

BASF in Korea Report 2018

 **BASF**
We create chemistry





← **Cover photo:** Chan-young Lee and Seong-hyeon Park, process technicians working at Yeosu site, are conducting safety inspections in front of the Ultrason® plant.

On this page: Jay Noh, an application development engineer at the Technical Development Center in Dongtan, Korea, is using the high-pressure foaming machine to draw a pattern into the mold.



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About this Report

The “BASF in Korea” Report is published annually as a concise document about the performance of our activities across the three dimensions of sustainability – economy, environment and society – in Korea. The reporting period for this publication is the financial year 2018. This report also carries an overview of BASF Group along with its financial performance, prepared in accordance with the requirements of the International Financial Reporting Standards (IFRS), and, where applicable, the German Commercial Code as well as the German Accounting Standards (GAS). The emissions, waste, energy and water use of consolidated joint operations are included pro rata, based on our stake. The employee numbers refer to employees within the BASF Group scope of consolidation as of December 31, 2018.

BASF Group 2018 at a glance

Key data

		2018	2017	+/-
Sales ¹	million €	62,675	61,223	2.4%
EBITDA before special items ¹	million €	9,481	10,738	(11.7%)
EBITDA ¹	million €	9,166	10,765	(14.9%)
EBIT before special items ¹	million €	6,353	7,645	(16.9%)
EBIT ¹	million €	6,033	7,587	(20.5%)
EBIT after cost of capital ¹	million €	825	2,902	(71.6%)
Net income	million €	4,707	6,078	(22.6%)
Earnings per share	€	5.12	6.62	(22.7%)
Assets	million €	86,556	78,768	9.9%
Investments including acquisitions ²	million €	10,735	4,364	146.0%

		2018	2017	+/-
Employees at year-end		122,404	115,490	6.0%
Personnel expenses	million €	10,659	10,610	0.5%
Research and development expenses ¹	million €	2,028	1,843	10.0%
Greenhouse gas emissions	million metric tons of CO ₂ equivalents	21.8	22.6	(3.5%)
Energy efficiency in production processes	kilogram of sales product/MWh	602	625	(3.7%)
Investments in environmental protection	million €	277	234	18.4%
Number of on-site sustainability audits of raw material suppliers		100	120	(16.7%)

¹ Figures for 2017 were restated with the presentation of the oil and gas activities as discontinued operations. For more information, see basf.com/report

² Additions to intangible assets and property, plant and equipment

Segment data



Chemicals

million €

Sales	2018	16,501	<div style="width: 85%;"></div>
	2017	16,331	<div style="width: 84%;"></div>
EBIT before special items	2018	3,386	<div style="width: 45%;"></div>
	2017	4,233	<div style="width: 55%;"></div>



Performance Products

million €

Sales	2018	15,812	<div style="width: 80%;"></div>
	2017	16,217	<div style="width: 82%;"></div>
EBIT before special items	2018	1,376	<div style="width: 30%;"></div>
	2017	1,416	<div style="width: 32%;"></div>



Functional Materials & Solutions

million €

Sales	2018	21,435	<div style="width: 95%;"></div>
	2017	20,745	<div style="width: 92%;"></div>
EBIT before special items	2018	1,307	<div style="width: 40%;"></div>
	2017	1,617	<div style="width: 48%;"></div>



Agricultural Solutions

million €

Sales	2018	6,156	<div style="width: 60%;"></div>
	2017	5,696	<div style="width: 55%;"></div>
EBIT before special items	2018	734	<div style="width: 25%;"></div>
	2017	1,033	<div style="width: 35%;"></div>

Welcome

Letter from the Management

Dear Friends & Stakeholders,

I am very happy to be able to present BASF in Korea – Report 2018. The past year included significant developments in the chemical industry. BASF continued to grow in Korea, with total sales of around €1.4 billion to customers in Korea, and BASF Korea was again awarded a certificate for outstanding export performance, with US\$1 billion in exports.

We successfully completed our joint production site with Kolon Plastics, named KOLON BASF innoPOM, and began commercial production. Meanwhile, our acquisitions from Bayer allowed us to strengthen our agricultural business. We also successfully increased the production capacity of Ultrason® and Neopor®. We completed construction of a new production line for the Ultrason plant in Yeosu, while we converted the site in Ulsan to produce the much demanded Neopor.

Our dedication to efficient energy usage and safety management has continued across all BASF facilities and offices in Korea, including the polyol plant at our chemicals site in Ulsan, which is marking its 20th anniversary this year.

We have also continued our efforts to support education in Korea. Our BASF Kids' Lab event, which was traditionally focused on children living near the BASF sites and office, and became part of the Daejeon Science Festival this past year, allowing more families to join the activity.

But the most meaningful development of the past year was the announcement of BASF's updated corporate strategy. While our dedication to sustainable development through innovative products and solutions remains unchanged, BASF has made a concerted effort to streamline our organization to respond flexibly and rapidly to the demands of our customers. The Asia Pacific region is a market of crucial importance for the growth of the global chemical market, and for our company in particular.

For this reason, BASF must engage more competitively with the market in Korea by enhancing our portfolio in accordance with the wishes of our customers, thus making a united effort toward the circular economy of the future. As we continue to put our best efforts toward these goals, we invite our customers and shareholders to take part in the future we envision together.



Young-Yull Kim
Representative Director, BASF in Korea

The BASF Group

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 122,000 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. Until December 31, 2018, our portfolio was arranged into four segments: Chemicals, Performance Products, Functional Materials & Solutions and Agricultural Solutions.¹ Since January 1, 2019, BASF's activities have been grouped into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions.

Organization of the BASF Group until December 31, 2018

- **Twelve divisions grouped into four segments**
- **Regional divisions, functional units and corporate and research units support our business**

Until December 31, 2018, our 12 divisions¹ were grouped into four segments based on their business models: Chemicals, Performance Products, Functional Materials & Solutions and Agricultural Solutions. On September 27, 2018 BASF and LetterOne signed a definitive agreement to merge their oil and gas businesses in a joint venture. Since the agreement was signed, we have no longer reported on BASF's oil and gas business as a separate Oil & Gas segment. Following the approval of all relevant authorities, BASF and LetterOne completed the merger of Wintershall and DEA on May 1, 2019. The new joint venture operates under the name Wintershall Dea. Until closing, its earnings were presented as a separate item, income after taxes from discontinued operations. In the Agricultural Solutions segment, we renamed the division from Crop Protection to Agricultural Solutions after the acquisition of significant businesses from Bayer was closed in August 2018, especially for seeds.

Our divisions bear operational responsibility and are organized according to sectors or products. They manage our 54 global and regional business units and develop strategies for the 86 strategic business units.¹

Our regional units are responsible for optimizing local infrastructure, and contribute to tapping our market potential. For financial reporting purposes, we organize the regional divisions into four regions: Europe; North America; Asia Pacific; South America, Africa, Middle East.

Seven functional units and eight corporate units support the BASF Group's business activities. The functional and corporate units provide services in areas such as finance, human resources, engineering and site management, environmental protection, health and safety, investor relations, and communications. Our global research units safeguard our innovative capacity and competitiveness.

Business processes such as the procurement of raw materials and services, production and transport to customers are the shared responsibility of the divisions and the functional units.

New organization of the BASF Group as of January 1, 2019

As of January 1, 2019, we have 12 divisions grouped into six segments as follows:

- **Chemicals:** Petrochemicals and Intermediates
- **Materials:** Performance Materials and Monomers
- **Industrial Solutions:** Dispersions & Pigments and Performance Chemicals
- **Surface Technologies:** Catalysts, Coatings and Construction Chemicals
- **Nutrition & Care:** Care Chemicals and Nutrition & Health
- **Agricultural Solutions:** Agricultural Solutions

We are considering the possibility of merging our construction chemicals business with a strong partner, as well as the option of divesting this business. The outcome of this review is open. The Construction Chemicals division will be reported under the Surface Technologies segment until signing of a transaction agreement.

BASF's new segment structure will allow a more differentiated steering of our businesses according to their market-specific competitive environment. It will increase transparency regarding the results of our segments and divisions and highlight the importance of the Verbund and value chains to our business success. BASF aims to clearly position its businesses against their relevant competitors and establish a high-performance organization to enable BASF to be successful in an increasingly competitive market environment.

The **Chemicals** segment will remain the cornerstone of our Verbund structure. It supplies the other segments with basic chemicals and intermediates, contributing to the organic growth of our key value chains. Alongside internal accounts, our customers include the chemical and plastics industries. We aim to increase our competitiveness through technological leadership and operational excellence.

The **Materials** segment's portfolio comprises advanced materials and their precursors for new applications and systems. These include isocyanates and polyamides as well as inorganic basic products and specialties for the plastics and plastics processing industries. We aim to grow organically through differentiation via specific technological expertise, industry know-how and customer proximity to maximize value in the isocyanate and polyamide value chains.

The **Industrial Solutions** segment develops and markets ingredients and additives for industrial applications such as polymer dispersions, pigments, resins, electronic materials, antioxidants and admixtures. We aim to drive organic growth in key industries such as automotive, plastics or electronics and expand our position in value-enhancing ingredients and solutions by leveraging our comprehensive industry expertise and application know-how.

¹ Excluding the oil and gas activities presented as discontinued operations

The **Surface Technologies** segment comprises our businesses that offer chemical solutions on and for surfaces. Its portfolio includes coatings, rust protection products, catalysts and battery materials for the automotive and chemical industries. The aim is to drive organic growth by leveraging our portfolio of technologies and know-how, and to establish BASF as a leading and innovative provider of battery materials as well.

In the **Nutrition & Care** segment, we strive to expand our position as a leading provider of nutrition and care ingredients for consumer products in the area of nutrition, home and personal care. Customers include food and feed producers as well as the pharmaceutical, cosmetics, detergent and cleaner industries. We aim to enhance and broaden our product and technology portfolio. Our goal is to drive organic growth by focusing on emerging markets, new business models and sustainability trends in consumer markets, supported by targeted acquisitions.

The **Agricultural Solutions** segment aims to further strengthen our market position as an integrated provider of crop protection products and seeds. Its portfolio comprises fungicides, herbicides, insecticides and biological crop protection products, as well as seeds and seed treatment products. We also offer farmers digital solutions combined with practical advice. Our main focus is on innovation-driven organic growth, targeted portfolio expansion as well as leveraging synergies from the acquired businesses.

In addition, BASF will embed business-critical parts of its functional units – such as engineering services, procurement and logistics – into the divisions to bring its employees closer to its customers and improve customer-specific agility. We will create leaner structures in our functional units, research and development and in governance functions.

Sites and Verbund

- **Six Verbund sites with intelligent plant networking**
- **355 additional production sites worldwide**

BASF has companies in more than 90 countries. We operate six Verbund sites and 355 additional production sites worldwide. Our Verbund site in Ludwigshafen, Germany, is the world's largest chemical complex owned by a single company that was developed as an integrated network. This was where the Verbund principle was originally established and continuously optimized before being implemented at additional sites.

The Verbund system is one of BASF's great strengths. We add value by using our resources efficiently. The Production Verbund intelligently links production units and their energy supply so that, for example, the waste heat of one plant provides energy to others. Furthermore, one facility's by-products can serve as feedstock elsewhere. This not only saves us raw materials and energy, it also avoids emissions, lowers logistics costs and leverages synergies

We also make use of the intelligent Verbund principle for more than

production, applying it for technologies, the market and digitalization as well. Expert knowledge is pooled in our global research platforms.

Procurement and sales markets

- **Over 90,000 customers; broad customer portfolio**
- **More than 70,000 suppliers**

BASF supplies products and services to over 90,000 customers¹ from various sectors in almost every country in the world. Our customer portfolio ranges from major global customers and medium-sized businesses to end consumers.

We work with over 70,000 Tier 1 suppliers from different sectors worldwide. They supply us with important raw materials, chemicals, investment goods and consumables, and perform a range of services. Some of our most important raw materials are naphtha, natural gas, methanol, ammonia and benzene.

Business and competitive environment

BASF's global presence means that it operates in the context of local, regional and global developments and is bound by various conditions. These include:

- Global economic environment
- Legal and political requirements (such as European Union regulations)
- International trade agreements
- Industry standards
- Environmental agreements (such as the E.U. Emissions Trading System)
- Social aspects (such as the U.N. Universal Declaration of Human Rights)

BASF holds one of the top three market positions in around 75% of the business areas in which it is active. Our most important global competitors include Arkema, Clariant, Covestro, DowDuPont, DSM, Evonik, Formosa Plastics, Huntsman, Lanxess, SABIC, Sinopec, Solvay, Wanhua and many hundreds of local and regional competitors. We expect competitors from Asia and the Middle East in particular to gain increasing significance in the years ahead.

Corporate legal structure

As the publicly traded parent company, BASF SE takes a central position: Directly or indirectly, it holds the shares in the companies belonging to the BASF Group, and is also the largest operating company. The majority of Group companies cover a broad spectrum of our business. In the BASF Group Consolidated Financial Statements, 323 companies including BASF SE are fully consolidated. We consolidate eight joint operations on a proportional basis, and account for 35 companies using the equity method.

¹ The method used to calculate customers in the previous year has been adjusted to "sold-to" parties of our consolidated companies. The updated figure for 2017 is over 80,000 customers.

Corporate Strategy

At BASF, we are passionate about chemistry and our customers. Thanks to our expertise, our innovative and entrepreneurial spirit, and the power of our Verbund integration, our innovations have decisively contributed to changing the world we live in for the better for more than 150 years. To be the world's leading chemical company for our customers, we will grow profitably and add value to society. This is how we create chemistry for a sustainable future.

Today, the world is changing more rapidly than ever before, driven by demographic change and new digital technologies. Our customers in different industries and regions face diverse social and environmental challenges due to limited natural resources and increasing consumer demands. Chemistry is key to solving many of these challenges. By combining our unique expertise with our customers' competence, we will jointly develop profitable, innovative and responsible solutions for these global trends.

**Our purpose reflects what we do and why we do it:
We create chemistry for a sustainable future.**

We pursue this purpose with our corporate strategy, which was updated in 2018. We want to contribute to a world that provides a viable future with enhanced quality of life for everyone. This is why we offer products and solutions that make the best use of available resources.

Our aspiration is to be the world's leading chemical company. With our updated corporate strategy, which was announced in November 2018, we are targeting profitable growth. We aim to grow organically and thus will strengthen our customer focus. The Asian market plays an important role in our growth strategy. With a share of more than 40%, China is already the largest chemical market and drives the growth of global chemical production. By 2030, China's share will increase to nearly 50%, and we want to participate in this growth. To drive forward our growth in this dynamic market, we plan to build an integrated Verbund site in Zhanjiang in the southern Chinese province of Guangdong. We also want to expand our existing joint venture with Sinopec in Nanjing.

As part of our aspiration to be the world's leading chemical company for our customers, we want to strengthen our passion for customers throughout the entire organization. We want to grow profitably and create value for society. To achieve this, we have set ourselves ambitious financial and nonfinancial targets.

New targets from 2019 onward

Business success tomorrow means creating value for the environment, society and business. We have set ourselves new financial and non-financial targets so that our customers, investors, employees and other stakeholders can track our progress.

We want to grow faster than the market and thus be economically successful and profitable. Furthermore, we want to provide answers to

the most pressing challenges of our time. To combat climate change and global warming, we have committed ourselves to growing production volumes without adding further CO₂ emissions until 2030. This means we will decouple greenhouse gas emissions from organic growth. We have also defined targets for a sustainable product portfolio, responsible procurement and engaged employees. Safety for people and the environment, inclusion of diversity and water management will remain a top priority.

The new targets apply from 2019 onward and replace our previous goals. In this way, we want to steer our business into a sustainable future and, at the same time, contribute to the implementation of the United Nations' Sustainable Development Goals (SDGs).

Our strategic action areas

To reach our goals and be the leading company in the chemical industry for our customers, we want to strengthen our performance in innovation and in operations as the leading chemical producer and plant operator, leverage digital ways of working across the entire company, and integrate sustainability more deeply into our business decisions. We want to strengthen our passion for our customers in all employees. We aim to strengthen our portfolio and further develop our organization to better meet customer needs using the power of our Verbund integration. We have defined six strategic action areas through which we will sharpen our customer focus.¹



Innovation

Our ambition is to be the most attractive partner for our customers whenever they are confronted with challenges that can be approached with chemistry. Our research and development competences are unique in the chemical industry. We aim to build on and leverage our position as a leading innovator to jointly develop innovations for our customers. We will design our innovation chain to be as seamless as possible so that we can bring products to the market more quickly. This means fostering a higher level of excellence throughout the entire innovation process, starting from the lab all the way to the customer.

¹ We defined six strategic action areas in our updated corporate strategy, which was announced in November 2018. They build on the four strategic principles of the "We create chemistry" strategy – we add value as one company; we innovate to make our customers more successful; we drive sustainable solutions; we form the best team – according to global trends and challenges as well as their implications for BASF.

New targets from 2019 onward

Financial targets

Grow sales volumes faster than global chemical production every year

Increase EBITDA before special items by 3% to 5% per year

Achieve a return on capital employed (ROCE)¹ considerably above the cost of capital percentage every year

Increase the dividend per share every year based on a strong free cash flow

Nonfinancial targets

Grow CO₂-neutrally until 2030

Achieve €22 billion in Accelerator sales² by 2025

Cover 90% of our relevant spend³ with sustainability evaluations by 2025, and have 80% of our suppliers improve their sustainability performance upon re-evaluation

More than 80% of our employees feel that at BASF, they can thrive and perform at their best

Existing nonfinancial targets

Reduce the worldwide lost-time injury rate per 200,000 working hours to ≤0.1 by 2025

Reduce worldwide process safety incidents per 200,000 working hours to ≤0.1 by 2025

Introduce sustainable water management at all production sites in water stress areas and at all Verbund sites by 2030

Increase the proportion of women in leadership positions with disciplinary responsibility to 22–24% by 2021

¹ Return on capital employed (ROCE) is a measure of the profitability of our operations. We calculate this indicator as the EBIT generated by the segments as a percentage of the average cost of capital basis.
² Accelerator products are products that make a substantial sustainability contribution in the value chain.
³ We understand relevant spend as procurement volumes with suppliers defined as relevant.

Sustainability

We are successful in the long term when our products, solutions and technologies add value to the environment, society and the economy. We want to be a thought leader in sustainability and increase the relevance of sustainability in our decision-making processes and business models. This secures the long-term success of our company, creates business opportunities and establishes us as a key partner supporting our customers.

Operations

We are committed to running our production safely, efficiently and reliably so that we can deliver products to our customers on spec and on time. We aim to further improve the reliability and availability of our plants, as well as our agility. Above and beyond this, continuous process improvements and effective debottlenecking of our existing asset base are paramount to ensure our competitiveness.

Digitalization

We want to make digitalization an integral part of BASF's business. This will create additional value for our customers, grow our business and improve efficiency. By promoting comprehensive digital skills among our future leaders and our entire workforce, we will ensure that the necessary resources are available.

Portfolio

We will sharpen our portfolio and focus our capital allocation more towards growing business areas. We will focus primarily on organic growth through capital expenditures and innovation, but also make targeted acquisitions where this makes strategic sense and creates value. The new segment structure will create a higher transparency regarding the steering of our businesses, the importance of value chains and the role of our Verbund. The physical, technological, market and digital integration of the Verbund continues to be at the core of our portfolio and our unique strength.

Employees

We aim to clearly position each business against its relevant competitors and establish a high-performance organization to enable us to be successful in an increasingly competitive market environment. We will adapt our business models and organizational structures so that each business unit can optimally serve its market segment. Our people are what will make the implementation of our updated strategy successful. We rely on the engagement of our employees and give them the tools and skills necessary to be able to offer our customers differentiated and customized products and services.

Corporate values

guide our conduct and actions

Creative: We make great products and solutions for our customers. This is why we embrace bold ideas and give them space to grow. We act with optimism and inspire one another.

Open: We value diversity, in people, opinions and experience. This is why we foster feedback based on honesty, respect and mutual trust. We learn from our setbacks.

Responsible: We value the health and safety of people above all else. We make sustainability part of every decision. We are committed to strict compliance and environmental standards.

Entrepreneurial: We focus on our customers, as individuals and as a company. We seize opportunities and think ahead. We take ownership and embrace personal accountability.

Goal Achievement in 2018

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. This also helps to achieve the United Nations’ Sustainable Development Goals (SDGs).¹ We are focusing on issues where we as a company can make a significant contribution, such as sustainable consumption and production, climate protection or fighting hunger.

Goal areas along the value chain



Procurement

	2020 goal	Status at end of 2018	SDGs
Assessment of sustainability performance of relevant suppliers; ² development of action plans where improvement is necessary	70%	60%	SDG 8, 12, 16, 17

² Our suppliers are evaluated based on risk due to the size and scale of our supplier portfolio. We define relevant suppliers as Tier 1 suppliers 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.

Growth and profitability

As determined in 2015, our aim was, on average, to grow sales slightly faster and EBITDA considerably faster than global chemical production (excluding pharmaceuticals; 2018: 2.7%; average change since 2015: 3.3%), and to earn a significant premium on our cost of capital. Another goal was to achieve a high level of free cash flow each year, either raising or at least maintaining the dividend at the prior-year level.

	2018	Change since 2017	Average change since 2015 ⁴
Sales ³	€62.7 billion	2.4%	3.3%
EBITDA ³	€9.2 billion	(14.9%)	3.8%
Dividends per share paid out	€3.10	€0.10	
Premium on cost of capital	€0.8 billion		
Free cash flow	€4.0 billion		

³ The average change was calculated using the changes in the non-adjusted figures from 2015 to 2017 and the change in the adjusted figures from 2018 to 2017. This gives an approximate average change on a comparable basis in each case. However, the figures do not take into account the structural decline in sales and EBITDA due to the classification of the oil and gas business as a discontinued operation.

⁴ Baseline 2015: excluding the gas trading and storage business transferred to Gazprom

¹ Sustainable Development Goals (SDGs): SDG 1 – No poverty, SDG 2 – Zero hunger, SDG 3 – Good health and well-being, SDG 4 – Quality education, SDG 5 – Gender equality, SDG 6 – Clean water and sanitation, SDG 7 – Affordable and clean energy, SDG 8 – Decent work and economic growth, SDG 9 – Industry, innovation and infrastructure, SDG 10 – Reduced inequalities, SDG 11 – Sustainable cities and communities, SDG 12 – Responsible consumption and production, SDG 13 – Climate action, SDG 14 – Life below water, SDG 15 – Life on land, SDG 16 – Peace, justice and strong institutions, SDG 17 – Partnerships for the goals

Employees

	2021 goal	Status at end of 2018	SDGs
Proportion of women in leadership positions with disciplinary responsibility	22–24 %	21.7 %	SDG 5, 16
Long-term goals			
International representation among senior executives ⁵	Increase in proportion of non-German senior executives (baseline 2003: 30%)	40.4%	
Senior executives with international experience	Proportion of senior executives with international experience over 80%	85.4%	

⁵ 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.

Safety in production

	2020 goal	Status at end of 2018	SDGs
Reduction of worldwide lost-time injury rate per 200,000 working hours	≤ 0.1	0.3	SDG 3, 8
Reduction of worldwide process safety incidents per 200,000 working hours	≤ 0.1	0.3	SDG 3, 12, 15
Annual goal			
Health Performance Index	>0.9	0.96	SDG 3, 8

Product stewardship

	2020 goal	Status at end of 2018	SDGs
Risk assessment of products that we sell in quantities of more than one metric ton per year worldwide	>99%	91%	SDG 3, 12

Energy and climate protection

	2020 goal	Status at end of 2018	SDGs
Coverage of our primary energy demand by certified energy management systems (ISO 50001) at all relevant sites ⁶	90%	73.0%	SDG 7, 12, 13, 14, 15
Reduction of greenhouse gas emissions per metric ton of sales product (excluding the oil and gas business, baseline 2002)	(40%)	(34.2%)	SDG 12, 13, 14, 15

⁶ The selection of relevant sites is determined by the amount of primary energy used and local energy prices; figures relate to BASF operations including the discontinued oil and gas business.

Water

	2025 goal	Status at end of 2018	SDGs
Introduction of sustainable water management at all production sites in water stress areas and at all Verbund sites (excluding the oil and gas business)	100%	50.0%	SDG 3, 6, 12, 14, 15

Products and solutions

	2020 goal	Status at end of 2018	SDGs
Increase the proportion of sales generated by products that make a substantial contribution to sustainable development (Accelerator products)	28%	27.7%	SDG 3, 8, 9, 12, 13

BASF in the Regions

BASF Group sales 2018: €62,675 million;
 EBIT 2018: €6,033 million



North America



16,659
Sales¹ (in million €)

802
EBIT (in million €)

20,069
Employees²

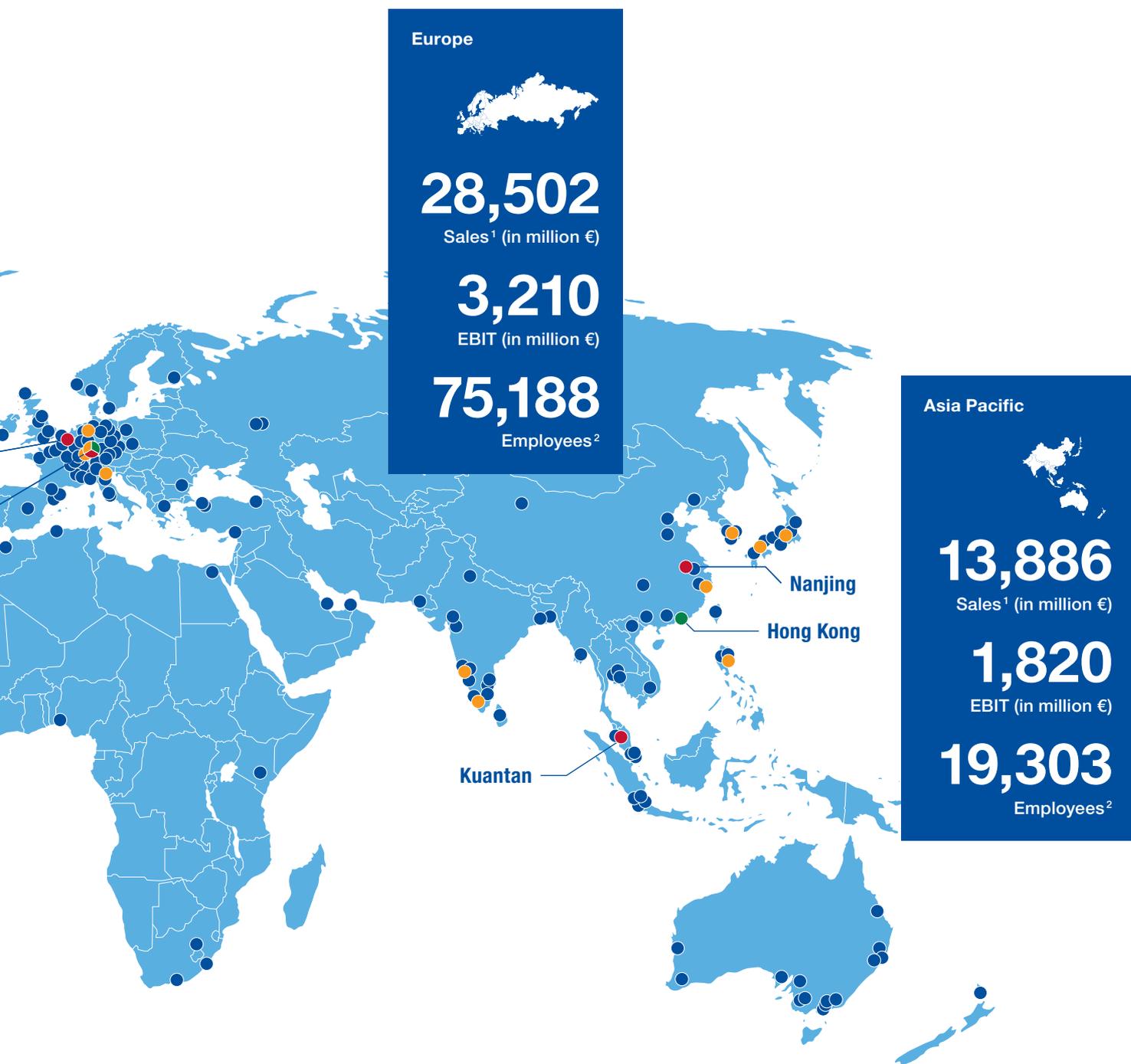
**South America,
Africa, Middle East**



3,628
Sales¹ (in million €)

201
EBIT (in million €)

7,844
Employees²



Europe

28,502
Sales¹ (in million €)

3,210
EBIT (in million €)

75,188
Employees²

Asia Pacific

13,886
Sales¹ (in million €)

1,820
EBIT (in million €)

19,303
Employees²

- Regional centers
- Selected sites
- Verbund sites
- Selected research and development sites

¹ In 2018, by location of company
² At year-end 2018

BASF on the Capital Market

In 2018, the stock markets were characterized by long periods of uncertainty as a result of geopolitical tensions and trade conflicts, especially between the United States and China. The BASF share price declined considerably over the course of the year. We stand by our ambitious dividend policy and we proposed a dividend of €3.20 per share at the Annual Shareholders' Meeting – an increase of 3.2% compared with the previous year.

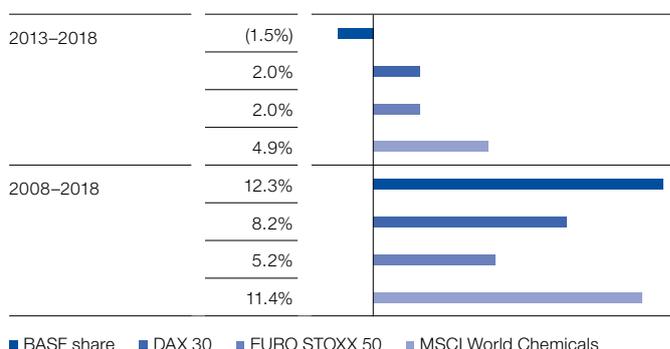
BASF share performance

- BASF share declines 34.2% in 2018
- Long-term performance continues to clearly exceed benchmark indexes

The BASF share closed the 2018 stock market year with a closing price of €60.40, a decrease of 34.2% compared with the previous year's closing price. The considerable year-on-year decline in the BASF Group's earnings was primarily attributable to considerably lower earnings in the Chemicals segment, mainly as a result of lower margins for isocyanates and steam cracker products. The segment's earnings were also negatively impacted by the low water levels on the Rhine River in the second half of 2018. In addition, geopolitical tensions and trade conflicts, especially between the United States and China, led to a slowdown in economic growth over the course of the year particularly in Asia, and there mainly in China. The ensuing downturn in demand from significant customer industries, in particular the automotive industry, further weighed on BASF's share performance.

Long-term performance of BASF shares compared with indexes

Average annual increase with dividends reinvested



Weighting of BASF shares in important indexes as of December 31, 2018

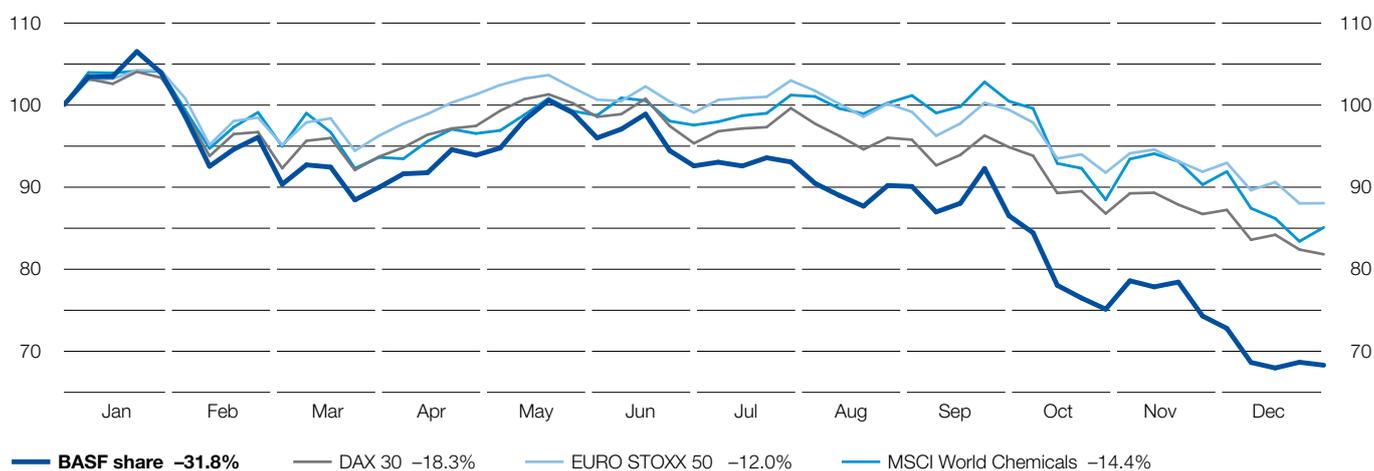
DAX 30	6.3%
EURO STOXX 50	2.6%
MSCI World Chemicals	7.0%

Assuming that dividends were reinvested, BASF's share performance declined by 31.8% in 2018. The benchmark indexes of the German and European stock markets – the DAX 30 and the EURO STOXX 50 – lost 18.3% and 12.0% over the same period, respectively. The global industry index MSCI World Chemicals fell by 14.4%.

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 2008 and reinvested the dividends in additional BASF shares would have increased to €3,201 by the end of 2018. This represents an annual yield of 12.3%, placing BASF shares above the returns for the DAX 30 (8.2%), EURO STOXX 50 (5.2%) and MSCI World Chemicals (11.4%) indexes.

Change in value of an investment in BASF shares in 2018

With dividends reinvested; indexed



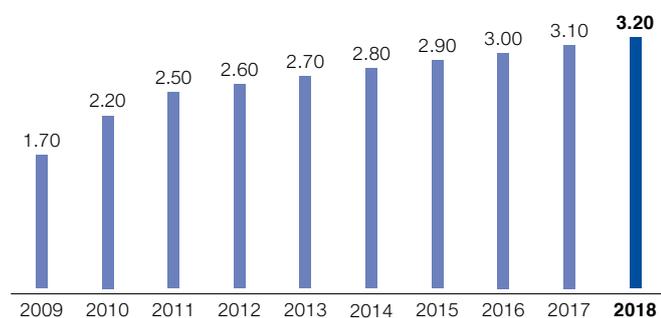
Dividend of €3.20 per share

At the Annual Shareholders' Meeting, the Board of Executive Directors and the Supervisory Board proposed a dividend payment of €3.20 per share. We stand by our ambitious dividend policy of increasing our dividend each year and plan to pay out €2.9 billion to our shareholders.

Based on the year-end share price for 2018, BASF shares offer a high dividend yield of around 5.3%. 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

€ per share

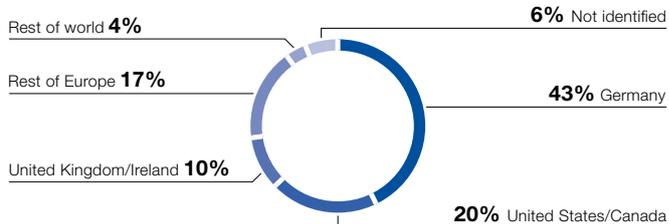


Broad base of international shareholders

With over 600,000 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 2018 showed that, at around 20% of share capital, the United States and Canada made up the largest regional group of institutional investors. Institutional investors from Germany accounted for around 13%. Shareholders from the United Kingdom and Ireland hold 10% of BASF shares, while investors from the rest of Europe hold a further 17% of capital. Approximately 30% 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.

Shareholder structure

By region, rounded



Employees becoming shareholders

In many countries, we offer share purchase programs that turn our employees into BASF shareholders. In 2018, for example, 25,000 employees (2017: 23,700) purchased employee shares worth €79 million (2017: €63 million).



Process technicians and technical engineers working at Ulsan Chemicals site are reviewing the process changes at the polyol plant during the on-site inspection.

BASF in Asia Pacific

At a glance

Economy

Sales by location of customer in the Asia Pacific region rose by 2% to €14,646 million in 2018 (2017: €14,343 million).

Sales at companies headquartered in the Asia Pacific region rose by 2% to €13,886 million in 2018 (2017: €13,658 million). In local currency terms, sales rose by 5% year on year. The positive development was mainly driven by the Functional Materials & Solutions segment. We also increased sales in the Agricultural Solutions segment.

All segments increased volumes; Functional Materials & Solutions and Performance Products also achieved higher prices. By contrast, sales were consistently weighed down by currency effects. Portfolio measures had no effect on sales development in 2018. The trade conflict between the United States and China dampened economic sentiment across Asia, leading to lower prices and volumes year on year in the fourth quarter of 2018.

EBIT in the region decreased by 18% year on year to €1,820 million. This was primarily due to the lower contribution from the Chemicals segment as a result of narrower margins in the isocyanates business, as well as for steam cracker products at our joint venture. Lower fixed costs were unable to compensate for these effects.

As part of our regional strategy, we aim to further increase the proportion of sales from local production in Asia Pacific. We once again made progress toward this goal: For instance, we started commercial production of polyoxymethylene (POM) in Gimcheon, South Korea, in October 2018. We started production of citral, citronellol and menthol at our new aroma ingredients complex in Kuantan, Malaysia.

Our investments in production facilities as well as in research and development serve to bring products to market for our local and global customers in this fast-growing region. We therefore plan to build an integrated Verbund site in Zhanjiang in the southern Chinese province of Guangdong and expand our existing joint venture with Sinopec in Nanjing, China.

BASF sales in Asia Pacific (by location of customer)

Million €

Year	Sales (Million €)
2018	14,646
2017	14,343
2016	12,165

BASF EBIT in Asia Pacific (by location of company)

Million €

Year	EBIT (Million €)
2018	1,820
2017	2,209
2016	1,098

Environment

From procurement at the supplier end, to production at production plants to the product delivery to the customers, we are committed to energy efficiency and global climate protection along the value chain, around the world and in Asia Pacific.

In India, BASF and the Navi Mumbai Municipal Corporation collaborated on an innovative safe water and sanitation project. A solar powered, cashless community water treatment plant, commonly referred to as a "water ATM", will dispense potable drinking water at just Rs. 8 (USD 0.11) per 20 liters when accessed with a debit card. Water is harvested from rain and other sources, and is purified with BASF's ultrafiltration solution. This innovative social business model offers clean and affordable drinking water to 10,000 people.

At production sites throughout Asia Pacific, we adopted various measures to reduce emissions along the value chain. These include efficient technologies for generating steam and electricity, energy-efficient production processes, and comprehensive energy management systems.

Our products make an important contribution toward helping our customers avoid emissions. In 2018, Nippon Paint launched an interior paint in China, Infinite Air, made with BASF dispersions derived from renewable resources. With the TÜV SÜD-certified biomass balance approach from BASF, fossil resources are replaced with renewable feedstock. The launch of this new paint helps save fossil resources and reduce greenhouse gas emissions while providing excellent product performance and minimizing odor.

Employees and society

As of the end of 2018, BASF employed 19,303 people in the Asia Pacific region (2017: 18,256). Of these, 25.7% were female (2017: 25.9%). There were 2,094 new hires in the region in 2018, 31.1% of which were female (2017: 24.9% of 2,141).

Number of employees (as of December 31)

Year	Total	% of which female
2018	19,303	25.7%
2017	18,256	25.9%
2016	18,156	26.6%

Number of new hires¹ (as of December 31)

Year	Total	% of which female
2018	2,094	31.1%
2017	2,141	24.9%
2016	1,733	32.1%

¹ Excluding employees of the businesses acquired from Bayer

Throughout the region, BASF developed customized campaigns and activities to support employee engagement, impactful leadership, and inclusion of diversity. These initiatives help to support and engage employees, fostering a safe, inclusive and inspiring working environment.

Innovation

Innovation in chemistry enables economic, environmental, and social development, and thus plays a key role in meeting the needs of Asia Pacific's growing population in a period of rapid urbanization. BASF is committed to fostering innovation in this dynamic region by constantly enhancing its local research capabilities. In the future, around a quarter of BASF's global research and development (R&D) activities will be in Asia Pacific.

Growing R&D capabilities in Asia Pacific

- **New Regional Automotive Application Center enables collaborative innovation with automotive customers**
- **New Process Catalysis R&D Center complements manufacturing capabilities**

BASF has been continuously expanding its research and development footprints in Asia Pacific, to drive innovation by integrating customer and market needs at an early stage. With major R&D sites located in China, India, Japan and Korea, BASF had 1,285 (2017: 1,160) R&D employees in Asia Pacific by the end of 2018.

BASF operates two Innovation Campuses, in Shanghai, China, and Mumbai, India. This concept is unique to Asia Pacific and brings all parties, including R&D, business and production units, to a single integrated site. Each Innovation Campus is an integral part of BASF's global Know-How Verbund, and houses global, regional and local R&D projects. Innovation Campus Shanghai, located at BASF Shanghai Pudong Innovation Park in Shanghai, China, was inaugurated in 2012 and expanded in 2015 and 2019.

The Innovation Campus Shanghai is the global headquarters of Advanced Materials & Systems Research. It has a broad research portfolio in the areas of advanced materials, chemical process engineering and environmental catalysts. Combining technical development capabilities of the operating divisions, as well as industrial design expertise featured in the Creation Center, the Innovation Campus Shanghai serves the innovation demand of almost all major industries.

In 2019, BASF further enhanced its regional innovation capabilities with new facilities at the Innovation Campus Shanghai, to further strengthen collaboration with the automotive industry and to offer new process catalysts to the chemical industry. With an investment of approximately €34 million, the new 5,000-square-meter facilities include the Automotive Application Center and the Process Catalysis Research & Development (R&D) Center.



With an investment of approximately €34 million, the new 5,000-square-meter building includes the Automotive Application Center and the Process Catalysis Research & Development (R&D) Center.

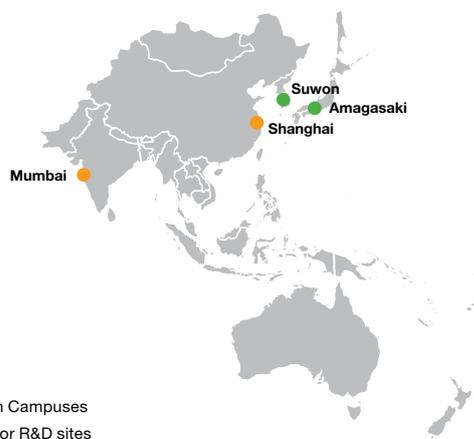
The Innovation Campus Mumbai, with complementary research focusing on crop protection and specialty chemicals, is an important pillar of BASF's growing R&D network in Asia Pacific. It includes state-of-the-art laboratories for chemical synthesis, application and process development, as well as analytics. The Innovation Campus Mumbai brings all new and existing R&D activities in Mumbai under one roof, located next to the office buildings and production plants at BASF's Thane site in Navi Mumbai.

In 2018, the Innovation Campus Mumbai contributed to the successful launch of the new insecticide Sefina. The new insecticide from BASF helps farmers to protect crops (e.g. cotton) and increase yields. The pioneering solution is powered by BASF's new active ingredient, Inscalis®, the first of its kind from a novel chemical class, Pyropenes. Offering a new mode of action for the control of key insect pests, Sefina gives farmers a powerful new tool to combat resistance, as part of integrated pest management programs.



The BASF Automotive Application Center Asia Pacific can simulate nearly any situation on a customer's paint line.

BASF R&D setup in Asia Pacific



Asia Pacific R&D sites

Innovation Campus Shanghai

- Focus: Advanced Materials, Process Engineering, Catalysts

Innovation Campus Mumbai

- Focus: Crop Protection, Specialty Chemicals

R&D Center Amagasaki

- Focus: Electronics, Battery Materials

R&D Center Suwon

- Focus: Electronics

Across Asia Pacific, BASF R&D centers with specialized focus areas contribute to developing innovative solutions that address the region's challenges of resource efficiency, food and nutrition, and quality of life. BASF's R&D Center in Amagasaki, Japan, focuses on developing innovative materials to improve battery performance, while covering other R&D activities in electronics, plastic additives, packaging and adhesives. The company's R&D Center in Suwon, Korea, specializes in electronic materials development in close collaboration with major customers in Korea and across the region.



At the new Process Catalysis R&D Center, scientists develop new catalytic materials for both new and existing process catalysis applications.

Open innovation with academia and industry

■ Network for Asian Open Research (NAO) expands topic scope with more partners

BASF places great value on open innovation through close collaboration with academic and industry partners around the world. It maintains a global network of partners from universities, institutes and companies, forming a key pillar of BASF's global Know-How Verbund. In Asia Pacific, the Network for Asian Open Research (NAO) has been a joint platform directed by BASF and leading universities and institutes in the region since 2014.

NAO has expanded to include a broader range of university partners and research areas in 2017. The network currently consists of 10 partners from China, Japan and Korea. Areas of collaboration have been extended to cover all technologies under BASF's three global technology platforms: Advanced Materials & Systems Research; Bioscience Research; and Process Research & Chemical Engineering.

Since its establishment, BASF and its partners have completed more than 29 joint research projects, with 11 postdoctoral students joining BASF after the projects' completion. Currently, NAO projects cover research areas including new monomers and polymers, surfaces and interfaces, zeolites, hybrid materials, coatings, as well as digitalization in R&D. For example, BASF is partnering with Sichuan University and is exploring improved solutions for important market needs like high chemical resistance of polyamide blends.



Yae-dong Kim and Sung-ho Park, technical engineers at BASF Electronic Materials R&D Center in Asia Pacific located in Suwon, Korea, examines an electro-plating solution used in semiconductor processes.

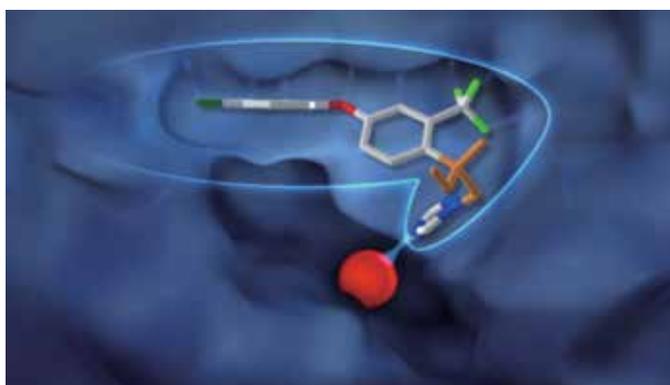
Innovation in Korea

Korean farmers combat disease with innovative fungicide

- **World's first approval of Revysol® active ingredient received in Korea**
- **Provides outstanding performance for rice and specialty crops**
- **Offers farmers a powerful tool for resistance management**

BASF introduced its latest active ingredient Revysol® in Korea in 2018. This innovative azole fungicide provides fast-acting, long-lasting and reliable performance to combat diseases on a broad range of crops, including high-value fruits, such as pears, apples and grapes – as well as rice. With the first global regulatory approval for the new compound received from South Korean authorities in 2018, farmers in the country will be among the first in the world to benefit from the company's latest offering.

In rice cultivation, Revysol shows outstanding protection against sheath blight and dirty panicle – two common diseases that plague growers around Asia. Revysol also can be used to control harmful diseases in a broad range of crops such as cereals, specialty crops, and turf and ornamentals. Because they are effective in both foliar and seed treatment applications, the new fungicide will be a useful tool for farmers around the world.



Revysol® offers superior activity, excellent selectivity, and outperforms where conventional triazole fungicides fail due to resistance issues.

Innovations help Korean manufacturers branch out into new area of business

- **Irgatec® improves air permeability as well as higher long-term thermal stability of PP meltblown non-woven materials**

BASF innovations have helped a meltblown non-woven fabric manufacturer in Korea branch out into a new area of business. Korea Nonwoven Technology Co., Ltd. (KNT), a polypropylene meltblown non-woven fabric maker in South Korea, has launched new single-use scrub wipes using BASF's rheology-modifying additive Irgatec®. The wipes can offer a more hygienic alternative to conventional materials. By adopting BASF's solution in their production, KNT has been able to develop a new meltblown non-woven grade which has better barrier and mechanical properties than conventional meltblown grades. This new meltblown grade was initially launched for filter applications. One such area is single-use scrub wipes.

With consumers placing great emphasis on health and hygiene, single-use scrub wipes for indoor and outdoor use are growing in popularity. The single filaments made possible with Irgatec are thinner, stronger and more flexible than those of existing technology. The resulting stronger fabric improves cleaning efficiency compared to existing materials like paper, spunbond non-woven and conventional meltblown grades.



The new single-use scrub wipes using BASF's rheology-modifying additive Irgatec® improve cleaning efficiency compared to existing materials like paper, spunbond non-woven and conventional meltblown grades.

BASF in Korea

At a glance

BASF has been a committed partner to Korea since 1954. As a leading foreign investor in the chemical industry in Korea, BASF operates eight world-scale production sites in the country. BASF also maintains a research and development center in Suwon and four technical development centers¹ across Korea, and the Asia Pacific headquarters of BASF's Electronic Materials business is located in Seoul. In 2018, BASF posted sales to customers in Korea of approximately €1.4 billion, and employed 1,182 employees as of the end of the year.

BASF strives to be a solution provider and strategic partner to enhance the competitiveness of our customers as the business environment changes.

In 2018, KOLON BASF innoPOM Inc., the 50:50 joint venture between KOLON PLASTICS and BASF started operations at its new polyoxymethylene (POM) production plant in Gimcheon, Korea. The new production with annual capacity of 70,000 metric tons, combined with KOLON PLASTICS' existing annual POM production capacity of 80,000 metric tons, creates the world's largest POM production facility, with a total annual capacity of 150,000 metric tons.

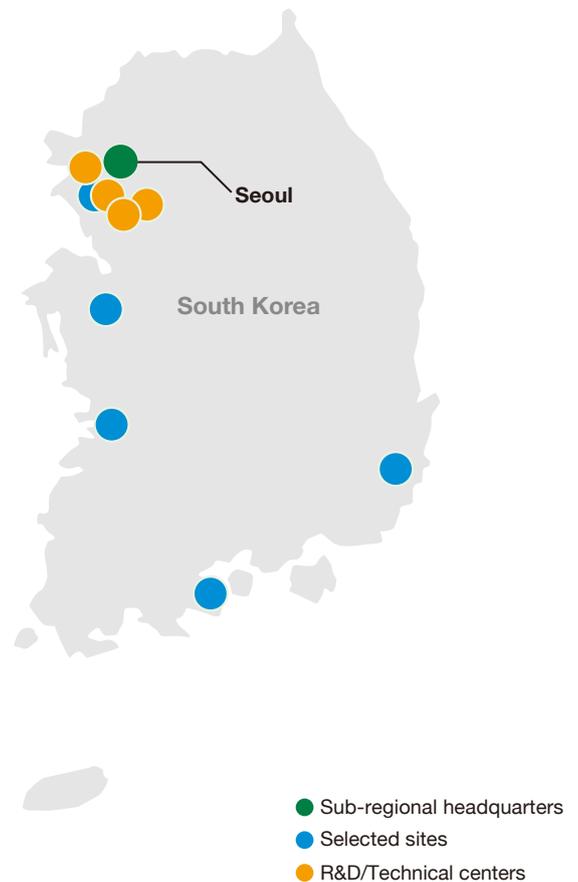
Together with Kolon BASF innoPOM, BASF also inaugurated Global POM Compounding Hub in Ansan site. BASF will supply 11,000 metric tons of POM compounding product to capitalize on the growing demand in the market.

At the same time, BASF has started up a new production line for its high-temperature resistant thermoplastic polyarylsulfone, Ultrason®, at its site in Yeosu. With the new line, the global annual capacity for Ultrason will increase by 6,000 metric tons to 24,000 metric tons, serving the growing market demand worldwide. The plant in Yeosu was opened in 2014 as the first Ultrason plant in Asia.

BASF is also meeting new market demands by adapting production at our existing plants. The Ulsan plastics site expanded its Neopor® production capacity to meet the increasing demand of the high-

performance insulation market. In doing so, production for Styropor® has been discontinued, and Neopor production increased from 57,000 metric tons to 85,000 metric tons per year.

In line with our global strategy to strengthen BASF's agricultural business, we successfully completed the acquisition of a range of businesses and assets from Bayer in 2018. The transaction is a strategic complement to BASF's crop protection, biotech and digital farming activities and marks its entry into seeds, non-selective herbicides and nematicide seed treatments. In order to expand the scope of its agricultural business, BASF has changed its business from crop protection to agricultural solutions. Our agricultural business in Korea has also expanded, and the business for seeds and traits is included.



BASF in Korea

Sales in 2018 (by location of customer)

€1,369 million

Employees (as of December 31, 2018)

1,182

¹ This figure reflects the situation until the end of 2018.

Major sites

Seoul Office

- First activities in 1954
- Provides marketing, sales, human resources and other functions for BASF in Korea
- BASF Asia Pacific Electronic Materials Headquarters located in Seoul Office
- BASF Colors & Effects Korea (a wholly-owned company of BASF) located in Seoul office

BASF Korea Technology Development Center (Dongtan)

- Established in 2015
- Consolidated polyurethane research center and research site for care chemicals and cosmetics
- Develops application systems and provides customer support
- Cellasto® testing Lab established in 2016

Ansan Coatings Technology Center

- Established in 2010
- Develops environmentally friendly water-based coatings and coating methods for automotive applications

Ansan CAE Technology Center

- Established in 2006
- Develops automotive engineering plastic parts using CAE (Computer Aided Engineering) technology

Ansan Engineering Plastics Site

- Engineering plastics compounding site acquired from Honeywell in 2003
- Produces engineering plastics
- Supports automotive and electronics sector
- Produces polyoxymethylene compounding (Global Compounding Hub)

BASF Electronic Materials R&D Center Asia (Suwon)

- Established in 2014
- Conducts regional research and development on electronic materials

Gunsan Site

- Established in 2003
- Produces Vitamin B2

Yeosu Site

- First plants established in 1991 by Hanyang BASF Urethane Co., Ltd.
- Produces raw materials for polyurethanes: MDI (methylene diphenyl diisocyanate), TDI (toluene diisocyanate), CCD (carbonyl chloride derivatives)
- Ultrason® plant completed in 2014, first of its kind outside Germany
- Ultra-pure NH₄OH (electronic-grade ammonia water) plant completed in 2017

Ulsan Site

Chemicals Site

- Established in 1998 to produce PolyTHF®, polyol, and polyurethane system A

Plastics Site

- Established in 1980 by Hyosung BASF Co., Ltd. to produce expandable polystyrene

Pigments Site

- Acquired in 2010 from Daihan Swiss Chemical; produces organic pigments
- Operated by BASF Colors & Effects Korea since 2016

Yesan Site

- Established in 2015
- Produces engineering plastics for automotive and consumer products

Gimcheon Site (Joint Venture)

- Established in 2016
- Joint venture (50:50) with Kolon Plastics
- Produces polyoxymethylene engineering plastics

BASF Korea in Figures

Despite the difficulties in the global market in 2018, BASF has achieved strong results in Korea, not only in financial, but also in environmental and social terms. In cooperation with our customers, BASF is pursuing a diversified growth strategy in Korea to develop new products and solutions. BASF has also engaged proactively with local communities in order to establish understanding and maintain the trust with all relevant stakeholders.

Business development

BASF continued to provide quality products that support our customers' sustainable success in 2018.

We started operations at its new polyoxymethylene (POM) production plant in Gimcheon. The new production, with a capacity of 70,000 metric tons per year, combined with KOLON PLASTICS' existing annual POM production capacity of 80,000 metric tons, has created the world's largest POM production facility, with a total annual capacity of 150,000 metric tons. The increased capacity meets the growing POM market for the automobile and electronics industries. The first POM production plant in Asia enables us to respond rapidly and flexibly to increasing demand of our customers for quality products. The plant combines BASF's stringent quality control system and its energy-saving technology with KOLON PLASTICS' highly efficient and stable production capabilities, built over more than 20 years, to produce best-in-class POM products.

BASF has started up a new production line for its high-temperature resistant thermoplastic Ultrason® (polyarylsulfone) at its site in Yeosu. With the new line the global annual capacity for Ultrason® will increase by 6,000 metric tons to 24,000 metric tons, serving the growing market demand worldwide.

BASF also increased the global production capacity for Neopor® by a total of 40,000 metric tons per year. At the Ulsan plastics site, BASF switched the plant's entire 85,000 metric ton capacity from the clas-



The government officials and BASF executives inaugurated the new line for Ultrason® plant in Yeosu.

sic Styropor® to the improved insulation raw material Neopor. This will allow the company to meet growing demand in the Asian market.

At the same time, BASF took new steps in 2018 to become a strategic partner to our customers. The company into two exclusive distribution and trademark licensing agreements with NongHyup Chemical Co., Ltd. and Sungbo Chemicals Co., Ltd. Under the agreements, BASF will supply high-quality active ingredients from its production plant in Germany to the two companies. The two companies will formulate and market BASF's non-selective herbicide, Basta®, to farmers in Korea. BASF will also provide the fast-acting fungicide Revysol® to combat diseases on a broad range of crops, including high-value fruits, such as pears, apples and grapes, in addition to rice. With the first global regulatory approval for the new compound received from South Korean authorities in 2018, farmers in Korea will be among the first in the world to benefit from the company's latest offering.

Our continuous efforts have led to meaningful results for the national economy. BASF was awarded a Commendation by Korea's Ministry of Trade, Industry and Energy at the "Fourth Foreign Investment Caravan" event, for its contributions to Korea's national economy over the past several decades. This includes direct investments, increased job opportunities and a substantial contribution to the country's exports. BASF was also recognized for achieving USD\$1 billion in exports with the "Export Tower" award by the Korean government, in celebration of the 55th Annual Trade Day.

Environmental protection, health and safety

At BASF, we value the health and safety of people above all else. This principle is anchored in our strategy and underlies our philosophy in operating our own facilities and dealing with third parties. Around the world, including in Korea, BASF has embraced the goals of the chemical industry's voluntary Responsible Care® initiative, which covers environmental protection, health and safety (EHS) as well as security and energy efficiency, and applies them to its operation.

BASF actively manages greenhouse gas emissions through steam conservation and electricity conservation, as well as utilizing waste heat generated by our plants and neighboring plants. In 2018, we reduced its greenhouse emissions and air pollutants by implement-



BASF Korea held a Revysol® launching and showcase event on October 12th, 2018.

ing a range of improvement projects, including energy analysis and manufacturing process optimization in all sites.

To enhance safety performance, a “Back to Basics” campaign was launched at Yeosu site to strengthen the overall management and supervising system for various areas, including process safety, product stewardship, and transportation and distribution safety. In 2018, the MDI complex in Yeosu site received “Green”, the highest safety grade in the Responsible Care audits.

BASF Corporate Health Management serves to promote and maintain the health and productivity of our employees. Our worldwide standards for occupational health are specified in a directive that is implemented by a global network of experts. The Global Health Campaign, “Life. Saving. Heroes.”, was rolled out in 2018. CPR (Cardiopulmonary Resuscitation) training was provided to employees at all BASF sites. Through this training, employees are able to become safety officers. BASF has a strong policy that 5% of the office workers and 10% of the site workers should be the safety officers of each locations.



A firefighter is putting out on-site fires in the emergency drill.

Employees and society

Our employees play a critical role in our economic success and long-term development.

BASF strives to recruit the most talented workers and leaders all over the world, in order to continue our successful growth. In 2018, we participated in a large-scale job fair, with over 150 foreign companies, and 15,000 students and job seekers participating. The company provided an opportunity for participants to learn about the professional world through experience shared by the engineers from the Ulsan and Yeosu sites.

To constantly attract and retain young talents for site operations, a summer internship program was launched in 2018. Outstanding trainees will be offered employment as graduate engineers at the Yeosu and Ulsan sites. This program aims at educating the next generation of chemical engineers and enriching the pool of production experts for site management.

Developing leadership excellence is another priority of our employee



Employees at the Seoul Office enjoy a brief coffee break with BASF mugs.

development strategy. In 2018, BASF in Korea introduced a new Leadership Impact Model that connects the three fundamental dimensions of strategy, operations and people. Through virtual sessions and workshops, management and leaders were given opportunities to evaluate their management skills and define specific actions, bringing their leadership to the next level.

BASF social engagement activities in Korea are designed to contribute to the United Nations Sustainable Development Goal SDG 4 “Quality Education.” Since 2003, BASF in Korea has held annual science classes for elementary school students in Suwon, Yeosu, and Ulsan to foster their interest in chemistry through safe and interesting experiments. To allow more children to benefit from this learning experience, BASF also hosted the Kids’ Lab at the Daejeon Science Festival in October. So far, over 7,500 children have experienced hands-on experiments at BASF Kids’ Lab. BASF also donated laptops to children in underprivileged communities in Gangwon Province to enhance their learning environment, in collaboration with the civil educational cooperative “1000 Breaths”.

BASF and local communities have built strong relationships over the long term and continue to cooperate with each other to build sustainability practices and address social needs. Employees at the BASF head office in Seoul, Yeosu, and Ulsan sites, regularly make kimchi and donated it to those in need. The company also hosted events or made products, such as stationery, with people with disabilities to increase public awareness.

In 2018, BASF reduced the amount of waste through “Start Small to Create a Clean Environment” campaign at its Seoul office and Yeosu site. The campaign called for reducing the use of disposable cups among employees. In 2018, the Community Advisory Panels (CAP) at our sites focused on safety and collaboration with nearby residents and other companies.

Key data

		2018	2017	2016
Financial Results				
Sales by location of customer		1,369	1,201	1,086
Employees (as of December 31)				
Number of employees		1,182	1,154	1,105
BASF employee age structure				
Up to and including 25 years	%	1.9	2.5	1.9
Between 26 and 39 years	%	34.4	34.0	33.7
Between 40 and 54 years	%	52.4	53.7	56.9
55 years and older	%	11.3	9.8	7.6
Occupational Safety				
Lost-time injury rate (BASF employees, leased personnel and contractors)	per 200,000 working hours ¹	0.12	0.06	0.13
Fatalities (total)		0	0	1
Environment				
Emissions to air				
Greenhouse gas emissions	Metric tons of CO ₂ equivalents	661,319	678,347	657,683
Air pollutants (without CH ₄)	Metric tons	622	721	564
Water				
Emissions to water: Organic substances (CoD)	Metric tons	290	340	845
Emissions to water: Nitrogen	Metric tons	187	137	196
Emissions to water: Heavy metals	Metric tons	0.48	0.42	0.42
Water supply	Million cubic meters	5.9	6.3	6.0
Water used for production	Million cubic meters	3.5	3.6	3.5
Water used for cooling	Million cubic meters	321	309	314
Waste				
Waste (total amount)	Metric tons	43,058	40,813	39,826
Recycling and thermal recovery	%	52	46	45
Energy				
Electricity consumption	MWh	462,846	471,276	468,733
Steam consumption	Metric tons	1,906,442	1,880,039	1,728,135
Fuel consumption (Central powerplants and boilers)	MWh	957,007	972,372	971,185

¹Hours worked by BASF employees, temporary employees and contractors. We previously reported on the number of lost-time injuries per one million working hours worldwide (BASF and temporary employees). The 2016 and 2017 figure have been adjusted based on 200,000 working hours.



KOLON BASF innoPOM production site, Gimcheon

Ten-Year-Summary

Million €

	2009	2010	2011	2012 ²	2013 ³	2014	2015	2016	2017	2018
Sales and earnings										
Sales	50,693	63,873	73,497	72,129	73,973	74,326	70,449	57,550	61,223 ¹	62,675
Income from operations (EBIT)	3,677	7,761	8,586	6,742	7,160	7,626	6,248	6,275	7,587 ¹	6,033
Income before income taxes	3,079	7,373	8,970	5,977	6,600	7,203	5,548	5,395	6,882 ¹	5,288
Income after taxes from continuing operations	-	-	-	-	-	-	-	-	5,592	4,150
Income after taxes from discontinued operations	-	-	-	-	-	-	-	-	760	829
Income after taxes	1,655	5,074	6,603	5,067	5,113	5,492	4,301	4,255	6,352	4,979
Net income	1,410	4,557	6,188	4,819	4,792	5,155	3,987	4,056	6,078	4,707
Income from operations before depreciation and amortization (EBITDA)	7,388	11,131	11,993	10,009	10,432	11,043	10,649	10,526	10,765 ¹	9,166
EBIT before special items	4,852	8,138	8,447	6,647	7,077	7,357	6,739	6,309	7,645 ¹	6,353
EBIT after cost of capital	(226)	3,500	2,551	1,164	1,768	1,368	194	1,136	2,902 ¹	825
Capital expenditures, depreciation and amortization										
Additions to property, plant and equipment and intangible assets	5,972	5,304	3,646	5,263	7,726	7,285	6,013	7,258	4,364	10,735
of which property, plant and equipment	4,126	3,294	3,199	4,084	6,428	6,369	5,742	4,377	4,028	5,040
Depreciation and amortization of property, plant and equipment and intangible assets	3,711	3,370	3,407	3,267	3,272	3,417	4,401	4,251	4,202	3,750
of which property, plant and equipment	2,614	2,667	2,618	2,594	2,631	2,770	3,600	3,691	3,586	3,155
Number of employees										
At year-end	104,779	109,140	111,141	110,782	112,206	113,292	112,435	113,830	115,490	122,404
Annual average	103,612	104,043	110,403	109,969	111,844	112,644	113,249	111,975	114,333	118,371
Personnel expenses										
	7,107	8,228	8,576	8,963	9,285	9,224	9,982	10,165	10,610	10,659
Research and development expenses										
	1,398	1,492	1,605	1,732	1,849	1,884	1,953	1,863	1,843¹	2,028
Key data										
Earnings per share	€ 1.54	4.96	6.74	5.25	5.22	5.61	4.34	4.42	6.62	5.12
Adjusted earnings per share	€ 3.01	5.73	6.26	5.64	5.31	5.44	5.00	4.83	6.44	5.87
Cash flows from operating activities	5,693	6,460	7,105	6,602	8,100	6,958	9,446	7,717	8,785	7,939
EBITDA margin	% 14.6	17.4	16.3	13.9	14.1	14.9	15.1	18.3	17.6 ¹	14.6
Return on assets	% 7.5	14.7	16.1	11.0	11.5	11.7	8.7	8.2	9.5 ¹	7.1
Return on equity after tax	% 8.9	24.6	27.5	19.9	19.2	19.7	14.4	13.3	18.9	14.1
Return on capital employed (ROCE)	% -	-	-	-	-	-	-	-	15.4	11.4
Appropriation of profits										
Net income of BASF SE ⁴	2,176	3,737	3,506	2,880	2,826	5,853	2,158	2,808	3,130	2,982
Dividend	1,561	2,021	2,296	2,388	2,480	2,572	2,664	2,755	2,847	2,939
Dividend per share	€ 1.70	2.20	2.50	2.60	2.70	2.80	2.90	3.00	3.10	3.20
Number of shares as of December 31	million	918.5	918.5	918.5	918.5	918.5	918.5	918.5	918.5	918.5

¹ Figures for 2017 were restated with the presentation of the oil and gas activities as discontinued operations. For more information, see the Consolidated Financial Statements from page 200 onward.

² We have applied International Reporting Standards IFRS 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.

³ Figures for 2013 have been adjusted to reflect the dissolution of the natural gas trading business disposal group.

⁴ Calculated in accordance with German GAAP.

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