20.4	18.5	4.8	5.0
Income from operations before depreciation and amortization (EBITDA)	3,149	2,626	2,587	1,596	2,069
EBITDA margin	% 21.3	17.3	19.9	57.7	63.8
Income from operations (EBIT) before special items	1,856	1,795	1,366	517	793
EBIT before special items margin	% 12.6	11.9	10.5	18.7	24.4
Income from operations (EBIT)	2,403 ²	1,688	1,072	499	1,043
EBIT margin	% 16.3	11.1	8.2	18.0	32.2
Net income	1,730	1,464	1,050	362	719

¹ Figures for 2013 have been adjusted to reflect the dissolution of the natural gas trading business disposal group.

² In 2013, special income of €429 million resulted from the reclassification of GASCADE Gastransport GmbH.

Oil & Gas

Exploration and production of crude oil and natural gas is performed by BASF's subsidiary Wintershall. In addition to investments in the exploration, development and production of hydrocarbons, we also secure our lasting success by broadening our technological expertise. Our focus is on increasing the yield from producing fields as well as on operating as efficiently as possible. In Europe, Wintershall is also active in the transport of natural gas.

Exploration and Production

Activities by region



Europe

Wintershall has been operating in Europe for over 80 years, with Germany being one of Wintershall's most important regions. Wintershall is the operator of the only gas production platform in the German North Sea (A6-A) and has a 50% stake in the largest German crude oil field, Mittelplate. Domestic energy is also produced onshore around Barnstorf in Lower Saxony, in Emlichheim on the German-Dutch border, in Landau in the Palatinate and in Aitingen near Augsburg. Wintershall produces from 15 oil fields and 35 gas fields in Germany. In Emlichheim, a recent drilling campaign was successfully completed in 2017. With 12 new wells, the company is expanding production in Germany's largest existing onshore oil field.

In the Netherlands, Wintershall is one of the largest producers, operating over 20 offshore platforms. Since an asset swap in October 2015, Gazprom participates with a 50% stake in the activities of Wintershall Noordzee B.V. in the southern North Sea in the Netherlands, United Kingdom and Denmark. We commenced production from our first own-operated Danish oil field in April 2017. The Ravn field (Block 5/06) produces oil from a new platform in the Danish North Sea. Wintershall closely monitors the productivity of the reservoir to assess opportunities for further development of the Greater Ravn area.

Wintershall Norge, with around 50 licenses on the Norwegian Continental Shelf, is one of the largest license holders in the region. We are actively looking to expand our portfolio with new licenses. In December 2017, Wintershall and its partners Petoro and Spirit Energy started production on the Maria field. The field was discovered in 2010 and is the first project in Norway that Wintershall has operated from discovery of the field to the start of production. Development of the Ivar Aasen and Edvard Grieg fields continued with additional wells. The Plan for Development and Operations (PDO) of the Aasta Hansteen field was approved by the Norwegian authorities in June 2013. Production startup is planned for late 2018. For Nova (formerly Skarfjell), Wintershall's second own-operated development project in Norway, the field development concept was submitted to the Norwegian Ministry of Petroleum and Energy in May 2018.

Russia

With approximately one-quarter of the world's natural gas reserves, Russia is very important for the global energy market. Wintershall has been active in Russia for more than 25 years – in particular through its successful cooperation with Gazprom. Wintershall is currently involved in several joint projects linked to the exploration and production of hydrocarbons in western Siberia and southern Russia.

Yuzhno Russkoye: Wintershall has a 35% share in the commercial success of the field via Severneftegazprom. The field reached plateau production of 25 billion m³ of natural gas¹ per year in 2009. Currently, more than 140 production wells are in operation. The field has recoverable volumes of approximately 600 billion m³ of natural gas¹. The comprehensive production of natural gas from the shallow Turonian formation in the Yuzhno Russkoye gas field is currently being tested. Severneftegazprom is planning to commercially produce gas from the Turonian formation by 2021.

¹ Russian standard cubic meter

Achimov block 1A: Wintershall and Gazprom operate a 50-50 joint venture (Achimgaz) for block 1A of the Achimov formation in the Urengoy field. According to the state-approved amended unified development plan, the recoverable volumes are estimated at approximately 230 billion m³ of natural gas¹ and 70 million metric tons of condensate. In 2017, the joint venture produced 6.6 billion m³ of gas¹ and 2.9 million metric tons of condensate. The gradual development of Achimgaz continued and 88 wells had been drilled by the end of 2017.

Achimov blocks 4A and 5A: The asset swap with Gazprom, completed at the end of September 2015, gives Wintershall a 25.01% share in the blocks 4 and 5 of the Achimov formation. Overall, the two blocks contain hydrocarbon resources of around 274 billion m³ of natural gas¹ and 74 million metric tons of condensate, based on the development plan confirmed by the Russian mining authorities. The start of production is envisaged for 2020.

¹ Russian standard cubic meter

Wolgodeminoil: Wintershall holds 50% in a joint venture with Ritek, subsidiary of Russian Lukoil, in the Volgograd area. Wolgodeminoil was founded at the end of 1992 and is thus the longest-operating joint venture between a Russian and a Western European partner in the exploration and production sector. Currently, the company produces crude oil and natural gas from 11 fields – around 4.8 million BOE in 2017.

North Africa/Middle East

Wintershall has been engaged in exploration and production activities in Libya since 1958. Our onshore activities comprise eight oilfields in the Libyan desert, where Gazprom is participating with a 49% stake. Due to the very challenging situation in the country, our onshore production had to be suspended repeatedly. In addition to our onshore activities, Wintershall is also involved in the Al Jurf offshore field off the Libyan coast. Operation of the Al Jurf oil field was possible throughout 2017 without interruption and the offshore oil production is not affected by the events in the country.

In recent years, Wintershall expanded its operations to the Arabian Peninsula. In June 2012, Wintershall signed a technical evaluation agreement with OMV and the Abu Dhabi National Oil Company (ADNOC) to appraise the sour gas and condensate field Shuwaihat in the Western Region of Abu Dhabi. The operations of the offshore well were successfully completed in May 2017 ahead of schedule and below budget. The appraisal phase has been concluded, and plans for the development of the field are under discussion.

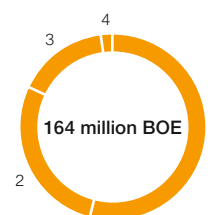
South America

Wintershall has been active in this core region since the late 1970s. In Argentina, we are participating in 15 oil and gas fields and are one of the country's largest producers of natural gas. The company is active in Tierra del Fuego, as well as in the central Argentinean provinces of Neuquén and Mendoza. Off the coast of Tierra del Fuego, Wintershall produces natural gas and liquids from the Carina and Aries natural gas fields. In addition, Wintershall is a partner in the newly developed natural gas field Vega Pléyade, with a production capacity of 9 million m³ (100%). Wintershall and its partners in Cuenca Austral Marina 1 are currently expanding the plant processing capacity and are planning the development of a new gas field, Fenix. Argentina has an enormous potential of non-conventional reservoirs, especially in the Vaca Muerta formation in the Neuquén Basin. Wintershall has interests in San Roque, Aguada Pichana Este, Bandurria Norte and Aguada Federal concessions and is operator in Bandurria Norte and Aguada Federal. Wintershall's share in the Aguada Pichana Oeste (West) block was sold to Pan American Energy LLC and YPF S.A. Wintershall also reduced its interest in the shale development of the Aguada Pichana Este (East) block through the sale of shares to Total Austral S.A. In 2018, we have initiated a new drilling campaign in Aguada Pichana Este, together with our partners.

At the beginning of 2018, Wintershall was awarded seven exploration licenses in Brazil. The licenses are located off the north and south-east coasts of Brazil, and Wintershall will hold the operatorship for four of these licenses. Initial exploration activities in the allocated blocks are being planned and will take place from 2019.

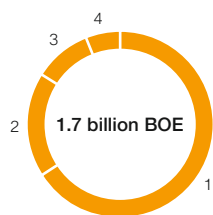
Production by region 2017

1	Russia	55%
2	Europe	25%
3	South America	16%
4	North Africa, Middle East	4%



Proven 1P reserves by region 2017

1	Russia	67%
2	Europe	19%
3	South America	9%
4	North Africa, Middle East	5%



For further information, please refer to the BASF Report 2017, pages 237–244.

Natural Gas Transport

In addition to the exploration and production of natural gas, Wintershall – with its partner Gazprom and other companies – is active in the construction and operation of natural gas pipelines that are important for ensuring supply security in Western Europe. The German natural gas transport businesses are bundled in the WIGA Transport Beteiligungs-GmbH & Co. KG (WIGA). Via its subsidiaries, the WIGA Group operates a 3,300 kilometer long-distance on-shore pipeline network that includes the pipeline links to the Nord Stream 1 pipelines: the Baltic Sea Pipeline Link (OPAL) and the North European Natural Gas Pipeline (NEL). The two 1,224 kilometer offshore pipelines of Nord Stream 1 run through the Baltic Sea, providing a direct link between Russia and Germany with a capacity to transport a total of 55 billion m³ of gas per year. We hold a 15.5% share in Nord Stream AG, which owns and operates the Nord Stream 1 pipelines. Other shareholders are Gazprom (51%) and E.ON (15.5%) as well as N.V. Nederlandse Gasunie and ENGIE (9% each).

Our pipeline network



Moreover, Wintershall contributes to the financing of the expansion of Nord Stream together with other European partners. The Nord Stream 2 project aims to build two additional offshore pipelines with an overall capacity of 55 billion m³ of natural gas per year. The project will be developed by the company Nord Stream 2 AG, which is a 100% subsidiary

of Gazprom. Five European energy companies, including Wintershall, have committed to provide long-term financing for 50% of the total costs of the project, currently estimated to be €9.5 billion. Each company will fund up to €950 million. In April 2017, the financing agreements were signed, underscoring the project's strategic importance for the European gas market.

GASCADE Gastransport GmbH plans, as project developer, to construct the 485 kilometer European gas pipeline link (EUGAL), which will extend from the Baltic Sea in northern Germany to the Czech border. Its maximum annual transportation capacity of 51 billion cubic meters is to be achieved in two phases by 2020. The project will be implemented under a fractional ownership agreement with its partners Fluxys Deutschland GmbH, Gasunie Deutschland Transport Services GmbH and ONTRAS Gastransport GmbH, each of which holds a 16.5% share.

Major pipelines

Nord Stream 1

Twin pipeline through the Baltic Sea from Vyborg, Russia, to Greifswald, Germany

- BASF share: 15.5%
- Total capacity: 55 billion m³ p.a.
- Total investment offshore: €7.4 billion
- First pipeline operative November 2011; project completed October 2012

OPAL

Pipeline from the landfall point of Nord Stream 1 in Greifswald to Brandov, Czech Republic, on the German-Czech border

- OGT¹ share: 80%
- Total capacity: 36 billion m³ p.a.
- Startup 2011, together with the first offshore string of Nord Stream 1

NEL

Pipeline from landfall point of Nord Stream 1 towards Rehdén in Lower Saxony

- NGT² share: 51%
- Total capacity: 20 billion m³ p.a.
- Startup 2012, together with the second offshore string of Nord Stream 1

¹ OGT: OPAL Gastransport GmbH & Co. KG, operator of the OPAL pipeline
² NGT: NEL Gastransport GmbH, operator of the NEL pipeline

Intention to merge Wintershall Group with LetterOne's oil and gas business

On December 7, 2017, BASF signed a letter of intent with the LetterOne group on the merger of their respective oil and gas businesses in a new joint venture, which would operate under the name Wintershall DEA. The oil and gas activities of BASF bundled in the Wintershall Group comprise Wintershall Holding GmbH, based in Kassel, Germany, and its subsidiaries including the gas transportation business. LetterOne's oil and gas business comprises Hamburg-based DEA Deutsche Erdoel AG and its subsidiaries. According to the plan, Wintershall DEA is to be created by LetterOne contributing all its shares in DEA Deutsche Erdoel AG to Wintershall against issuance of new shares to LetterOne. BASF shall initially hold 67% and LetterOne 33% of the shares in Wintershall DEA. Wintershall's gas transportation business is not included in this shareholding ratio. As of closing, Wintershall DEA would issue a mandatory convertible bond to BASF reflecting the value of Wintershall's gas transportation business.

Key capabilities of BASF

- Many years of experience as cost-efficient operator with low finding, development and production costs
- Strong presence and position in key countries
- Strategic partnerships and cooperation
- Capital discipline and operational excellence
- Portfolio robustness (proven in volatile commodity markets)

Innovation



Acquisitions/JVs/investments (from 2015 onward)

Product group	Description	Year
Oil field development	Knarr, Norway	2015
	Edvard Grieg (former Luno), Norway	2015–2018
	Ivar Aasen, Norway	2016
	Ravn, Denmark	2017
	Maria, Norway	2017
	F17, Netherlands	2022
Oil/gas field development	Nova (formerly Skarfjell), Norway	2021
Gas field development	L6-B, Netherlands	2015
	Vega Pléyade, Argentina	2016
	Aasta Hansteen, Norway	2018
	Fenix, Argentina	2021
	Yuzhno Russkoye, Turon FFD Ph1, Russia	2020–2023
Gas/condensate field development	Achimov 1A (Achimgaz), Russia	2008–2020
	Achimov 4 and 5, Russia	2020–2026
Asset swaps and transactions	Farm-in agreement Aguada Federal with Gas y Petroléo del Neuquén and increase in participation interest, Argentina	2014–2015
	Participating interest of 100% in Bandurria Norte after the license split of Bandurria license, Argentina	2015
	Asset swap with Gazprom, transfer of 25.01% in Achimov 4 and 5 in Urengoy field to Wintershall, Russia	2015

Divestitures/shutdowns (from 2015 onward)

Product group	Description	Year
Asset swaps and transactions	Asset swap with Gazprom, transfer of 50% of Wintershall Noordzee B.V. to Gazprom	2015
	Asset swap with Gazprom, transfer of all shares in gas trading and storage business to Gazprom	2015
	Sale of 10% share in Yme license on the Norwegian Continental Shelf to OKEA	2016
	Sale of all shares (25%) in Byrding (former Astero) field on the Norwegian Continental Shelf to Statoil	2016
	Sale of all shares (27.27%) in Aguada Pichana Oeste (West) block to Pan American Energy and YPF	2017
	Sale of 4.77% share in Aguada Pichana Este (East) to Total Austral	2018
Cessation of activities	Relinquishment of Block 4 North in Qatar	2015
	Cessation of production from Kotter and Logger in the Netherlands	2015

Enhanced oil recovery (EOR)

Wintershall concentrates its innovation activities on improving the success rate of exploration, developing technologies for reservoirs with challenging development and production conditions, and increasing the recovery factor of reservoirs. We are working together with BASF's Performance Chemicals division on the development of heat-resistant and salt-tolerant surfactants. These will be used to mobilize the oil trapped in the pores of rock, especially in regions such as the Middle East and North Africa or in the North Sea.

Other

Activities not assigned to a particular division are reported in Other. These include the sale of raw materials, engineering and other services, rental income and leases, the steering of the BASF Group by corporate headquarters, and cross-divisional corporate research.

Cross-divisional corporate research, which also includes plant biotechnology research, works on long-term topics of strategic importance to the BASF Group. Furthermore, it focuses on the development of specific key technologies which are of central importance for the divisions.

Earnings from currency conversion that are not allocated to the segments are also reported under Other, as are earnings from the hedging of raw materials prices and foreign currency exchange risks. Furthermore, revenues and expenses from the long-term incentive (LTI) program are reported here.

Transfers between the segments are generally executed at adjusted market-based prices which take into account the higher cost efficiency and lower risk of Group-internal transactions. Assets, as well as their depreciation and amortization, are allocated to the segments based on economic control. Assets used by more than one segment are allocated based on the percentage of usage.

Financial data (million €)

	2013	2014	2015	2016	2017
Sales to third parties	4,190	3,609	2,790	2,018	2,242
Income from operations before depreciation and amortization (EBITDA)	(533)	(2)	(866)	(972)	(679)
Income from operations (EBIT)	(664)	(133)	(985)	(1,091)	(799)
Income from operations (EBIT) before special items	(618)	(566)	(888)	(1,050)	(764)
Thereof costs of corporate headquarters	(237)	(218)	(233)	(222)	(224)
costs for cross-divisional corporate research	(386)	(389)	(402)	(395)	(379)
foreign currency results, hedging and other measurement effects	(190)	(2)	(220)	(331)	(28)

3 Financials

BASF on the capital market	72
Business review by segment	74
Regional results	75
Factors influencing sales and sensitivities	76
Financing	77
Ten-year summary	78
Investor Relations team	80

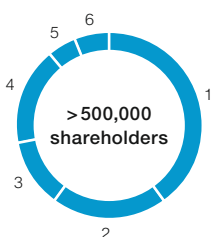
BASF on the capital market

Broad base of international shareholders

With over 500,000 shareholders, BASF is one of the largest publicly owned companies with a high free float. An analysis of the shareholder structure carried out at the end of 2017 showed the following shareholder distribution:

Shareholder structure (by region; rounded)

1	Germany	40%
2	United States and Canada	20%
3	United Kingdom and Ireland	12%
4	Rest of Europe	17%
5	Rest of world	5%
6	Not identified	6%



Approximately 29% of the company's share capital is held by private investors, nearly all of whom reside in Germany. BASF is therefore one of the DAX 30 companies with the largest percentage of private shareholders.

Employees becoming shareholders

In many countries, we offer share purchase programs that turn our employees into BASF shareholders. In 2017, for example, 23,700 employees (2016: approximately 24,000) purchased employee shares worth €63 million (2016: €59 million).

For further information, please refer to the BASF Report 2017, page 46.

BASF a sustainable investment

Since 2004, BASF has participated in the CDP's program for reporting on data relevant to climate protection. The international organization CDP represents more than 800 institutional investors who manage over \$100 trillion in assets. BASF again achieved a score of A- in 2017, awarding it "Leadership" status. Companies on this level are distinguished by factors such as the completeness and transparency of their reporting. They also have approaches in place for managing the opportunities and risks associated with climate change as well as corporate strategies to reduce emissions. BASF has also reported on water management to CDP since 2010 and was again included in the CDP Water A List in 2017. This assessment includes how transparently companies report on water management activities, the degree to which risks are reduced and the extent to which product developments contribute to sustainable water management at customers. Efficient water use and the development of sustainable local solutions are important elements of BASF's water stewardship strategy.

BASF continued to be included in the MSCI ESG Ratings in 2017 with a score of AA. The analysts recognized that BASF has made further progress in reducing greenhouse gas emissions and has one of the lowest emissions intensities in the chemical industry.

Share price performance

The BASF share closed the 2017 stock market year with a closing price of €91.74. This equates to a 3.9% rise in the value of BASF shares compared with the previous year's closing price, which also marked the high for 2016. Assuming that dividends were reinvested, BASF shares gained 7.4% in value in 2017. The benchmark indexes of the German and European stock markets – the DAX 30 and the EURO STOXX 50 – rose by 12.5% and 9.2% over the same period, respectively. The global industry index MSCI World Chemicals gained 23.6%.

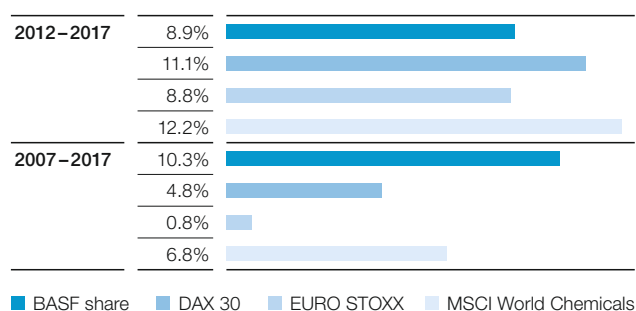
Performance of BASF shares¹



¹ With dividends reinvested

The BASF share reached a new high of €97.46 over the course of 2017. Viewed over a 10-year period, the long-term performance of BASF shares still clearly surpasses the German, European and global benchmark indexes. The assets of an investor who invested €1,000 in BASF shares at the end of 2007 and reinvested the dividends in additional BASF shares would have increased to €2,676 by the end of 2017. This represents an annual yield of 10.3%, placing BASF shares above the returns for the DAX 30 (4.8%), EURO STOXX 50 (0.8%) and MSCI World Chemicals (6.8%) indexes.

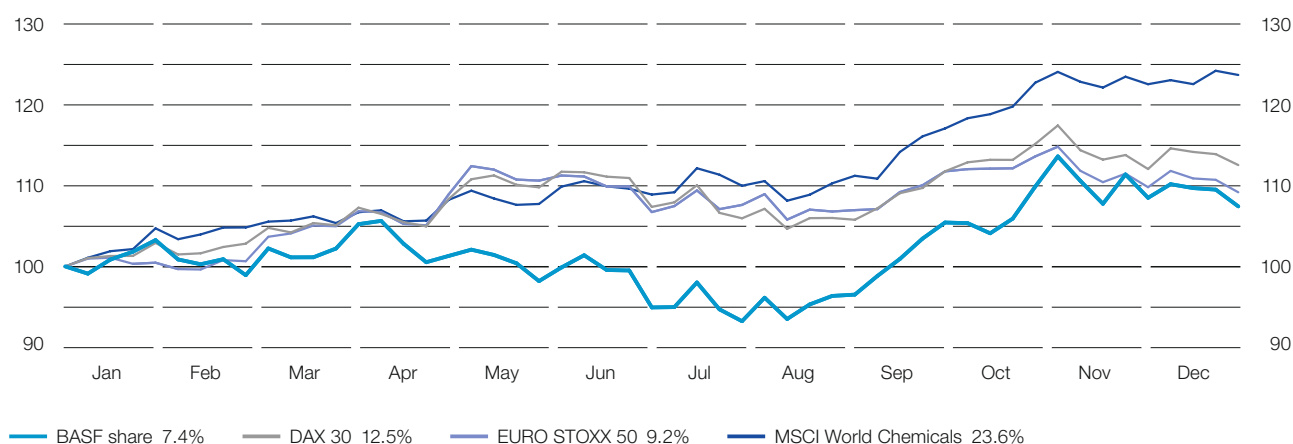
Long-term performance of BASF shares compared with indexes
(Average annual performance with dividends reinvested)



American depositary receipts

American depositary receipts (ADRs) allow U.S. institutional and retail investors to trade and own non-U.S. companies directly through the U.S. equity markets. BASF has a sponsored level 1 program, which is traded on OTC-QX, the platform for international quality companies on OTC markets. BASF's ADR (Symbol: BASFY) is part of the OTC-QX30 index, which comprises the 30 largest ADR programs listed on OTC markets.

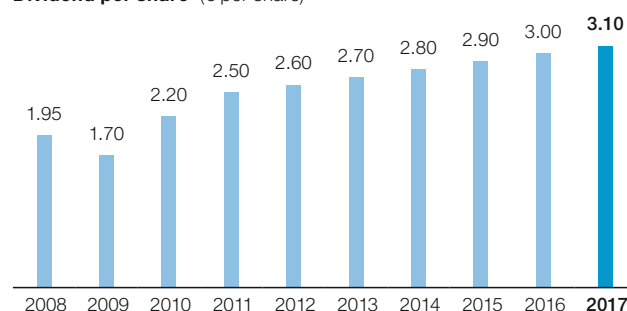
For further information, please see basf.com/share

Change in value of an investment in BASF shares in 2017 (with dividends reinvested; indexed)**Dividend**

For 2017, BASF paid a dividend of €3.10 per share, up 3.3% versus the previous year. We stand by our ambitious dividend policy and paid out €2.8 billion to our shareholders. Based on the year-end share price for 2017, BASF shares offered a high dividend yield of around 3.4%. BASF is part of the DivDAX share index, which contains the 15 companies with the highest dividend yield in the DAX 30.

Dividend per share**€3.10****Dividend yield****3.4%****Dividend policy**

We aim to increase our dividend each year, or at least maintain it at the previous year's level.

Dividend per share¹ (€ per share)**Analysts' recommendations**

Around 30 financial analysts regularly publish studies on BASF. The latest analyst recommendations for our shares as well as the average target share price ascribed to BASF by analysts can be found online at basf.com/analystestimates.

For further information, please see basf.com/share

Shareholder return

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Share buybacks (million €)	1,618	-	-	-	-	-	-	-	-	-
Dividends (million €)	1,791	1,561	2,021	2,296	2,388	2,480	2,572	2,664	2,755	2,847
Total (million €)	3,409	1,561	2,021	2,296	2,388	2,480	2,572	2,664	2,755	2,847
Dividend per share (€) ¹	1.95	1.70	2.20	2.50	2.60	2.70	2.80	2.90	3.00	3.10
Share price at year-end (€/share) ¹	27.73	43.46	59.70	53.89	71.15	77.49	69.88	70.72	88.31	91.74
Dividend yield (%)	7.0	3.9	3.7	4.6	3.7	3.5	4.0	4.1	3.4	3.4
Payout ratio (%)	62	111	44	37	50	52	50	67	68	47
Price/earnings ratio (P/E ratio)	8.9	28.2	12.0	8.0	13.6	14.8	12.5	16.3	20.0	13.9
Free cash flow yield (%) ²	9.8	8.0	7.1	7.5	4.0	4.5	2.6	5.6	4.4	5.7

¹ Adjusted for 2-1 stock split in 2008

² Free cash flow per share at year-end divided by share price at year-end

Business review by segment

Segment overview (million €)

	Sales		Income from operations before depreciation and amortization (EBITDA)		Income from operations (EBIT) before special items	
	2017	2016	2017	2016	2017	2016
Chemicals ¹	16,331	12,905	5,374	3,114	4,233	2,032
Performance Products ¹	16,217	15,558	2,427	2,577	1,416	1,777
Functional Materials & Solutions	20,745	18,732	2,251	2,906	1,617	1,946
Agricultural Solutions	5,696	5,569	1,282	1,305	1,033	1,087
Oil & Gas	3,244	2,768	2,069	1,596	793	517
Other	2,242	2,018	(679)	(972)	(764)	(1,050)
Total	64,475	57,550	12,724	10,526	8,328	6,309

¹ On January 1, 2017, the Monomers and Dispersions & Pigments divisions' activities for the electronics industry were merged into the global Electronic Materials business unit and allocated to the Dispersions & Pigments division. For better comparability, the affected figures for 2016 have been adjusted accordingly.

Segment overview (million €)

	Income from operations (EBIT)		Assets		Investments including acquisitions ²	
	2017	2016	2017	2016	2017	2016
Chemicals ¹	4,208	1,953	13,233	13,124	1,149	1,185
Performance Products ¹	1,510	1,678	14,432	14,911	800	892
Functional Materials & Solutions	1,545	2,199	17,364	17,359	1,056	3,679
Agricultural Solutions	1,015	1,037	8,096	8,899	185	266
Oil & Gas	1,043	499	11,967	12,829	988	1,115
Other	(799)	(1,091)	13,676	9,374	186	121
Total	8,522	6,275	78,768	76,496	4,364	7,258

¹ On January 1, 2017, the Monomers and Dispersions & Pigments divisions' activities for the electronics industry were merged into the global Electronic Materials business unit and allocated to the Dispersions & Pigments division. For better comparability, the affected figures for 2016 have been adjusted accordingly.

² Additions to property, plant and equipment (thereof from acquisitions: €8 million in 2017 and €155 million in 2016) and intangible assets (thereof from acquisitions: €235 million in 2017 and €2,789 million in 2016)

Contributions to EBITDA by segment 2017

Chemicals	42%	
Performance Products	19%	
Functional Materials & Solutions	18%	
Agricultural Solutions	10%	
Oil & Gas	16%	
Other	(5%)	

EBITDA margin by segment 2017

Chemicals	33%	
Performance Products	15%	
Functional Materials & Solutions	11%	
Agricultural Solutions	23%	
Oil & Gas	64%	
Other	(30%)	

Cash contributions¹ by segment 2017 (million €)

Chemicals	4,225	
Performance Products	1,627	
Functional Materials & Solutions	1,195	
Agricultural Solutions	1,097	
Oil & Gas	1,081	
Other	(865)	

¹ Cash contribution is defined here as EBITDA minus additions to property, plant and equipment and intangible assets; including acquisitions

Additions to property, plant and equipment¹ by segment 2017

1	Chemicals	28%
2	Performance Products	18%
3	Functional Materials & Solutions	22%
4	Agricultural Solutions	4%
5	Oil & Gas	24%
6	Other (infrastructure, R&D)	4%



¹ Including capitalized exploration, restoration obligations and IT investments

Regional results

Sales by location of company (million €)

	2008	2009	2010	2011	2012 ¹	2013	2014	2015	2016	2017
Europe	38,652	30,375	35,156	41,036	41,445	43,335	42,854	38,675	27,221	30,778
Thereof Germany	27,497	21,543	25,426	28,816	29,320	31,571	32,241	28,229	17,540	19,873
North America	11,937	9,404	13,246	14,727	14,441	14,573	15,467	15,665	14,682	15,937
Asia Pacific	8,664	7,997	11,642	13,316	11,694	11,679	11,643	11,712	11,512	13,658
South America, Africa, Middle East	3,051	2,917	3,829	4,418	4,549	4,386	4,362	4,397	4,135	4,102
Total	62,304	50,693	63,873	73,497	72,129	73,973	74,326	70,449	57,550	64,475

Sales by location of customer (million €)

	2008	2009	2010	2011	2012 ¹	2013	2014	2015	2016	2017
Europe	36,693	28,532	33,201	39,124	39,428	41,221	40,911	36,897	26,039	29,214
Thereof Germany	13,796	10,666	12,225	14,705	15,210	14,446	15,126	13,483	7,412	8,359
North America	11,932	9,480	12,886	13,995	13,992	14,272	15,213	15,390	14,042	15,357
Asia Pacific	9,320	8,706	12,510	14,410	12,546	12,450	12,341	12,334	12,165	14,343
South America, Africa, Middle East	4,359	3,975	5,276	5,968	6,163	6,030	5,861	5,828	5,304	5,561
Total	62,304	50,693	63,873	73,497	72,129	73,973	74,326	70,449	57,550	64,475

Income from operations (EBIT)² by location of company (million €)

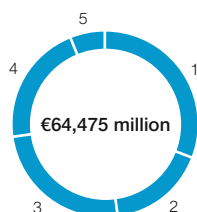
	2008	2009	2010	2011	2012 ¹	2013	2014	2015	2016	2017
Europe	5,822	2,390	5,206	5,668	4,557	4,485	5,010	4,174	3,632	4,742
Thereof Germany	4,744	1,855	3,769	3,249	2,249	2,164	1,894	2,303	1,582	1,913
North America	73	495	1,107	1,314	969	1,488	1,548	1,295	1,113	1,236
Asia Pacific	254	503	1,271	1,133	855	817	673	445	1,098	2,209
South America, Africa, Middle East	314	289	177	471	361	370	395	334	432	335
Total	6,463	3,677	7,761	8,586	6,742	7,160	7,626	6,248	6,275	8,522

¹ We have applied International Financial Reporting Standards 10 and 11 as well as International Accounting Standard 19 (revised) since January 1, 2013. Figures for 2012 have been restated; no restatement was made for 2011 and earlier.

² For purposes of increased clarity in the presentation of regional results, income from operations (EBIT) before special items was replaced by EBIT, a figure directly derivable from the Consolidated Financial Statements, as of the second quarter of 2016.

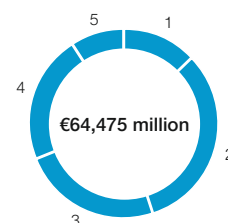
Sales by location of company 2017

1	Germany	31%
2	Europe (excl. Germany)	17%
3	North America	25%
4	Asia Pacific	21%
5	South America, Africa, Middle East	6%



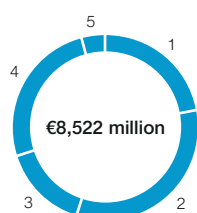
Sales by location of customer 2017

1	Germany	13%
2	Europe (excl. Germany)	32%
3	North America	24%
4	Asia Pacific	22%
5	South America, Africa, Middle East	9%



Income from operations (EBIT) by location of company 2017

1	Germany	22%
2	Europe (excl. Germany)	33%
3	North America	15%
4	Asia Pacific	26%
5	South America, Africa, Middle East	4%



Factors influencing sales and sensitivities

Factors influencing sales of the BASF Group

	2008	2009	2010	2011	2012 ¹	2013 ²	2014	2015	2016	2017
Volumes	0%	(10%)	11%	0%	1%	5%	4%	3%	2%	4%
Prices	12%	(14%)	8%	12%	1%	0%	(3%)	(9%)	(4%)	8%
Currencies	(4%)	1%	5%	(2%)	3%	(3%)	(1%)	6%	(1%)	(1%)
Acquisitions/divestitures	0%	4%	2%	5%	(1%)	1%	0%	(5%)	(15%)	1%
Total	8%	(19%)	26%	15%	4%	3%	0%	(5%)	(18%)	12%

¹ We have applied International Financial Reporting Standards 10 and 11 as well as International Accounting Standard 19 (revised) since January 1, 2013. Figures for 2012 have been restated; no restatement was made for 2011 and earlier.

² Figures for 2013 have been adjusted to reflect the dissolution of the natural gas trading business disposal group.

Factors influencing sales

Sales rose by €6,925 million to €64,475 million in 2017. This was mainly attributable to significantly higher sales prices in the chemicals business, especially in the Chemicals segment, as well as volumes growth in all segments. The Chemetall business, which was acquired from Albemarle in December 2016, also had a positive impact. Sales were reduced by slightly negative currency effects in all segments.

Sensitivities

Currency impact on BASF Group

Our competitiveness on global markets is influenced by fluctuations in exchange rates. For BASF's sales, opportunities and risks arise in particular when the U.S. dollar exchange rate fluctuates. A full-year rise in the value of the U.S. dollar/euro exchange rate by \$0.01 would result in an increase of around €50 million in the BASF Group's EBIT, assuming other conditions remain the same. On the production side, we counter exchange rate risks by producing in the respective currency zones.

Annual impact of US\$/€ exchange rate change on BASF Group

(exchange rate: -\$0.01 per €)

Sales
€200 million

EBIT
€50 million

Financial currency risks result from the translation of receivables, liabilities and other monetary items in accordance with IAS 21 at the closing rate into the functional currency of the respective Group company. In addition, we incorporate planned purchase and sales transactions in foreign currencies in our financial foreign currency risk management. These risks are hedged using derivative instruments, if necessary.

Oil price impact on the Oil & Gas segment

The year's average oil price for Brent crude was around \$54 per barrel in 2017, compared with \$44 per barrel in the previous year. For 2018, we anticipate an average oil price of \$65 per barrel. We therefore expect a slight increase in price levels for the raw materials and petrochemical basic products that are important to our business. Yet an oil price level below the expected average would pose risks for our oil and gas business, whose EBIT declines by approximately €20 million for every \$1 decrease in the average annual barrel price of Brent crude.

Annual impact of oil price change on Oil & Gas segment

(\$1 per barrel rise in annual average oil price for Brent crude)

Sales
€25 million

EBIT
€20 million

Financing

Our financing policy is aimed at ensuring our solvency at all times, limiting the risks associated with financing and optimizing our cost of capital. We preferably meet our external financing needs on the international capital markets. We strive to maintain at least a solid “A” rating, which ensures unrestricted access to financial and capital markets. Our financing measures are aligned with our operational business planning as well as the company’s strategic direction and also ensure the financial flexibility to take advantage of strategic options.

Financing policy

Corporate bonds form the basis of our medium to long-term debt financing. These are issued in euros and other currencies with different maturities as part of our €20 billion debt issuance program.

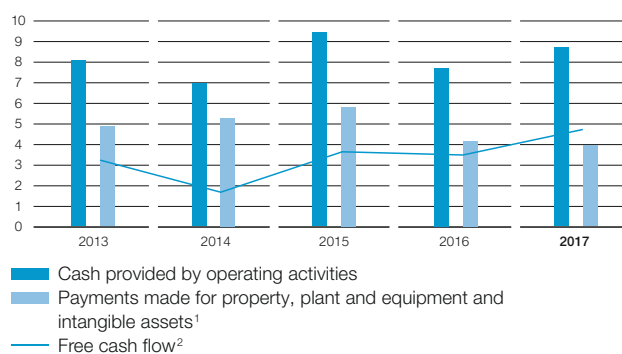
For short-term financing, we use BASF SE’s U.S. dollar commercial paper program, which has an issuing volume of up to \$12.5 billion. As of December 31, 2017, no commercial paper was outstanding under this program (December 31, 2016: \$1,089 million). Firmly committed, syndicated credit lines of €6 billion serve to cover the repayment of outstanding commercial paper, and can also be used for general company purposes. These credit lines were not used at any point in 2017. Our external financing is therefore largely independent of short-term fluctuations in the credit markets.

To minimize risks and exploit internal optimization potential within the Group, we bundle the financing, financial investments and foreign currency hedging of BASF SE’s subsidiaries within the BASF Group where possible. Foreign currency risks are primarily hedged centrally by means of derivative financial instruments in the market. Off-balance sheet financing tools, such as leasing, are of minor importance for BASF.

Cash flow

Cash provided by operating activities improved by €1,068 million year-on-year to €8,785 million in 2017. This was due to higher net income. Free cash flow rose to €4,789 million compared with €3,572 million in the previous year, primarily due to the increase in cash provided by operating activities.

Cash flow (billion €)



¹ Including investments to the extent that they already had an effect on cash.
² Cash provided by operating activities less payments related to property, plant and equipment and intangible assets.

Good credit ratings and solid financing

Our ratings have remained unchanged since the publication of the BASF Report 2017. Rated “A1/P-1/outlook stable” by Moody’s, “A/A-1/outlook stable” by Standard & Poor’s and “A/S-1/outlook stable” by Scope, BASF enjoys good credit ratings, especially compared with competitors in the chemical industry. These ratings were most recently confirmed by Moody’s on December 19, 2017, by Standard & Poor’s on October 18, 2017, and by Scope on March 6, 2018.

Credit Ratings

Agency	Rating
Moody’s	A1/P-1/outlook stable
Standard & Poor’s	A/A-1/outlook stable
Scope	A/S-1/outlook stable

Maturities of financial indebtedness (million €)

2018	2,497	<div style="width: 25%;"></div>
2019	2,052	<div style="width: 20%;"></div>
2020	1,845	<div style="width: 18%;"></div>
2021	1,140	<div style="width: 11%;"></div>
2022	1,781	<div style="width: 18%;"></div>
2023 and beyond	8,717	<div style="width: 87%;"></div>

Ten-year summary

Million €	2008	2009	2010	2011	2012 ¹	2013 ²	2014	2015	2016	2017
Sales and earnings										
Sales	62,304	50,693	63,873	73,497	72,129	73,973	74,326	70,449	57,550	64,475
Income from operations (EBIT)	6,463	3,677	7,761	8,586	6,742	7,160	7,626	6,248	6,275	8,522
Income before taxes	5,976	3,079	7,373	8,970	5,977	6,600	7,203	5,548	5,395	7,800
Income before minority interests	3,305	1,655	5,074	6,603	5,067	5,113	5,492	4,301	4,255	6,352
Net income	2,912	1,410	4,557	6,188	4,819	4,792	5,155	3,987	4,056	6,078
Income from operations before depreciation and amortization (EBITDA)	9,562	7,388	11,131	11,993	10,009	10,432	11,043	10,649	10,526	12,724
EBIT before special items	6,856	4,852	8,138	8,447	6,647	7,077	7,357	6,739	6,309	8,328
EBIT after cost of capital	1,621	(226)	3,500	2,551	1,164	1,768	1,368	194	1,136	2,727
Capital expenditures, depreciation and amortization										
Additions to property, plant and equipment and intangible assets	3,634	5,972	5,304	3,646	5,263	7,726	7,285	6,013	7,258	4,364
Thereof property, plant and equipment	2,809	4,126	3,294	3,199	4,084	6,428	6,369	5,742	4,377	4,028
Depreciation and amortization of property, plant and equipment and intangible assets	3,099	3,711	3,370	3,407	3,267	3,272	3,417	4,401	4,251	4,202
Thereof property, plant and equipment	2,481	2,614	2,667	2,618	2,594	2,631	2,770	3,600	3,691	3,586
Number of employees										
At year-end	96,924	104,779	109,140	111,141	110,782	112,206	113,292	112,435	113,830	115,490
Annual average	95,885	103,612	104,043	110,403	109,969	111,844	112,644	113,249	111,975	114,333
Personnel expenses										
	6,364	7,107	8,228	8,576	8,963	9,285	9,224	9,982	10,165	10,610
Research and development expenses										
	1,355	1,398	1,492	1,605	1,732	1,849	1,884	1,953	1,863	1,888
Key data										
Earnings per share ³	€ 3.13	1.54	4.96	6.74	5.25	5.22	5.61	4.34	4.42	6.62
Adjusted earnings per share ³	€ 3.85	3.01	5.73	6.26	5.64	5.31	5.44	5.00	4.83	6.44
Cash provided by operating activities ⁴	5,023	5,693	6,460	7,105	6,602	8,100	6,958	9,446	7,717	8,785
EBITDA margin	% 15.3	14.6	17.4	16.3	13.9	14.1	14.9	15.1	18.3	19.7
Return on assets	% 13.5	7.5	14.7	16.1	11.0	11.5	11.7	8.7	8.2	10.8
Return on equity after tax	% 17.0	8.9	24.6	27.5	19.9	19.2	19.7	14.4	13.3	18.9
Appropriation of profits										
Net income of BASF SE ⁵	2,982	2,176	3,737	3,506	2,880	2,826	5,853	2,158	2,808	3,130
Dividends	1,791	1,561	2,021	2,296	2,388	2,480	2,572	2,664	2,755	2,847
Dividend per share ³	€ 1.95	1.70	2.20	2.50	2.60	2.70	2.80	2.90	3.00	3.10
Number of shares as of December 31^{3,6}										
million	918.5	918.5	918.5	918.5	918.5	918.5	918.5	918.5	918.5	918.5

¹ We have applied International Financial Reporting Standards 10 and 11 as well as International Accounting Standard 19 (revised) since January 1, 2013. Figures for 2012 have been restated; no restatement was made for 2011 and earlier.

² Figures for 2013 have been adjusted to reflect the dissolution of the natural gas trading business disposal group.

³ We conducted a two-for-one stock split in the second quarter of 2008.

⁴ Includes the change in reporting from 2009 onward of the effects of regular extensions of U.S. dollar hedging transactions

⁵ Calculated in accordance with German GAAP

⁶ After deduction of repurchased shares earmarked for cancellation

Balance sheet (IFRS)

Million €	2008	2009	2010	2011	2012 ¹	2013 ²	2014	2015	2016	2017
Intangible assets	9,889	10,449	12,245	11,919	12,193	12,324	12,967	12,537	15,162	13,594
Property, plant and equipment	15,032	16,285	17,241	17,966	16,610	19,229	23,496	25,260	26,413	25,258
Investments accounted for using the equity method	1,146	1,340	1,328	1,852	3,459	4,174	3,245	4,436	4,647	4,715
Other financial assets	1,947	1,619	1,953	848	613	643	540	526	605	606
Deferred taxes	930	1,042	1,112	941	1,473	1,006	2,193	1,791	2,513	2,118
Other receivables and miscellaneous noncurrent assets	642	946	653	561	911	877	1,498	1,720	1,210	1,332
Noncurrent assets	29,586	31,681	34,532	34,087	35,259	38,253	43,939	46,270	50,550	47,623
Inventories	6,763	6,776	8,688	10,059	9,581	10,160	11,266	9,693	10,005	10,303
Accounts receivable, trade	7,752	7,738	10,167	10,886	9,506	10,233	10,385	9,516	10,952	11,190
Other receivables and miscellaneous current assets	3,948	3,223	3,883	3,781	3,455	3,714	4,032	3,095	3,078	3,105
Marketable securities	35	15	16	19	14	17	19	21	536	52
Cash and cash equivalents	2,776	1,835	1,493	2,048	1,647	1,827	1,718	2,241	1,375	6,495
Assets of disposal groups	–	–	614	295	3,264	–	–	–	–	–
Current assets	21,274	19,587	24,861	27,088	27,467	25,951	27,420	24,566	25,946	31,145
Total assets	50,860	51,268	59,393	61,175	62,726	64,204	71,359	70,836	76,496	78,768
Subscribed capital	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176
Capital surplus	3,241	3,229	3,216	3,203	3,188	3,165	3,143	3,141	3,130	3,117
Retained earnings	13,250	12,916	15,817	19,446	23,708	26,102	28,777	30,120	31,515	34,826
Other comprehensive income	(96)	156	1,195	314	(3,461)	(3,400)	(5,482)	(3,521)	(4,014)	(5,282)
Minority interests	1,151	1,132	1,253	1,246	1,010	630	581	629	761	919
Equity	18,722	18,609	22,657	25,385	25,621	27,673	28,195	31,545	32,568	34,756
Provisions for pensions and similar obligations	1,712	2,255	2,778	3,189	5,421	3,727	7,313	6,313	8,209	6,293
Other provisions	2,757	3,289	3,352	3,335	2,925	3,226	3,502	3,369	3,667	3,478
Deferred taxes	2,167	2,093	2,467	2,628	2,234	2,894	3,420	3,381	3,317	2,731
Financial indebtedness	8,290	12,444	11,670	9,019	8,704	11,151	11,839	11,123	12,545	15,535
Other liabilities	917	898	901	1,142	1,111	1,194	1,197	869	873	1,095
Noncurrent liabilities	15,843	20,979	21,168	19,313	20,395	22,192	27,271	25,055	28,611	29,132
Accounts payable, trade	2,734	2,786	4,738	5,121	4,502	5,153	4,861	4,020	4,610	4,971
Provisions	3,043	3,276	3,324	3,210	2,628	2,670	2,844	2,540	2,802	3,229
Tax liabilities	860	1,003	1,140	1,038	870	968	1,079	1,082	1,288	1,119
Financial indebtedness	6,224	2,375	3,369	3,985	4,094	3,256	3,545	4,074	3,767	2,497
Other liabilities	3,434	2,240	2,802	3,036	2,623	2,292	3,564	2,520	2,850	3,064
Liabilities of disposal groups	–	–	195	87	1,993	–	–	–	–	–
Current liabilities	16,295	11,680	15,568	16,477	16,710	14,339	15,893	14,236	15,317	14,880
Total equity and liabilities	50,860	51,268	59,393	61,175	62,726	64,204	71,359	70,836	76,496	78,768

¹ We have applied International Financial Reporting Standards 10 and 11 as well as International Accounting Standard 19 (revised) since January 1, 2013. Figures for 2012 have been restated; no restatement was made for 2011 and earlier.

² Figures for 2013 have been adjusted to reflect the dissolution of the natural gas trading business disposal group.

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October 26, 2018

BASF Report 2018

February 26, 2019

Quarterly Statement 1st Quarter 2019 / Annual Shareholders' Meeting 2019

May 3, 2019

Half-Year Financial Report 2019

July 25, 2019



BASF supports the chemical industry's global Responsible Care initiative.

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