



# BASF in Korea Report 2021

 **BASF**  
We create chemistry



**Cover photo:**

Engineer measuring the physical properties of resins at the Engineering Plastics Innovation Center located in Ansan

**On this page:**

Yeosu site engineer team conducting regular safety inspection



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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 2021. 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 fully consolidated joint ventures are reported on a proportional basis, while those accounted according to the equity method are not included. However, work-related accidents at all sites of BASF Group and its subsidiaries as well as joint operations and joint ventures in which we have sufficient authority in terms of safety management, are compiled regardless of our stake, and reported in full. The employee numbers refer to employees within the BASF Group scope of consolidation as of December 31, 2021.

# 2021 | BASF Group

## At a glance

### Sales

**€78.6 billion**  
(2020: €59.1 billion)

### EBIT before special items

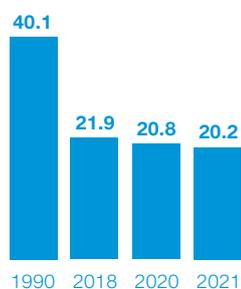
**€7.8 billion**  
(2020: €3.6 billion)

### ROCE

**13.5%**  
(2020: 1.7%)

### Greenhouse gas emissions

(million metric tons of CO<sub>2</sub> equivalents)



### Accelerator sales

**€24.1 billion**  
(2020: €16.7 billion)

### Employees at year-end

**111,047**  
(2020: 110,302)

### Research and development expenses

**€2.2 billion**  
(2020: €2.1 billion)

### Personnel expenses

**€11.1 billion**  
(2020: €10.6 billion)

## Segment data



### Chemicals

	Million €	
Sales	<b>2021</b>	13,579
	<b>2020</b>	8,071
EBIT before special items	<b>2021</b>	2,974
	<b>2020</b>	445



### Surface Technologies

	Million €	
Sales	<b>2021</b>	22,659
	<b>2020</b>	16,659
EBIT before special items	<b>2021</b>	800
	<b>2020</b>	484



### Materials

	Million €	
Sales	<b>2021</b>	15,214
	<b>2020</b>	10,736
EBIT before special items	<b>2021</b>	2,418
	<b>2020</b>	835



### Nutrition & Care

	Million €	
Sales	<b>2021</b>	6,442
	<b>2020</b>	6,019
EBIT before special items	<b>2021</b>	497
	<b>2020</b>	773



### Industrial Solutions

	Million €	
Sales	<b>2021</b>	8,876
	<b>2020</b>	7,644
EBIT before special items	<b>2021</b>	1,006
	<b>2020</b>	822



### Agricultural Solutions

	Million €	
Sales	<b>2021</b>	8,162
	<b>2020</b>	7,660
EBIT before special items	<b>2021</b>	715
	<b>2020</b>	970



## Welcome

### Letter from the Representative Director

Dear Stakeholders and supporters  
of BASF in Korea,

Greetings to our dear and generous supporters of the BASF Group and BASF Korea. I am Dr. David Im, Representative Director of BASF Korea.

Over the year 2021, while the BASF Group achieved successful business performance, major progress was made towards protecting our environment through various means such as lowered CO<sub>2</sub> emissions, even with an increased volume in production. Despite challenges of the prolongation of the coronavirus pandemic, supply chain bottlenecks, and an increase in the price of energy and raw materials, BASF has made major breakthroughs with the sustainable accelerator product line and embodied sustainable management based on values seeking not only the economic success, but also environmental protection and social responsibility.

As a leading global chemical company, BASF has set an example in achieving climate neutrality. After the new target of 2050 climate neutrality was announced, the basis for this was set with a 3% decrease in CO<sub>2</sub> emission from 2020 despite an increase in production. Since the electrical use of renewable energy is the key for achieving lower CO<sub>2</sub> emissions, we plan on securing 100% of our 2021 energy demand from green energy sources by 2030. Additionally, through eco-friendly electricity, low carbon steam, bio-based raw materials, high-efficiency processes, and more, BASF plans to lower its product carbon footprint by vast amounts, and furthermore manufacture net zero products. We will make continuous efforts to reduce the carbon footprint of products for our customers in Korea from almost all industries to help accomplish their own climate neutrality goals.

For BASF, while 2021 has been a year of recovering from difficulties and starting to undertake the challenge of climate neutrality, it has also been a year of achieving amazing business performance. In comparison to 2020, there has been exceptional performance, including sales and profits rising by around 33% and 118% respectively, and improved sales across all business segments. The Chemicals, Materials and Surface Technologies segments have achieved high profits, while

the Industrial Solutions segment has greatly contributed to performance improvement. This is proudly credited to BASF's high-value product line and optimized product portfolio.

Over the last year, BASF in Korea has made various internal and external efforts and innovative accomplishments to develop into a more agile, customer-oriented company. Firstly, by launching a new R&D center, the 'Engineering Plastic Innovation Center (EPIC Korea)' in Ansan, we are able to offer innovative and eco-friendly engineering plastics solutions to our customers across Asia Pacific region faster than ever. Internally, as part of our change management, the 'Future of Work' project has driven innovation and digitalization in workspaces, establishing a new office environment to better meet customer needs with agility and flexibility.

Owing to all these efforts, BASF in Korea has posted record sales of approximately €1.8 billion in 2021. We will continue to provide customized products and solutions and strive to grow together with our customers. Furthermore, the Ulsan Plastic site celebrates its 40th anniversary and the Yeosu MDI plant celebrates its 30th anniversary this year. We will continue to contribute to position Korea as the heart of high-value product development and its production hub by prioritizing safety while striving for quality.

We ask for your continued support for the journey of BASF in Korea to create chemistry for a sustainable future.

Thank you.

**Dr. David Im**  
Representative Director, BASF Company Ltd.

# BASF in Korea - Executive Committee



*“Our customers experienced ‘NEW BASF’ in Korea in 2021 from diverse changes we drove. Our journey towards ‘NEWER BASF’ will continue.”*

**Dr. David (Yoon Soon) Im**  
Representative Director, BASF Company Ltd.

*“To safeguard the continued successes of our customers during these challenging and uncertain times, we at BASF in Korea ensure the provision of reliable services.”*

**Mark Bueltel-Herz**  
Vice President, Business Services Korea, CFO



*“Through our ChemCycling® and our mass-balanced approaches also in Korea we are enabling our customers to be ahead in the accelerating race of sustainability.”*

**Dr. Dschun Song**  
Vice President, Business Management Specialties



*“BASF is steering its global Semiconductor Materials Business out of Korea – the cutting edge of the electronic industry. I am proud to be part of it!”*

**Jens Liebermann**

Vice President, Global Semiconductors Business

*“Sustainability is at the core of what we do, a driver for growth as well as an element of our risk management. On top of Isocyanate and Polyamide portfolio, we are striving the Green policy to achieve net zero CO<sub>2</sub> emission by 2050 as the firmbase line of our sustainability.”*

**Byoung Yeon Kim**

Vice President, Technology & Operation Monomers Asia Pacific



*“Our employees make a significant contribution to BASF’s long-term success.”*

**Sam Lyul Kwon**

Head of HR and Administration Korea



# The BASF Group

**At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. Over 111,000 employees contribute worldwide to the success of our around 90,000 customers in nearly all sectors. Our customer portfolio ranges from major global customers and small and medium-sized enterprises to end consumers.**

## At a glance

**111,047**

Employees around the world

**~240**

Production sites worldwide

- Six segments with eleven operating divisions
- Verbund structure ensures efficient and reliable production
- High-performance organization for greater customer proximity, increased competitiveness and profitable growth
- Around 90,000 customers are at the core of our strategy
- More than 70,000 Tier 1 suppliers

## Sites and Verbund

As the world's largest chemical company and industry leader, BASF has companies in 90 countries. We operate around 240 production sites worldwide – including Ludwigshafen, the world's largest integrated chemical complex owned by a single company. It was there, in 1865, that the foundation stone was laid for the Verbund concept, which remains a key strength of BASF today: Intelligently linking and steering our plants in a Verbund structure creates efficient value chains – from basic chemicals to highly refined products such as coatings or crop protection. In the Verbund, we can manage our production in a resource-efficient, CO<sub>2</sub>-optimized and reliable way. For example, by using by-products from one factory as feedstocks elsewhere. This enables us to save raw materials and energy, avoid emissions, reduce logistics costs and exploit synergies.

In addition to Ludwigshafen, Germany, BASF operates Verbund sites in Antwerp, Belgium; Freeport, Texas and Geismar, Louisiana; Kuantan, Malaysia; and Nanjing, China. Another is currently being built in Zhanjiang in the southern Chinese province of Guangdong.

## Organization of the BASF Group

We steer our six segments along our value chains to address the needs of our customers with differentiated solutions and business strategies.

- **Chemicals:** The segment supplies BASF's other segments and third-party customers with basic chemicals and intermediates.
- **Materials:** The segment offers advanced materials and their precursors for the plastics and plastics processing industries.
- **Industrial Solutions:** The segment develops and markets ingredients and additives for industrial applications.
- **Surface Technologies:** The segment offers chemical solutions for surfaces such as battery materials and automotive coatings.
- **Nutrition & Care:** The segment produces ingredients and solutions for consumer applications, for example, nutrition and personal care.
- **Agricultural Solutions:** The segment is an integrated provider of seeds, crop protection and digital technologies and solutions.

We take a differentiated approach to steering our businesses according to market-specific requirements and the competitive environment. We provide a high level of transparency around the results of our segments and show the importance of the Verbund and value chains to our business success. BASF aims to differentiate its businesses from their competitors and establish a high-performance organization to enable BASF to be successful in an increasingly competitive market environment.

The operating divisions, the service units, the regions and the corporate center form the cornerstones of the BASF organization, in line with the corporate strategy. As part of the implementation of our strategy, we streamlined our administration, sharpened the roles of services and regions, and simplified procedures and processes. The organizational realignment created the conditions for greater customer proximity, increased competitiveness and profitable growth.

Our eleven operating divisions bear strategic and operational responsibility and manage the 50 global and regional business units and develop strategies for 75 strategic business units.

The regional and country units represent BASF locally and support the growth of business units with local proximity to customers. For financial reporting purposes, we organize the regional divisions into four regions: Europe, North America, Asia Pacific, and South America, Africa and Middle East.

Our research is currently divided into three global divisions: Process Research & Chemical Engineering, Advanced Materials & Systems Research and Bioscience Research. To strengthen our innovation capabilities, we will reorganize our global research activities in 2022 and align them even more closely with the needs of our customers. To this end, we will integrate downstream research into the divisions and bundle activities with broad relevance in a research unit. This unit will continue to be globally positioned with research centers in Europe, North America and Asia Pacific.

Five service units provide competitive services for the operating divisions and sites: Global Engineering Services, Global Digital Services, Global Procurement, European Site & Verbund Management, Global Business Services (finance, human resources, environmental

protection, health and safety, intellectual property, communications, procurement, supply chain and inhouse consulting services).

Following the bundling of services and resources and the implementation of a wide-ranging digitalization strategy, the number of employees in the Global Business Services unit worldwide will decline by up to 2,000 by the end of 2022 compared with baseline 2019. From 2023 onward, the division expects to achieve annual cost savings of over €200 million.

The Corporate Center supports the Board of Executive Directors in steering the company as a whole. These include central tasks from the following areas: strategy, finance and controlling, compliance and law, tax, environmental protection, health and safety, human resources, communications, investor relations and internal audit.

Our Excellence Program aimed to contribute €2 billion to EBITDA annually until the end of 2021 onward compared with baseline 2018. We met this target in 2021. As planned, this was partly due to the reduction of more than 6,000 positions worldwide until the end of 2021. This decrease resulted from the organizational simplification and from efficiency gains in administration, the service units and the operating divisions.

## Procurement and Sales Markets

BASF supplies products and services to around 90,000 customers<sup>1</sup> from various sectors in almost every country in the world. Our customer portfolio ranges from major global customers and small and medium-sized enterprises to end consumers.

We work with over 70,000 Tier 1 suppliers<sup>2</sup> worldwide. They supply us with important raw materials, chemicals, investment goods and consumables, and perform a range of services. Important raw materials (based on volume) include naphtha, liquid gas, natural gas, benzene and caustic soda.

### BASF sales by industry 2021

Direct customers

>20%	Chemicals and plastics   Transportation (respectively)
10%–20%	Agriculture   Consumer goods (respectively)
<10%	Construction   Electronics   Energy and resources   Health and nutrition (respectively)

## Business and Competitive Environment

BASF's global presence means that it operates in the context of local, regional and global developments and a wide range of conditions. These include:

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

BASF holds one of the top three market positions in around 80% of the business areas in which it is active. Our most important global competitors include Arkema, Bayer, Clariant, Corteva, Covestro, Dow, Dupont, DSM, Evonik, Huntsman, Lanxess, SABIC, Sinopec, Solvay, Sumitomo Chemical, Syngenta, Wanhua and many hundreds of local and regional competitors. We expect competitors from Asia and the Middle East in particular to continue to grow in significance in the years ahead.

## Corporate Legal Structure

As the publicly listed parent company of the BASF Group, BASF SE takes a central position: Directly or indirectly, it holds the shares in the companies belonging to the BASF Group, and is also one of the largest operating companies. The majority of Group companies cover a broad spectrum of our business. In the BASF Group Consolidated Financial Statements, 258 companies including BASF SE are fully consolidated. We consolidate nine joint operations on a proportional basis and account for 27 companies using the equity method.

 For more information on the companies belonging to the BASF Group, see [basf.com/en/corporategovernance](https://basf.com/en/corporategovernance)

<sup>1</sup> The number of customers refers to all external companies (sold-to parties) that had contracts with the BASF Group in the business year concerned under which sales were generated.

<sup>2</sup> BASF considers all direct suppliers of the BASF Group in the business year concerned as Tier 1 suppliers. These are suppliers that provide us with raw materials, investment goods, consumables and services. Suppliers can be natural persons, companies or legal persons under public law.

# Our Strategy

**Chemistry is our passion. As an industry leader, we want to be the most attractive partner for challenges that can be solved with chemistry. That is why our customers are at the center of everything we do. We want to grow profitably and at the same time, create value for society and the environment. We help to change the world for the better with our expertise, our innovative and entrepreneurial spirit, and the power of our Verbund integration.**

The world is changing at a rapid pace – more and more urgently than ever, solutions are needed for a sustainable future. Chemistry plays a key role here. In almost all areas of life, it can help overcome pressing global challenges with innovative products and technologies – from climate change and using resources more sparingly to feeding the world’s population. This belief is expressed in our corporate purpose and is what motivates us day in and day out: We create chemistry for a sustainable future.

Our mission and motivation is to grow profitably and make a positive contribution to society and the environment. For example, BASF’s solutions contribute to climate protection and help to prevent or recycle waste, produce healthy and affordable food, and enable climate-smart mobility.

At the same time, as an energy and resource-intensive company, we are facing what is probably the biggest transformation in our over 150-year history: The shift toward a carbon-neutral and circular economy and the associated landmarks such as the European Green Deal demand from us new concepts and approaches – for the way we produce, for our raw material base and for our energy supply.

## Our corporate purpose

**We create chemistry for a sustainable future**

We also see these disruptive changes as an opportunity. As the world’s largest chemical company, we want to lead the way and actively and responsibly shape the change. That is why we are gradually switching our energy and raw material supplies to renewable sources. We are strengthening our Verbund structure as the basis for resource-efficient, safe and reliable production. We are developing pioneering low-carbon production processes for our products. We are accelerating our innovation processes and deepening cooperation with partners to develop high-performance products that also require fewer resources and have a lower carbon footprint. We are harnessing the many opportunities of digitalization. We are systematically aligning our portfolio with growth areas and future technologies, and are integrating sustainability into our value chains even more strongly. We create a working environment in which our employees can thrive and contribute to BASF’s long-term success. This is how we live our corporate purpose.

## Our Strategic Action Areas

Our customers are our number one priority and are at the heart of our strategy. We want to be their most attractive partner for challenges that can be solved with chemistry. BASF supplies products and services to around 90,000 customers from almost all sectors and countries around the world. Our customer portfolio ranges from major global customers and small and medium-sized enterprises to end consumers. Our comprehensive product portfolio means that we are active in many value chains and value creation networks. We use various business strategies, which we adapt to the needs of industries and markets. These range from cost leadership in basic chemicals to tailored system solutions for specific customer applications.

We continue to drive forward our customer focus. We have refined our organizational structure to enable our operating divisions to flexibly address specific market requirements and differentiate themselves from the competition.

We are also improving our customer relationships with a range of measures. For example, since 2019 we have been using the Net Promoter System® worldwide to systematically record and optimize our problem-solving skills, product quality and delivery reliability based on direct customer feedback. We have been using a new IT-based customer relationship management system, Salesforce,

## Good to know



## Net Zero Accelerator

The new Net Zero Accelerator unit started work on January 1, 2022. It bundles the extensive cross-company activities with which we want to achieve our ambitious climate protection targets. The unit will initially have around 80 employees and report directly to the Chairman of the Board of Executive Directors. It will focus on accelerating and implementing projects relating to low-CO<sub>2</sub> production technologies, circular economy and renewable energies – driving forward BASF’s transformation to a climate-neutral company. In parallel, our operating divisions will continue to work on divisional-specific carbon reduction projects.

 For more information on climate neutrality, see [basf.com](https://www.basf.com)

since 2020. The application helps our sales employees to provide customer support and simplifies their work. Above and beyond this, we have intensified cooperation with our customers to leverage innovation and growth potential together with them. For instance, we established interdisciplinary teams in our business units to even better and more quickly address the needs of our most important customers.

BASF's strategic orientation is founded on a comprehensive analysis of our markets and competitors. We continuously monitor global trends and anticipate the resulting growth opportunities and risks. The following six strategic focus areas enable us to focus on our customers while strengthening our leading position in an increasingly volatile and competitive environment.

### Our six strategic action areas

#### Innovation, sustainability, production, digitalization, portfolio and employees

**Innovation** is the bedrock of our success. BASF is a leader in the chemical industry with around 10,000 employees in research and development and R&D spending of around €2.2 billion. We are expanding this position by strengthening our research activities, bringing research and development even closer together, and fostering cooperation.

We pledged our commitment to **sustainability** in 1994 and since then, have systematically aligned our activities with the principles of sustainability. We see sustainability as an integral part of our strategy as well as our targets, steering processes and business models. Our approach covers the entire value chain – from responsible procurement and safety and resource efficiency in production to sustainable solutions for our customers.

Our core business is the **production** and processing of chemicals. Our strength here lies – both now and in the future – in the Verbund and its integrated value chains. The Verbund offers us many technological, market, production-related and digital advantages. That is why we will continue to invest in the creation and optimization of Verbund structures and drive forward the consolidation of production at highly efficient sites.

We want to leverage the diverse growth potential of **digitalization** and seize the associated opportunities to the benefit of our customers. To achieve this, we promote digital skills among our employees, cooperate with partners and make digital technologies and ways of working an integral part of our business.

Investments, acquisitions and divestitures play a key role in strengthening our **portfolio**. We are focusing on innovation-driven growth areas and sustainable technologies. To further strengthen our position in the dynamic growth market of Asia, we are building a new Verbund site in the southern Chinese province of Guangdong.

Our **employees** are key to BASF's success. That is why we believe that it is important to have an inspiring working environment that fosters and develops employees' individual talents and enables them and their teams to perform at their best. We are pursuing three action areas to make our high-performance organization even more so: empowerment, differentiation and simplification.

### Our Values and Global Standards

How we act is critical to the successful implementation of our strategy and how our stakeholders perceive us. This is what our four corporate values represent. They are binding for all employees worldwide. Together with our Code of Conduct and our global standards and guidelines, they provide the framework for responsible conduct.

**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 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.

We stipulate binding rules for our employees with standards that apply throughout the Group. We set ourselves ambitious goals with voluntary commitments and regularly monitor our performance in environmental protection, health and safety with our Responsible Care Management System. We mainly approach our adherence to international labor and social standards using three elements: the Compliance Program including our Code of Conduct and compliance hotlines, close dialog with our stakeholders, and the global management process to respect international labor norms. Our business partners are expected to comply with prevailing laws and regulations and to align their actions with internationally recognized principles. We have established appropriate monitoring systems to ensure this.

## Our Targets and Target Achievement 2021

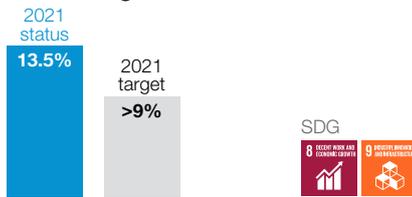
Business success tomorrow means creating value for the environment, society and business. That is why we have set ourselves ambitious targets along our entire value chain. We report transparently on our target achievement so that our stakeholders can track our progress. In order to grow profitably, we want to grow sales volumes faster than global chemical production, further increase our profitability, achieve a return on capital employed (ROCE) considerably above the cost of capital percentage and increase the dividend per share every year based on a strong free cash flow.

We also pursue broad sustainability targets. In this context, we significantly raised our CO<sub>2</sub> reduction target in 2021.<sup>2</sup> We want to strengthen the sustainability focus of our product portfolio and will

update our portfolio steering targets in 2022.<sup>3</sup> We also strive to strengthen the sustainability of our supply chains and use resources responsibly. We want to further improve safety in production. In addition, we aim to promote diversity within the company and create a working environment in which our employees feel that they can thrive and perform at their best.

The objective of these targets is 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). We are focusing on issues where we as a company can make a significant contribution, such as climate protection, sustainable consumption and production, and fighting hunger.

### Profitable growth

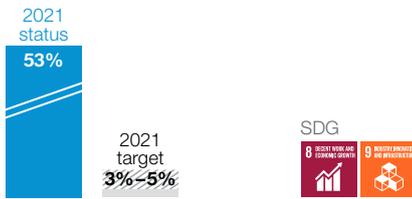


Most important key performance indicator

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



Grow **sales volumes** faster than global chemical production every year

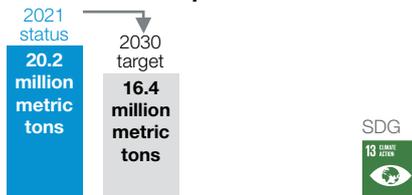


Increase **EBITDA before special items** by 3%–5% per year



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

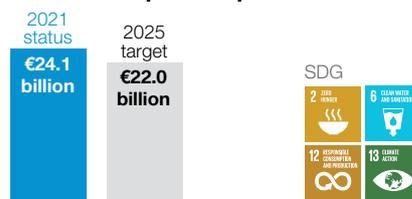
### Effective climate protection



Most important key performance indicator

Reduce our absolute **CO<sub>2</sub> emissions<sup>2</sup>** by 25% by 2030

### Sustainable product portfolio



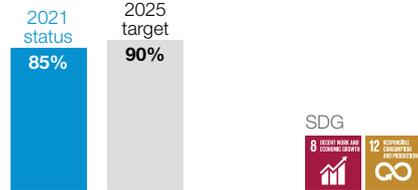
Most important key performance indicator

Achieve €22 billion in **Accelerator sales** by 2025<sup>3</sup>

↘ Reduction target

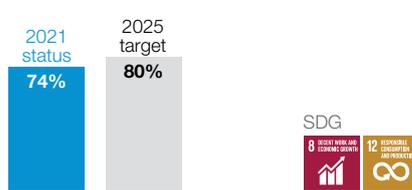
- 1 Dividend confirmed at the Annual Shareholders' Meeting.
- 2 Includes Scope 1 and Scope 2 emissions. In March 2021, we replaced our previous target of CO<sub>2</sub>-neutral growth until 2030 (baseline 2018: 21.9 million metric tons of CO<sub>2</sub>e) with a new, more ambitious climate protection target to reduce absolute CO<sub>2</sub> emissions by 25% compared with 2018.
- 3 We already reached our 2025 sales target for Accelerator products in 2021. Consequently, we will update our product portfolio steering target over the course of 2022.

### Responsible procurement



Limited assurance

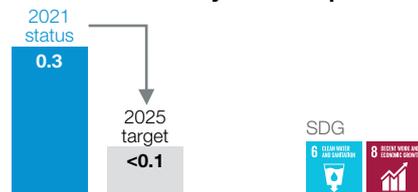
Cover 90% of our relevant spend with **sustainability evaluations** by 2025



Limited assurance

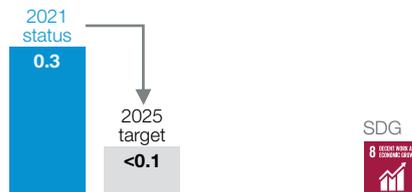
Have 80% of our suppliers improve their **sustainability performance** upon re-evaluation

### Resource efficiency and safe production



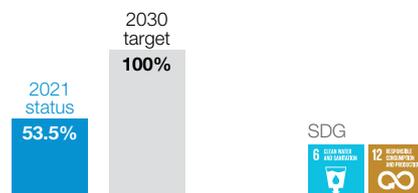
Limited assurance

Reduce worldwide **process safety incidents** per 200,000 working hours to  $\leq 0.1$  by 2025



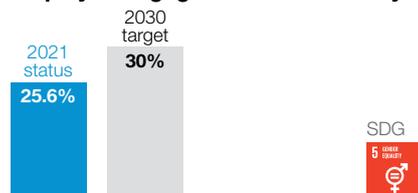
Limited assurance

Reduce the worldwide **lost-time injury rate** per 200,000 working hours to  $\leq 0.1$  by 2025



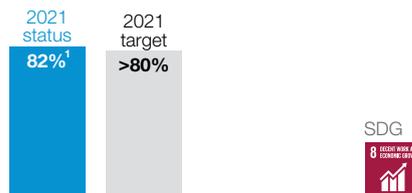
Introduce **sustainable water management** at our production sites in water stress areas and at our Verbund sites by 2030

### Employee engagement and diversity



Limited assurance

Increase the proportion of **women in leadership positions** with disciplinary responsibility to 30% by 2030



Limited assurance

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

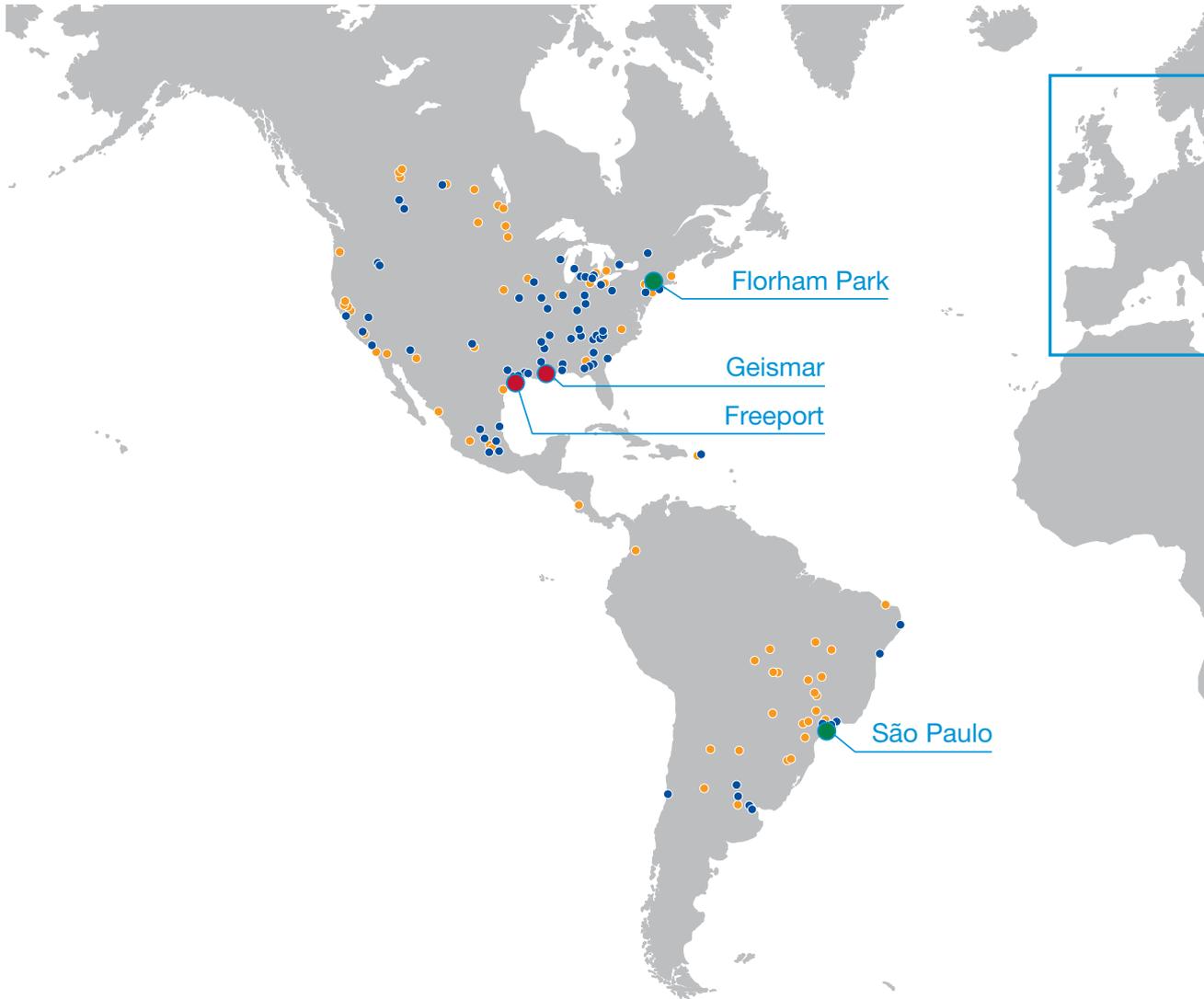
↙ Reduction target

<sup>1</sup> We regularly calculate the employee engagement level. The most recent survey was conducted in 2020. The next survey is planned for 2022.

# BASF in the Regions

BASF Group sales 2021: €78,598 million

BASF Group employees 2021: 111,047



**North America**



**21,935**  
Sales<sup>1</sup> (in million €)

**16,753**  
Employees<sup>2</sup>

**South America, Africa, Middle East**



**4,437**  
Sales<sup>1</sup> (in million €)

**6,786**  
Employees<sup>2</sup>

**Europe**



**31,594**  
Sales<sup>1</sup> (in million €)

**67,532**  
Employees<sup>2</sup>

**Asia Pacific**



**20,632**  
Sales<sup>1</sup> (in million €)

**19,976**  
Employees<sup>2</sup>



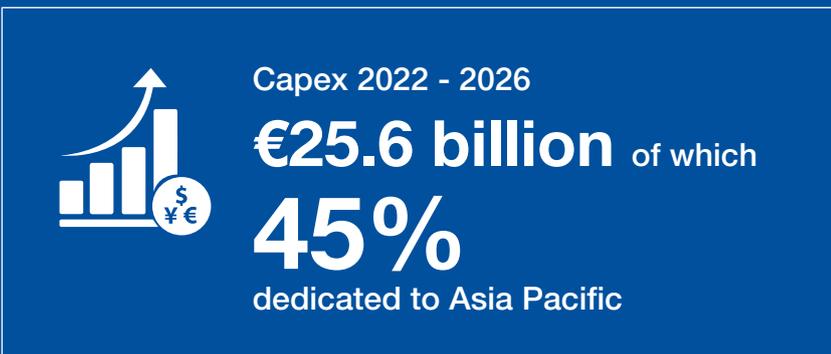
The map shows the production sites and research and development sites of the BASF Group according to the scope of consolidation for the BASF Report 2021. Sites not shown on the map include office and warehouse locations as well as sites of companies not in the scope of consolidation.

- ▨ Verbund sites / planned Verbund site
- Research and development sites
- Production sites
- Regional centers

1 In 2021, by location of company  
 2 At year-end 2021

# BASF in Asia Pacific

At a glance





Semiconductor material under development at BASF Electronic Materials R&D Center Asia Pacific located in Suwon, Korea

# BASF in Korea

## At a glance

Since 1954, when BASF entered the Korean market, the global chemical company has dominated the domestic chemical industry as a leading foreign-invested company. BASF operates eight world-class manufacturing facilities in Korea, as well as the Asia Pacific Electronic Materials Business Headquarters and Asia Pacific Electronic Materials Research and Development Center in Suwon. The company also operates a R&D center for high-tech material solutions and three technology research centers in Korea. Total sales to Korean customers amounted to approximately €1.8 billion in 2021, and the company employed 1,221 people in Korea as of the end of that year.

BASF provides innovative and sustainable solutions across all industries in Korea to meet the needs of local customers. BASF performed well in the Korean market in 2021, despite continued uncertainty. Notable is the company’s success with solutions that not only benefit the economy, but also benefit the environment and society. A solar energy project for agriculture was completed using BASF’s composite material Boldur™ as a structure, demonstrating its viability in the domestic agricultural sector, and BASF also contributed to public health and safety by applying Irgastab®, a plastic additive, to LDS syringes used to administer Covid-19 vaccines. In this way, BASF in Korea collaborates with customers in a variety of industries both domestically and internationally to boost market competitiveness, foster success, and generate social value.

### Business Locations and Manufacturing Facilities in Korea

(As of the end of 2021)



#### Business development

- Sub-regional headquarters
- Selected sites
- R&D/Technical centers

BASF in Korea	
Sales in 2021 (by location of customer)	Employees (as of December 31, 2021)
<b>€1,789 million</b>	<b>1,221</b>

## BASF Sites in Korea

### Seoul Office

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- First activities in 1954
- Provides marketing, sales, human resources and other functions for BASF in Korea

### BASF Electronic Materials R&D Center Asia (Suwon)

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- Established in 2014
- BASF Asia Pacific Electronic Materials Headquarters located in Suwon R&D center
- Conducts regional research and development on electronic materials

### BASF Engineering Plastics Innovation Center Korea (EPIC Korea)

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- Established in 2021
- Develops engineering plastic solutions for high performance applications in automotive, E&E, consumer, industrial, construction industry

### BASF Korea Technology Development Center (Dongtan)

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- 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 CAE Technology Center

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

### Ansan Coatings Technology Center

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

### Ansan Engineering Plastics Site

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

### Yeosu Site

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- 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® polyarylsulfone plant completed in 2014, first of its kind outside Germany
- Ultra-pure NH<sub>4</sub>OH (electronic-grade ammonia water) plant completed in 2017

### Ulsan Site

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#### 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

### Gunsan Site

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- Established in 2003
- Produces Vitamin B2

### Yesan Site

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- Established in 2015
- Produces engineering plastics for consumer products

### BASF Performance Polyamides Korea Co., Ltd. Onsan site

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- Acquired in 2020 from Solvay Chemicals Korea, operated by BASF Performance Polyamide Korea
- Produces Adipic Acid, Polyamide 6.6, Engineering Plastics

### Kolon BASF INNOPOM Inc. Gimcheon Site (Joint Venture)

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

# Products and Solutions of BASF in Korea

**BASF is committed to diversifying its growth strategy by collaborating with customers to develop new products and solutions through science and innovation. In addition, BASF in Korea is constantly optimizing its organization to meet the needs of the domestic market, while also forming diverse partnerships with customers, exploring new markets, and acquiring business opportunities. In the Korean market, BASF is active in all BASF global business segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care, Agricultural Solutions. This diverse business portfolio serves products and solutions to a range of industries including automotive, construction, pharmaceutical, electronics/ electricity, and agriculture.**

## Automotive and Transport Solutions

BASF is committed to providing functional materials and solutions that improve vehicle efficiency and reduce environmental impact as the world's leading chemical supplier of automotive solutions. In addition, BASF offers a variety of solutions that can help advance the automotive industry in terms of sustainability, eco-friendly vehicles, innovative interior concepts, safety, and convenience.



**Products & Solutions:** Exhaust catalyst solutions, vehicle paints, fuel additives, NVH solutions, coolant and brake fluids, EV battery materials, vehicle engineering plastics and urethanes, etc.

## Construction Solutions

BASF has been collaborating closely with its customers to ensure the viability of sustainable construction projects. In Korea, BASF's innovative construction solutions are used for a variety of applications. Eco-friendly insulation with improved flame retardancy and thermal insulation enhances the energy efficiency of buildings, reduces maintenance costs, and contributes to environmental protection

by reducing carbon dioxide (CO<sub>2</sub>) emissions. It is also used in structures to prevent erosion of natural embankments along coasts and rivers, as well as a variety of other applications such as preventing puddles and contributing to road safety by draining rainwater beneath the ground during periods of heavy rainfall.

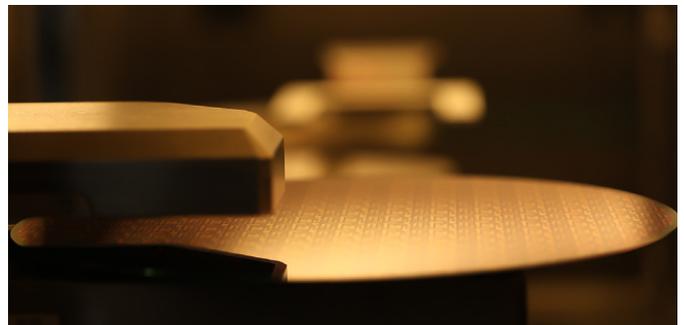


*The roof of Incheon International Airport's second passenger terminal is coated with BASF's extreme heat and light-resistant polymer-added insulation.*

**Products & Solutions:** Neopor®, Elastocoast®, Elastopave®, sound-absorbing agents, high-performance polyamides, plastic additives (antioxidant and light stabilizer, etc.), wetting agents, dispersing agents, etc.

## Electronic and Electrical Solutions

BASF bridges innovation and customer needs by supplying the world's most advanced chemical products and electronic materials to electronics and electrical industries worldwide. BASF operates an Asia Pacific Electronic Materials R&D center in Suwon to meet the high standards of customers in Korea, the world leader in the semiconductor and display industries, and localization is a priority at the Yeosu plant, which produces ultra-pure ammonia solution and cutting-edge performance materials required for the semiconductor manufacturing process.



**Products & Solutions:** Semiconductor cleaning agent and selective etchant, copper cobalt wiring material, photoinitiator for organic pigment and color filter for OLED panels, metal materials for mobile and wearable products.

## Consumer Goods and Furniture Solutions

Consumer product solutions from BASF are materials with superior mechanical properties, such as tensile strength, tear strength, and abrasion resistance, which are widely used in applications requiring high durability. They are also applied in various electronic products manufactured in Korea, such as microwave ovens and refrigerators, as well as industrial materials. In terms of furniture solutions, BASF offers the most comprehensive intelligent portfolio of solutions for customers in the furniture and processing industries who demand high quality and performance as well as cost savings and increased productivity.



**Products & Solutions:** <Consumer> Industrial seats, screen protection films, sanitary cutting boards, automotive ABS brake sensor cables, etc. <Furniture> Adhesives, binders, processing machinery, paints, pigment manufacturing materials, plastics for furniture-making, foaming agents for chair covers, etc.

## Personal, Home, and Industrial Care Solutions

BASF's innovative raw materials and technologies are used in a wide variety of personal care products including detergents, shampoos, toothpastes, cosmetics, and sunscreens. In terms of household and industry care solutions, we supply raw materials for a variety of applications including household care (detergent, cleaning, functional additives, etc.), industrial cleaners, pesticide additives, industrial additives (emulsion polymerization, coating, adhesive, synthetic rubber, etc.), textile preparations, and metal surface treatment.



**Products & Solutions:** UV protection ingredients, skin softeners, surfactants, emulsifiers, polymers, functional ingredients (beauty creation), water-soluble polymers, sequestering agent (chelate), MSA (methanesulfonic acid), plating chemicals, biocides, etc.

## Nutrition & Health Solutions

BASF produces and supplies chemicals and solutions for the food, pharmaceutical, feed, and fragrance industries. BASF's diverse portfolio contributes to a healthier society. In addition, alongside our customers, we are exploring ways to develop a more sustainable value chain that extends beyond product supply. The vitamin B2 products, manufactured at our plant in Gunsan, Korea, provide nourishment to customers worldwide.



**Products & Solutions:** <Human Nutrition> Synthetic vitamins, beta-carotene, omega-3, conjugated linoleic acid, lutein, food emulsifier, etc. <Pharmaceutical> Cell culture additives for pharmaceutical excipients, APIs, and biopharmaceuticals <Animal Nutrition> Feed additives such as vitamins, carotenoids, various organic acids and mixtures, conjugated linolenic acid, monoglycerides, organic minerals, enzymes and mycotoxins.

## Packaging Solutions

BASF supplies a wide range of packaging materials and solutions to the packaging and printing industries. We offer a diverse range of packaging solutions for food and beverages, as well as cosmetics and pharmaceuticals. Our packaging solutions encompass all manufacturing processes, from the use of processing chemicals to reduce printing costs and increase machine efficiency to the use of coating chemicals to enhance the appearance and performance of packaging. In Korea, BASF's environmentally friendly biodegradable vinyl is widely used for food packaging as well as agricultural mulching film, helping to protect the environment.



**Products & Solutions:** High-strength polyamide for nylon film, UV absorbers for PET bottles, high value-added packaging materials such as colorants and pearl pigments, as well as compostable plastic ecovio® and internal coatings to replace laminates.

## Agricultural Solutions

As an industry leader, BASF offers a broad range of fungicides, pesticides, herbicides, and seed care products. We also offer cutting-edge digital solutions that enable farmers to continuously improve yields and crop quality. These help optimize the crop growing environment by monitoring soil and crop conditions, identifying diseases and pests, and recommending the most effective drug treatment solutions.



**Products & Solutions:** Crop protection agents such as fungicides, pesticides, herbicides, and products that prevent disease spread are all available, as is the digital solution 'xarvio®'.

For more diverse and detailed information on our products and solutions, please visit the BASF Korea website.

<https://www.basf.com/kr/ko.html>

# Key data 2021

## Employees and society

		2021	2020*
<b>Employees (as of December 31)</b>			
Employees BASF Group		111,047	110,302
Employees BASF in Korea		1,221	1,370
Up to and including 25 years	%	2.1	2.0
Between 26 and 39 years	%	33.0	29.9
Between 40 and 54 years	%	49.3	52.8
55 years and up	%	15.6	15.3
<b>Gender</b>			
Women	%	14.8	13.4
Men	%	85.2	86.6

## Environmental protection, health and safety

<b>Energy<sup>1</sup></b>			
Electricity consumption	MWh	625,557	528,299
Steam supply	MWh	1,828,109	1,440,371
Fuel consumption	MWh	875,366	905,745
<b>Emissions to air<sup>1</sup></b>			
Greenhouse gas emissions	metric tons of CO <sub>2</sub> equivalents	732,301	667,608
Emissions of air pollutants (without CH <sub>4</sub> )	metric tons	755	601
<b>Water</b>			
Emissions to water: organic substances (COD)	metric tons	235	292
Emissions to water: nitrogen	metric tons	79	98
Emissions to water: phosphorus	metric tons	12	5
Emissions to water: heavy metals	metric tons	0.05	0.15
Water supply	million cubic meters	7	6
Water used for production	million cubic meters	6	6
Water used for cooling	million cubic meters	316	312
Sustainable water management (BASF Group)	%	53.5	46.2
<b>Waste</b>			
Total waste generated	metric tons	44,190	36,925
Waste recovered	metric tons	24,847	17,063
Waste disposed of	metric tons	19,343	19,862
<b>Occupational safety<sup>1</sup></b>			
Lost-time injury rate (BASF employees, leased personnel and contractors)	per 200,000 working hours	0.32	0.05
Fatalities (total)		0	1
<b>Process safety</b>			
Process safety incidents rate (BASF employees, leased personnel and contractors)	per 200,000 working hours	0.22	0.11

<sup>1</sup> The comparative figures for 2020 have been restated in alignment with the Corporate Report consolidation rules and change of calculation method to GHG Protocol 5th Assessment Review instead of 4th in the 2020 report.

# Ten-Year-Summary

Million €

	2012 <sup>a</sup>	2013 <sup>b</sup>	2014	2015	2016	2017	2018	2019	2020	2021	
<b>Statement of income</b>											
Sales	72,129	73,973	74,326	70,449	57,550	61,223 <sup>c</sup>	60,220 <sup>d</sup>	59,316	59,149	78,598	
Income from operations (EBIT)	6,742	7,160	7,626	6,248	6,275	7,587 <sup>c</sup>	5,974 <sup>d</sup>	4,201	-191	7,677	
Income before income taxes	5,977	6,600	7,203	5,548	5,395	6,882 <sup>c</sup>	5,233 <sup>d</sup>	3,302	-1,562	7,448	
Income after taxes from continuing operations	-	-	-	-	-	5,592	4,116 <sup>d</sup>	2,546	-1,471	6,018	
Income after taxes from discontinued operations	-	-	-	-	-	760	863 <sup>d</sup>	5,945	396	-36	
Income after taxes	5,067	5,113	5,492	4,301	4,255	6,352	4,979	8,491	-1,075	5,982	
Net income	4,819	4,792	5,155	3,987	4,056	6,078	4,707	8,421	-1,060	5,523	
Income from operations before depreciation and amortization (EBITDA)	10,009	10,432	11,043	10,649	10,526	10,765 <sup>c</sup>	8,970 <sup>d</sup>	8,185	6,494	11,355	
EBIT before special items	6,647	7,077	7,357	6,739	6,309	7,645 <sup>c</sup>	6,281 <sup>d</sup>	4,643	3,560	7,768	
<b>Capital expenditures, depreciation and amortization</b>											
Additions to property, plant and equipment and intangible assets	5,263	7,726	7,285	6,013	7,258	4,364	10,735	4,097	4,869	4,881	
of which property, plant and equipment	4,084	6,428	6,369	5,742	4,377	4,028	5,040	3,842	4,075	4,410	
Depreciation and amortization of property, plant and equipment and intangible assets	3,267	3,272	3,417	4,401	4,251	4,202	3,750 <sup>d</sup>	4,146	6,685	3,678	
of which property, plant and equipment	2,594	2,631	2,770	3,600	3,691	3,586	3,155 <sup>d</sup>	3,408	5,189	3,064	
<b>Number of employees</b>											
	<b>110,782</b>	<b>112,206</b>	<b>113,292</b>	<b>112,435</b>	<b>113,830</b>	<b>115,490</b>	<b>122,404</b>	<b>117,628</b>	<b>110,302</b>	<b>111,047</b>	
<b>Personnel expenses</b>											
	<b>8,963</b>	<b>9,285</b>	<b>9,224</b>	<b>9,982</b>	<b>10,165</b>	<b>10,610</b>	<b>10,659</b>	<b>10,924</b>	<b>10,576</b>	<b>11,097</b>	
<b>Research and development expenses</b>											
	<b>1,732</b>	<b>1,849</b>	<b>1,884</b>	<b>1,953</b>	<b>1,863</b>	<b>1,843<sup>c</sup></b>	<b>1,994<sup>d</sup></b>	<b>2,158</b>	<b>2,086</b>	<b>2,216</b>	
<b>Key data</b>											
Earnings per share	€	5.25	5.22	5.61	4.34	4.42	6.62 <sup>e</sup>	5.12	9.17	-1.15	6.01
Adjusted earnings per share	€	5.64	5.31	5.44	5.00	4.83	6.44 <sup>e</sup>	5.87	4.00	3.21	6.76
Cash flows from operating activities		6,602	8,100	6,958	9,446	7,717	8,785	7,939	7,474	5,413	7,245
EBITDA margin	%	13.9	14.1	14.9	15.1	18.3	17.6 <sup>e</sup>	14.9 <sup>d</sup>	13.8	11.0	14.4
Return on assets	%	11.0	11.5	11.7	8.7	8.2	9.5 <sup>e</sup>	7.1	4.5	-1.2	9.5
Return on equity after tax	%	19.9	19.2	19.7	14.4	13.3	18.9	14.1	21.6	-2.8	15.6
Return on capital employed (ROCE)	%	-	-	-	-	-	15.4	12.0 <sup>d</sup>	7.7	1.7	13.5
<b>Appropriation of profits</b>											
Net income of BASF SE <sup>a</sup>		2,880	2,826	5,853	2,158	2,808	3,130	2,982	3,899	3,946	3,928
Dividend		2,388	2,480	2,572	2,664	2,755	2,847	2,939	3,031	3,031	3,123 <sup>f</sup>
Dividend per share	€	2.60	2.70	2.80	2.90	3.00	3.10	3.20	3.30	3.30	3.40
<b>Number of shares as of December 31 million</b>											
		<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>

a 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.

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

c Figures for 2017 were restated with the presentation of the oil and gas activities as discontinued operations.

d Figures for 2018 were restated with the presentation of the construction chemicals activities as discontinued operations.

e Calculated in accordance with German GAAP

f Based on the number of outstanding shares as of December 31, 2021 (918,478,694)

# Further information

## Contact

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### Corporate office

#### Seoul office

15-16F, KCCI Bldg., 39, Sejong-daero, Jung-gu,  
Seoul, 04513, Korea  
Phone : +82 2 3707 3100, Fax : +82 2 3707 3122

#### R&D center

#### BASF Electronic Materials R&D Center Asia Pacific

2F, Research Center No.1, 2066, Seobu-ro, Jangan-gu, Suwon,  
Gyeonggi-do, 16419, Korea  
Phone : +82 31 250 5529, Fax : +82 31 250 5570

#### BASF Engineering Plastics Innovation Center Korea (EPIC Korea)

EPIC Korea, 171, Sinwon-ro, Danwon-gu, Ansan, Gyeonggi-do,  
15423, Korea

### Technical development centers

#### BASF Korea Technology Development Center

39, Samsung 1-ro 2-gil, Hwaseong, Gyeonggi-do, 18449, Korea  
Phone : +82 31 8077 0000, Fax : +82 31 8077 0009

#### Ansan Coatings Technology Center

4F, Gyeonggi Technopark Business Support Center, 705,  
Haean-ro, Sangnok-gu, Ansan, Gyeonggi-do, 15588, Korea  
Phone : +82 31 8040 6901, Fax : +82 31 8040 6900

#### Ansan CAE Technology Center

171, Sinwon-ro, Danwon-gu, Ansan, Gyeonggi-do, 15423, Korea  
Phone : +82 31 599 7513, Fax : +82 31 599 7506

### Production sites

#### Ansan site

171, Sinwon-ro, Danwon-gu, Ansan, Gyeonggi-do, 15423, Korea  
Phone : +82 31 599 7513, Fax : +82 31 599 7506

#### Gunsan site

57, Oehang 4-gil, Gunsan, Jeollabuk-do, 54008, Korea  
Phone : +82 63 469 2400, Fax : +82 63 463 0929

#### Yeosu site

284, Yeosusandan 2-ro, Yeosu, Jeollanam-do, 59610, Korea  
Phone : +82 61 680 7000, Fax : +82 61 691 7260

### Ulsan site - chemicals

27, Sinyecheon-ro, Nam-gu, Ulsan, 44781, Korea  
Phone : +82 52 278 2000, Fax : +82 52 278 2001

### Ulsan site - plastics

143, Sanggae-ro, Nam-gu, Ulsan, 44787, Korea  
Phone : +82 52 279 7900, Fax : +82 52 272 7999

### Yesan site

25, Sandan 1-gil, Sapgyo-eup, Yesan-gun, Chungcheongnam-do,  
32415, Korea  
Phone : + 82 41 330 7900, Fax : + 82 41 330 7999

### Onsan site

160, Gongdan-ro, Onsan-eup, Ulju-gun, Ulsan, 45010, Korea  
Phone : + 82 52 231 0800 Fax : + 82 52 237 5957

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Corporate Affairs Korea, BASF  
HoWon Chung  
Phone: +82 2 3707 3254



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