



 **BASF**  
We create chemistry

# Capital Market Story

February 2024

# Cautionary note regarding forward-looking statements

*This presentation contains forward-looking statements. These statements are based on current estimates and projections of the Board of Executive Directors and currently available information. Forward-looking statements are not guarantees of the future developments and results outlined therein. These are dependent on a number of factors; they involve various risks and uncertainties; and they are based on assumptions that may not prove to be accurate. Such risk factors include in particular those discussed in Opportunities and Risks on pages 173 to 183 of the BASF Report 2023. BASF does not assume any obligation to update the forward-looking statements contained in this presentation above and beyond the legal requirements.*



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Q4/FY 2023 reporting

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Unique position to capture growth in Asia

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Battery materials driving electromobility and growth

# Unique position to deliver long-term value

Unique Verbund concept	Industry-leading innovation platform	Strong and expanding local presence in fast growing Asian market	Creating value to society and contributing to a sustainable development	Progressive dividend policy
<ul style="list-style-type: none"> <li>▪ <b>6</b> Verbund sites globally</li> <li>▪ <b>234</b> production sites worldwide in total</li> <li>▪ <b>5.7 million metric tons</b> of CO<sub>2</sub> avoided globally in 2023</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>€2.1 billion</b> R&amp;D expenses in 2023</li> <li>▪ <b>~10,000</b> employees in R&amp;D</li> <li>▪ Sales of <b>&gt;€10 billion</b> in 2023 with products launched during last 5 years</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>2</b> Verbund sites already; one additional Verbund site currently under construction</li> <li>▪ <b>~70</b> production sites</li> <li>▪ <b>€17.5 billion<sup>1</sup></b> sales in 2023</li> </ul>	<ul style="list-style-type: none"> <li>▪ CO<sub>2</sub> emission targets:               <ul style="list-style-type: none"> <li>– <b>25% reduction</b> of absolute <b>Scope 1 and 2 emissions</b> by 2030 (compared with 2018)</li> <li>– <b>15% reduction</b> of specific <b>Scope 3.1 emissions</b> by 2030 (compared with 2022)</li> </ul> </li> <li>▪ We aim to achieve <b>net zero CO<sub>2</sub> emissions<sup>2</sup></b> by 2050</li> </ul>	<ul style="list-style-type: none"> <li>▪ Practice to <b>increase the dividend per share each year, or at least maintain it</b> at the previous year's level</li> <li>▪ Dividend<sup>3</sup> of <b>€3.40</b> per share for 2023</li> </ul>

<sup>1</sup> Sales in Asia Pacific by location of customer. Only includes sales from BASF entities fully consolidated according to IFRS 10/11

<sup>2</sup> Scope 1, Scope 2 and Scope 3.1

<sup>3</sup> Dividend proposed to the Annual Shareholders' Meeting

# The BASF Group's segments



## Chemicals

The Chemicals segment supplies BASF's other segments and customers with basic chemicals and intermediates.

- Sales 2023: €10,369 million
- EBITDA before specials items 2023: €1,167 million



## Materials

In the Materials segment, we produce advanced materials and their precursors for the plastics and plastics processing industries.

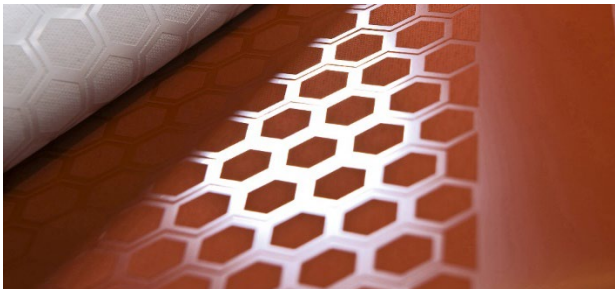
- Sales 2023: €14,149 million
- EBITDA before specials items 2023: €1,650 million



## Industrial Solutions

The Industrial Solutions segment develops and markets ingredients and additives for industrial applications.

- Sales 2023: €8,010 million
- EBITDA before specials items 2023: €965 million



## Surface Technologies

The Surface Technologies segment provides chemical solutions for surfaces and automotive OEM coatings, as well as battery materials and catalysts.

- Sales 2023: €16,204 million
- EBITDA before specials items 2023: €1,520 million



## Nutrition & Care

The Nutrition & Care segment produces ingredients and solutions for consumer applications such as human and animal nutrition, and home and personal care.

- Sales 2023: €6,858 million
- EBITDA before specials items 2023: €565 million

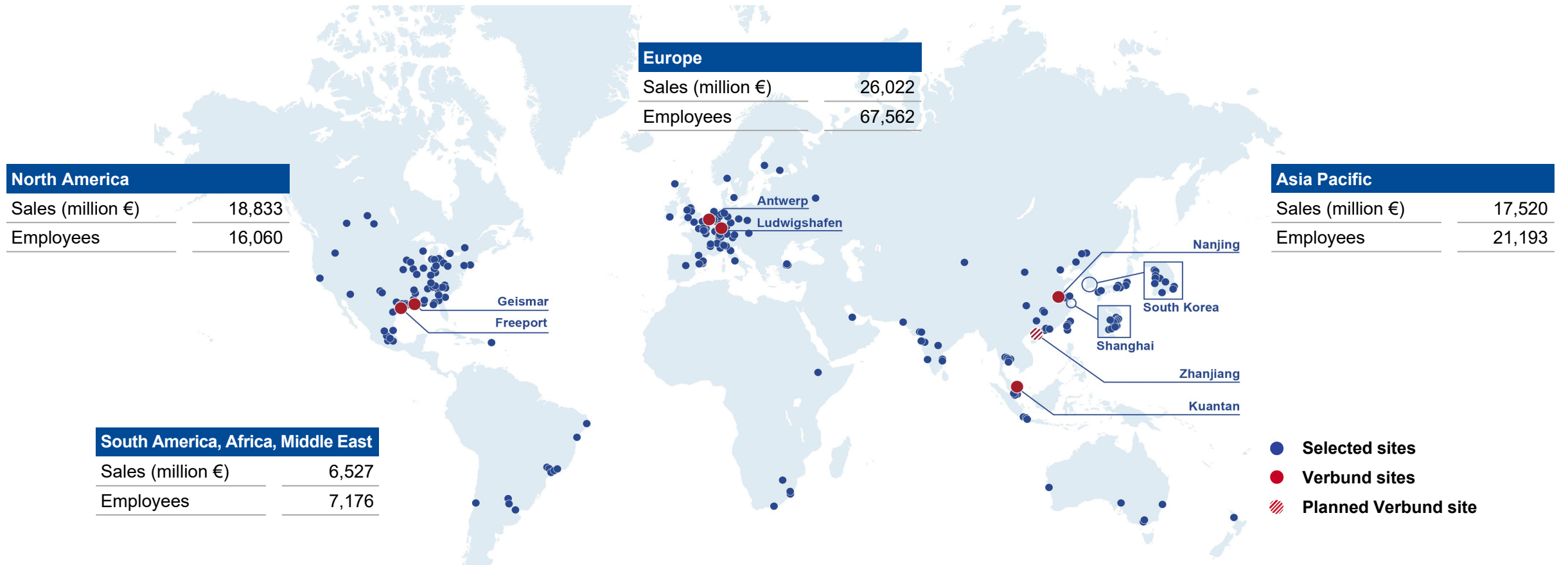


## Agricultural Solutions

The Agricultural Solutions segment is an integrated provider of seeds, crop protection and digital solutions for the agricultural sector.

- Sales 2023: €10,092 million
- EBITDA before specials items 2023: €2,270 million

# We operate close to our customers in all regions worldwide



## BASF sales by industry 2023

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

- Selected sites
- Verbund sites
- ▨ Planned Verbund site

# Priorities for the use of cash



- Capex budget of €6.2 billion for 2024
- Around €2 billion in R&D expenses per year



- Practice to increase the dividend per share each year, or at least maintain it at the previous year's level
- Strong balance sheet and high equity ratio<sup>1</sup> support dividend policy



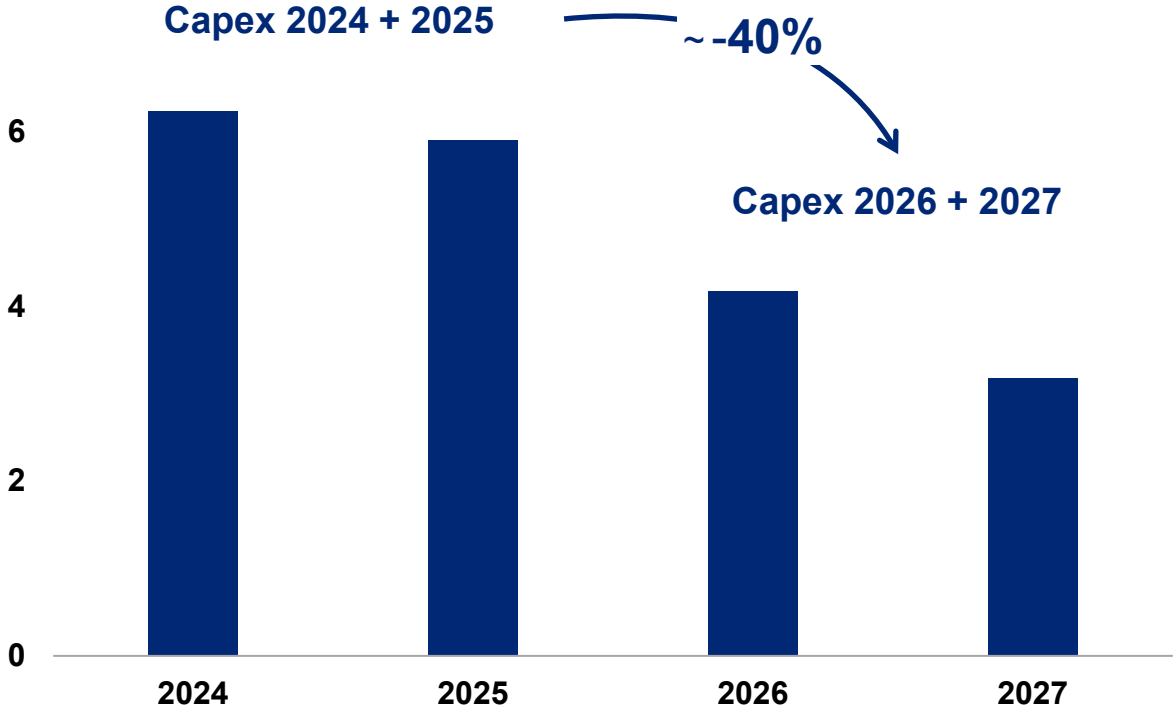
- Strengthen portfolio through selective M&A opportunities while maintaining price discipline
- Focus the portfolio with continued pruning measures



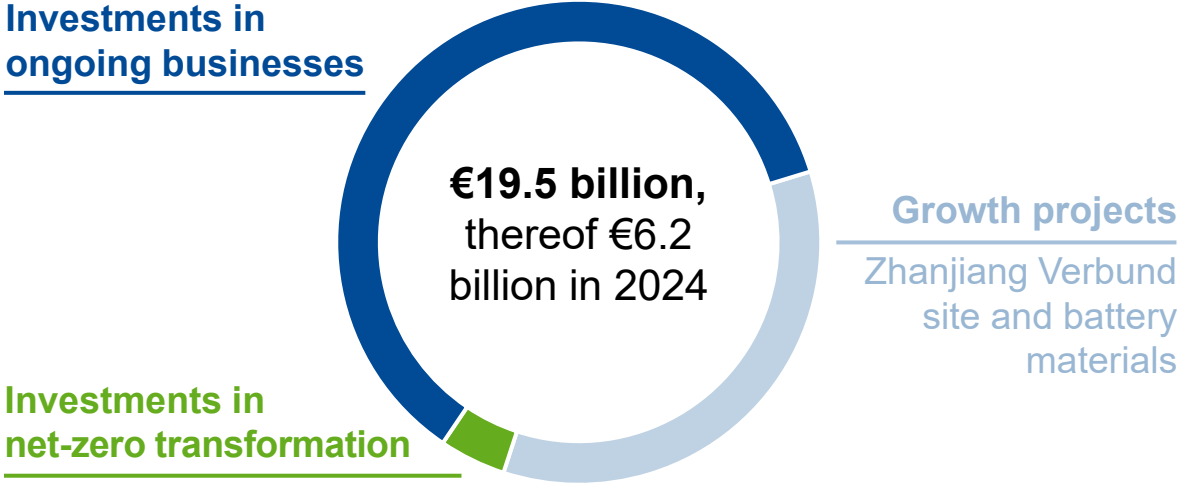
- Share buybacks are part of our toolbox but currently not being used
- Between January 2022 and February 2023 own shares were repurchased for ~€1.4 billion

# Continued strict management of capital expenditures

**Overall capex budget**  
Billion €, 2024–2027



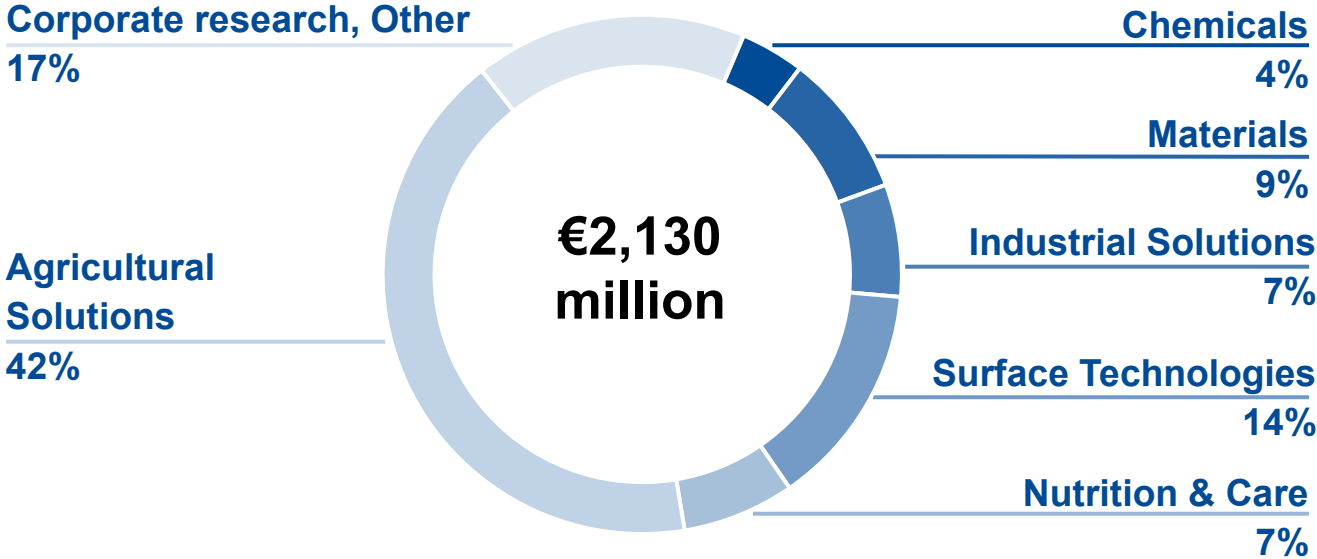
**Capex budget by type of investment**  
Billion €, 2024–2027





# BASF's industry-leading innovation platform ensures long-term organic growth

## R&D expenses 2023



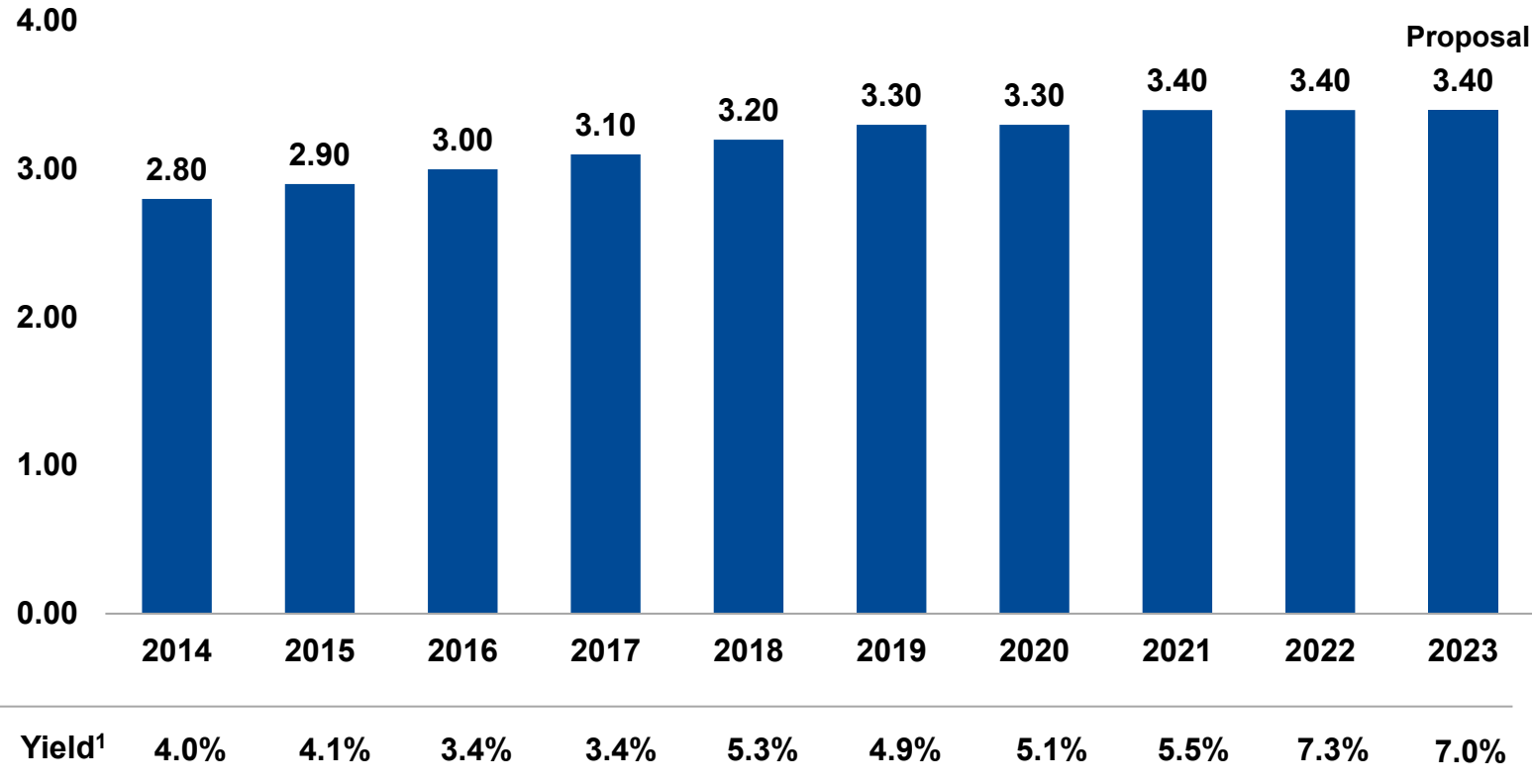
## Key facts 2023

- R&D expenses to sales ratio 3.1%
- Commitment to R&D with annual spending of ~€2 billion
- ~10,000 employees in R&D
- ~1,000 new patents filed in 2023
- Research Verbund: Academic Research Alliances are complemented by cooperations with ~280 universities and research institutes
- >€10 billion sales generated from R&D activities with products launched during last 5 years
- Peak sales potential of BASF's Agricultural Solutions innovation pipeline of >€7.5 billion between 2023 and 2033

# Attractive shareholder return – also in challenging times

## Dividend per share

€

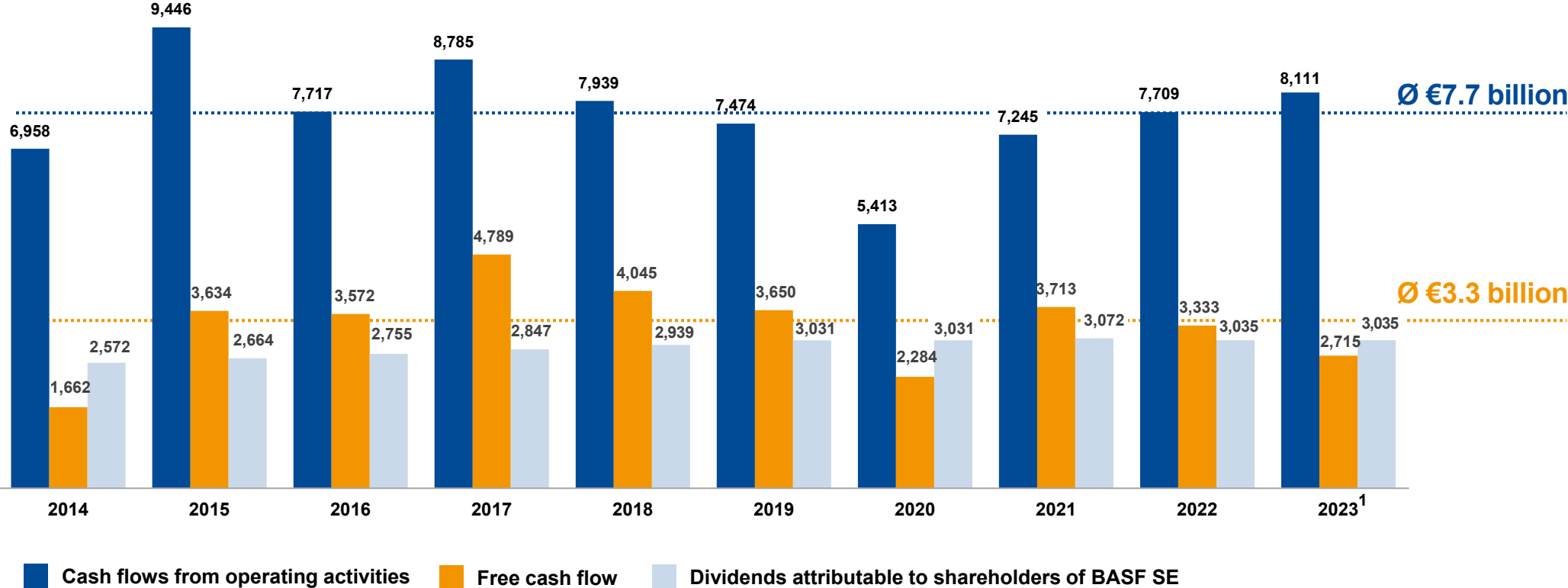


## Key facts 2023

- We stick to our practice to increase the dividend per share each year or keep it stable
- Dividend proposal to Annual Shareholders' Meeting of €3.40 per share
- In total, we will pay out €3.0 billion<sup>2</sup>, 90% of which is covered by our free cash flow
- Dividend yield of 7.0% based on the share price of €48.78 at year end 2023

# Dividend payments supported by strong cash flow generation

Cash flows from operating activities, free cash flow and dividends  
Million €



<sup>1</sup> Total payout based on the dividend proposal to the Annual Shareholders' Meeting of €3.40 per share and 892,522,164 shares outstanding as of December 31, 2023



# Key elements of the agreement signed by Harbour Energy and the shareholders of Wintershall Dea in December 2023

- **E&P business<sup>1</sup> of Wintershall Dea**, excluding Russia-related activities, **to be acquired by Harbour Energy plc** (Harbour); closing targeted for Q4 2024
- In exchange, at closing, **BASF will hold a share of 39.6% in Harbour** and will **receive cash consideration of \$1.56 billion**
- With this transaction, **BASF takes a major step** towards achieving its announced strategic goal **to exit the oil and gas business**
- In parallel to the transaction with Harbour, the **legal separation of Wintershall Dea's Russia-related business**, which is not part of the transaction, **is progressing as planned**; significant federal German investment guarantees are in place
- Furthermore, Wintershall Dea is continuing its preparations for a **separate sale of its stake in WIGA Transport Beteiligungs-GmbH & Co. KG**, which is not part of the transaction



<sup>1</sup> Consisting of its producing and development assets as well as exploration rights in Norway, Argentina, Germany, Mexico, Algeria, Libya (excluding Wintershall AG), Egypt and Denmark (excluding Ravn) as well as Wintershall Dea's carbon storage licenses.



# Outlook 2024 for BASF Group

## Outlook 2024

EBITDA before special items	€8.0 billion – €8.6 billion
Free cash flow	€0.1 billion – €0.6 billion
CO <sub>2</sub> emissions	16.7 million – 17.7 million metric tons

## Underlying assumptions (prior-year figures in parentheses)

- Growth in gross domestic product: 2.3% (2.6%)
- Growth in industrial production: 2.2% (1.4%)
- Growth in chemical production: 2.7% (1.7%)
- Average euro/dollar exchange rate: \$1.10 per euro (\$1.08 per euro)
- Average annual oil price (Brent crude): \$80 per barrel (\$82 per barrel)



# Outlook 2024 by segment<sup>1</sup>

Million €	EBITDA before special items		Segment cash flow	
	2023	2024 forecast	2023	2024 forecast
Chemicals	1,167	Considerable increase	-936	Considerable decrease
Materials	1,650	Slight increase	1,369	Considerable decrease
Industrial Solutions	965	Considerable increase	1,292	Considerable decrease
Surface Technologies	1,520	At prior-year level	1,488	Considerable decrease
Nutrition & Care	565	Considerable increase	503	Considerable decrease
Agricultural Solutions	2,270	Slight decrease	1,746	Considerable decrease

<sup>1</sup> For EBITDA before special items and cash flow, “slight” represents a change of 0.1%–10.0%, while “considerable” applies to changes of 10.1% and higher. “At prior-year level” indicates no change (+/-0.0%).

# What BASF stands for

- Competitive advantages through **flexible Verbund concept** for integrated production
- Strategic focus on **local production for local markets** and on **high-growth market segments**, e.g., battery materials
- Industry leader in **shaping the transformation to net zero CO<sub>2</sub> emissions** with an ambitious carbon management program
- **Powerful innovation** across a broad range of technologies to provide solutions for various customer industries and to increase our productivity
- Diverse team of **committed, capable and creative employees**
- Long-term shareholder **value creation** and **attractive dividend**



**We create  
chemistry  
for a  
sustainable  
future**

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# BASF Group full year 2023 and Q4 2023: Key financial figures

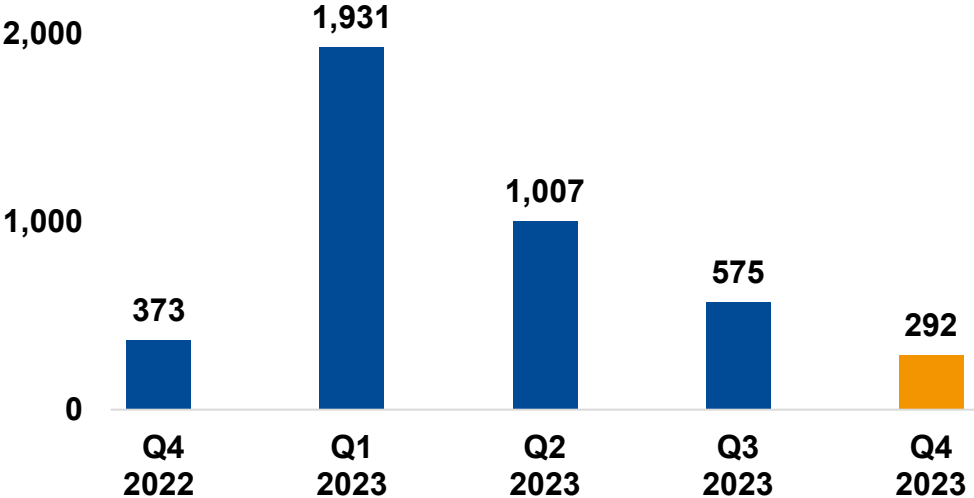
Financial figures	FY 2023	Change	Q4 2023	Change
	Million €	%	Million €	%
Sales	68,902	-21.1	15,871	-17.9
EBITDA before special items	7,671	-28.7	1,317	-6.0
EBITDA	7,180	-33.2	1,099	-20.8
EBIT before special items	3,806	-44.7	292	-21.6
EBIT	2,240	-65.8	-995	.
Net income	225	.	-1,587	67.3
Operating cash flow	8,111	5.2	4,262	-4.6
Free cash flow	2,715	-18.5	2,228	-14.2

# In Q4 2023, BASF Group's sales volumes were almost stable; excluding precious metals, volumes increased slightly

- In Q4 2023, **sales declined by 17.9% to €15.9 billion**, mainly due to lower prices and negative currency effects; all segments recorded price decreases as a result of subdued demand and in line with lower raw materials prices
- **Excluding precious metals, sales volumes of BASF Group increased by 2.6%**; including precious metals, sales volumes were almost stable compared with Q4 2022
- In Q4 2023, **EBIT before special items declined by €81 million to €292 million**
- **EBIT before special items in the Industrial Solutions, Nutrition & Care, Surface Technologies and Materials segments improved**, while the remaining two segments and Other recorded a decline versus the prior-year quarter

Sales development	Volumes	Prices	Portfolio	Currency
Q4 2023 vs. Q4 2022	↓ -0.4	↓ -13.9	↓ -0.1	↓ -3.5
FY 2023 vs. FY 2022	↓ -8.4	↓ -10.0	↓ -0.2	↓ -2.5

**EBIT before special items**  
Million €

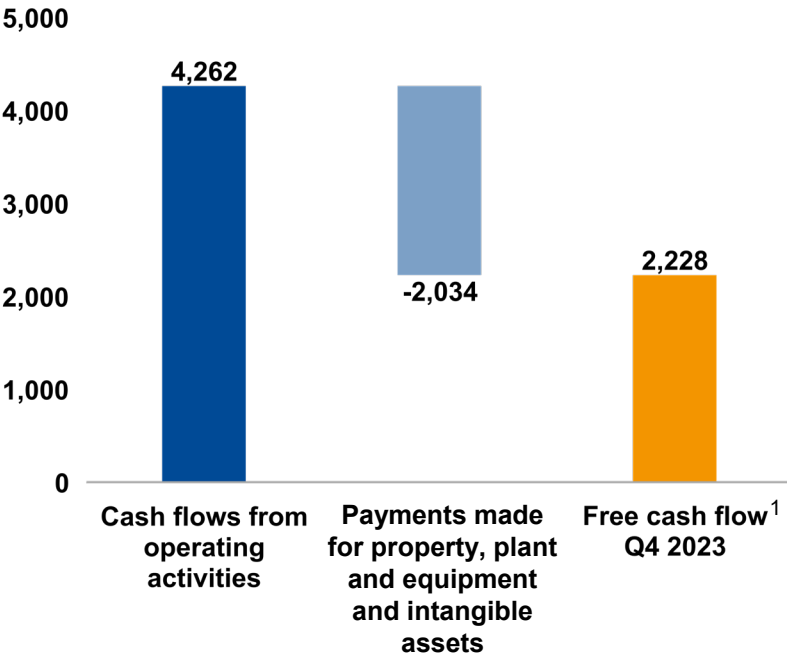


# In Q4 2023, EBIT before special items declined due to lower contributions from Agricultural Solutions, Chemicals and Other

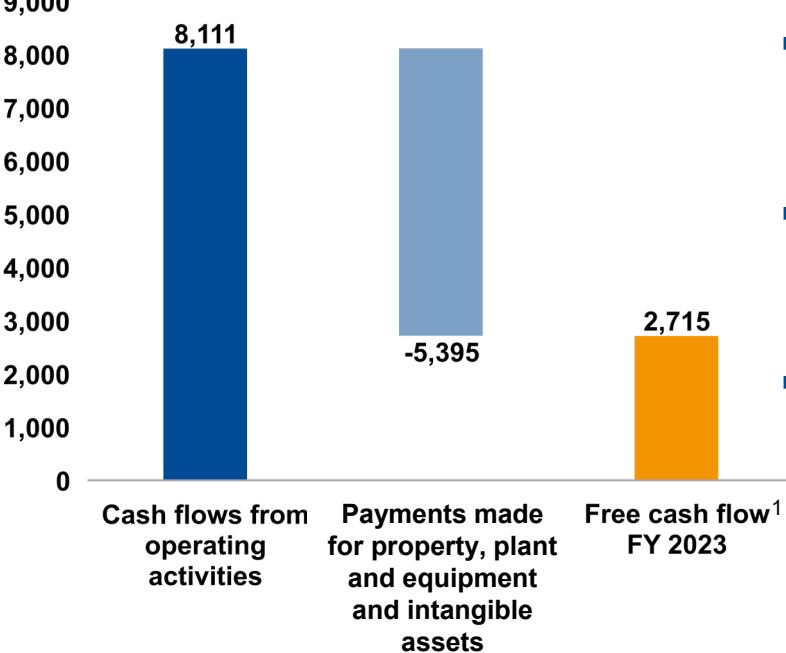
EBIT before special items Million €	BASF Group	Chemicals	Materials	Industrial Solutions	Surface Technologies	Nutrition & Care	Agricultural Solutions	Other	BASF Group
<b>Q4 2023 vs. Q4 2022</b>	373 Q4 2022	-51	17	42	18	27	-85	-50	292 Q4 2023
<b>Q4 2023</b>		-129	161	162	188	7	37	-135	
<b>FY 2023 vs. FY 2022</b>	6,878 FY 2022	-1,596	-1,013	-466	36	-511	343	135	3,806 FY 2023
<b>FY 2023</b>		361	826	625	938	107	1,563	-614	

# Strong cash flow generation in Q4 2023

**Q4 2023**  
Million €



**FY 2023**  
Million €



**Q4 2023 vs. Q4 2022**

- **Cash flows from operating activities** decreased by €207 million to €4.3 billion
- Increased focus on **reducing inventory levels** paid off; **changes in net working capital** led to a cash inflow of €3.2 billion
- **Payments made for property, plant and equipment and intangible assets** rose by €160 million to €2.0 billion
- **Free cash flow decreased** by €368 million to €2.2 billion

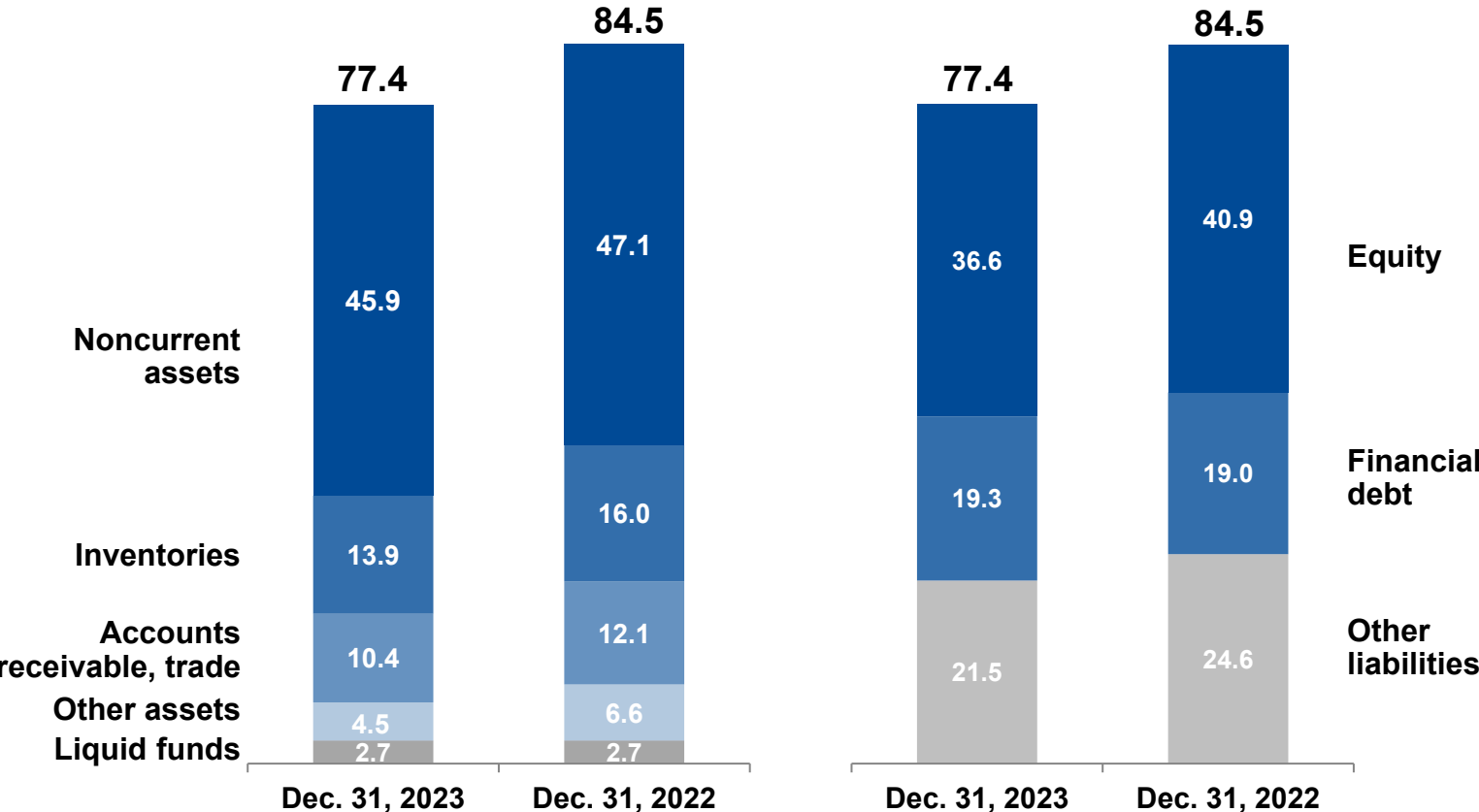
<sup>1</sup> Free cash flow: cash flows from operating activities minus payments made for property, plant and equipment and intangible assets



# Strong balance sheet

Balance sheet December 31, 2023, vs. December 31, 2022

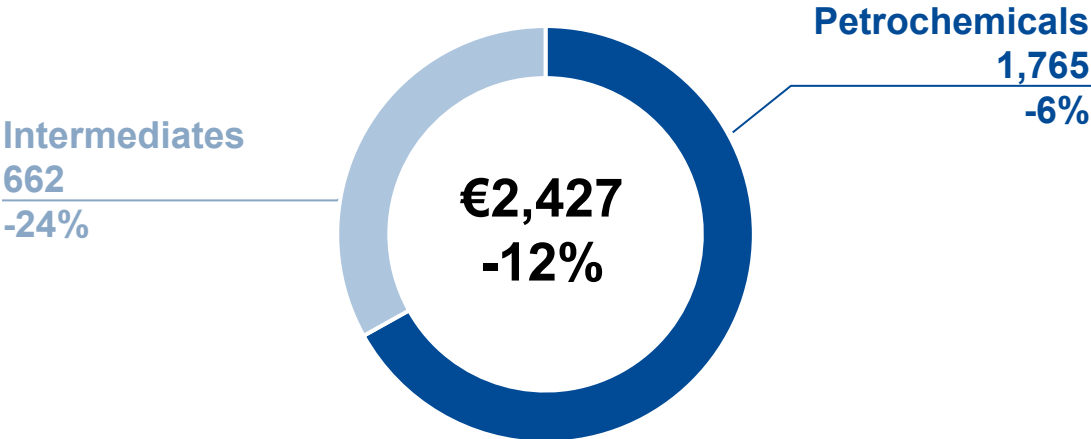
Billion €



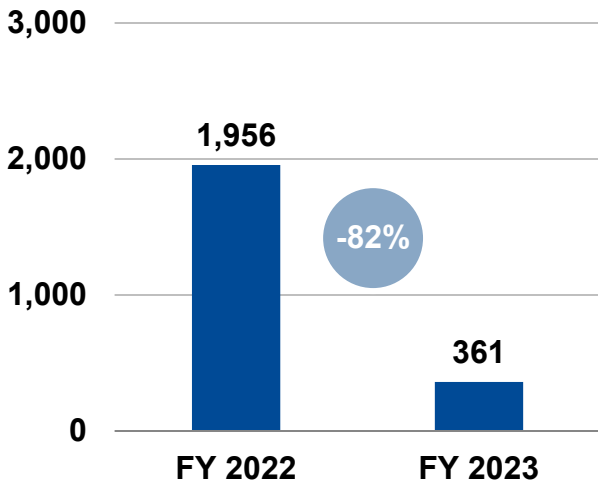
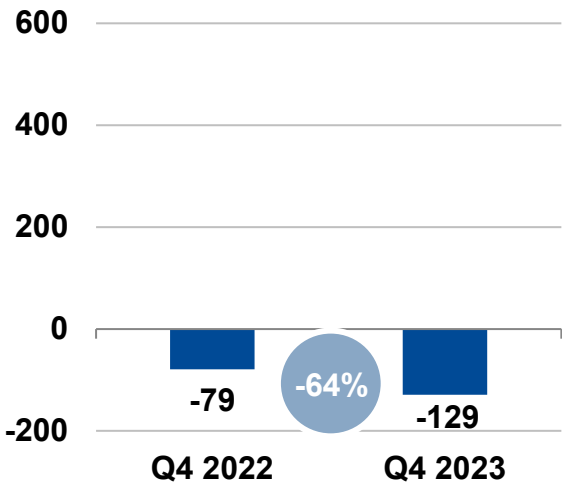
- **Total assets** decreased by €7.1 billion to €77.4 billion, mainly due to strong focus on net working capital management
- **Net debt** of €16.6 billion only slightly above the level of €16.3 billion at year end 2022
- **Equity ratio: 47.3%** (Dec. 31, 2022: 48.4%)
- BASF has **good credit ratings**<sup>1</sup>, especially compared with competitors

# Chemicals

**Sales Q4 2023 vs. Q4 2022**  
Million €



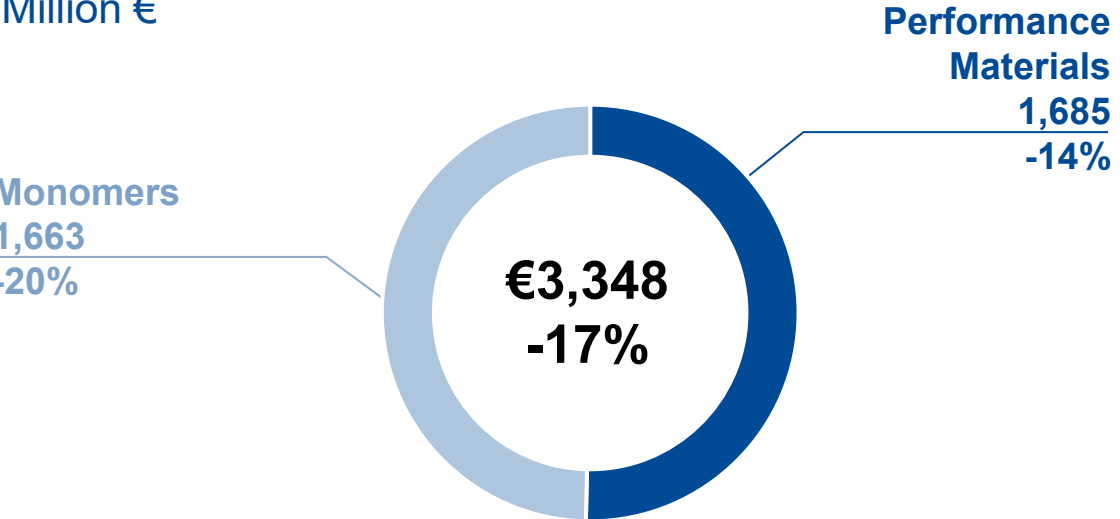
**EBIT before special items**  
Million €



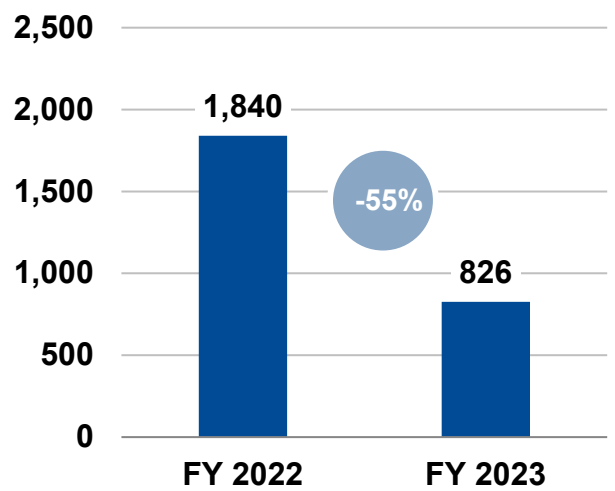
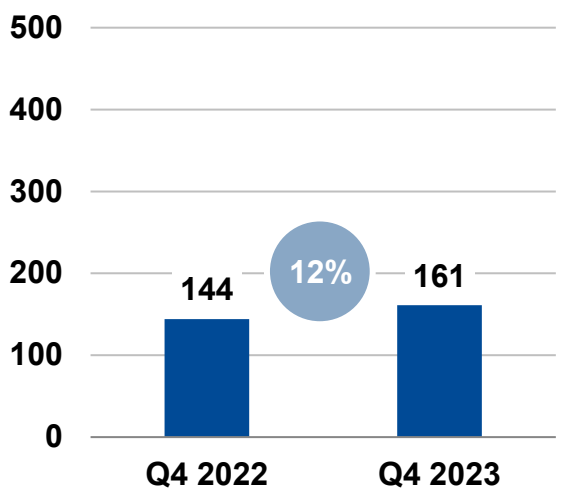
Sales development	Volumes	Prices	Portfolio	Currencies
Q4 2023 vs. Q4 2022	↑ 2.1%	↓ -11.2%	-	↓ -2.5%
FY 2023 vs. FY 2022	↓ -11.9%	↓ -17.1%	-	↓ -1.4%

# Materials

**Sales Q4 2023 vs. Q4 2022**  
Million €



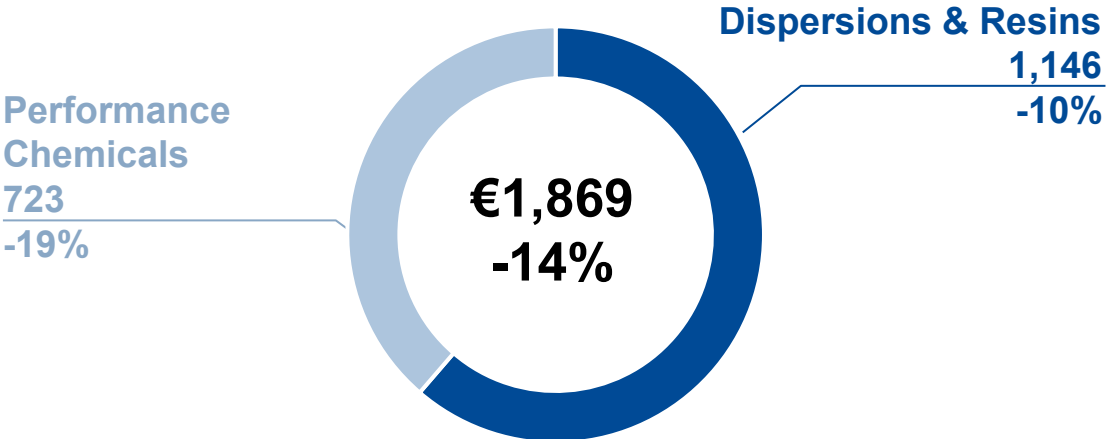
**EBIT before special items**  
Million €



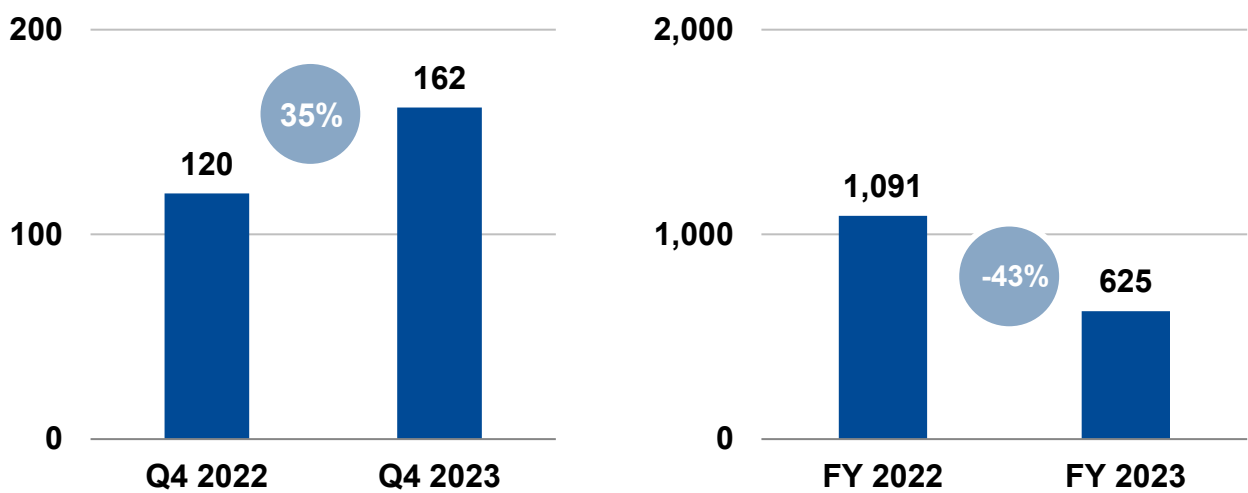
Sales development	Volumes	Prices	Portfolio	Currencies
Q4 2023 vs. Q4 2022	↑ 7.0%	↓ -21.1%	-	↓ -3.0%
FY 2023 vs. FY 2022	↓ -6.6%	↓ -14.3%	-	↓ -2.4%

# Industrial Solutions

**Sales Q4 2023 vs. Q4 2022**  
Million €



**EBIT before special items**  
Million €

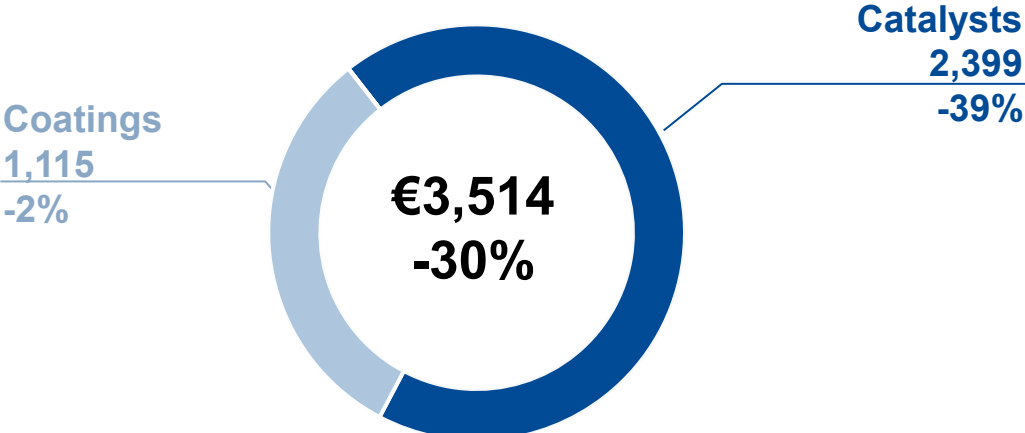


Sales development	Volumes	Prices	Portfolio	Currencies
Q4 2023 vs. Q4 2022	↓ -1.0%	↓ -9.3%	↓ -0.2%	↓ -3.4%
FY 2023 vs. FY 2022	↓ -10.4%	↓ -5.3%	↓ -1.8%	↓ -2.3%

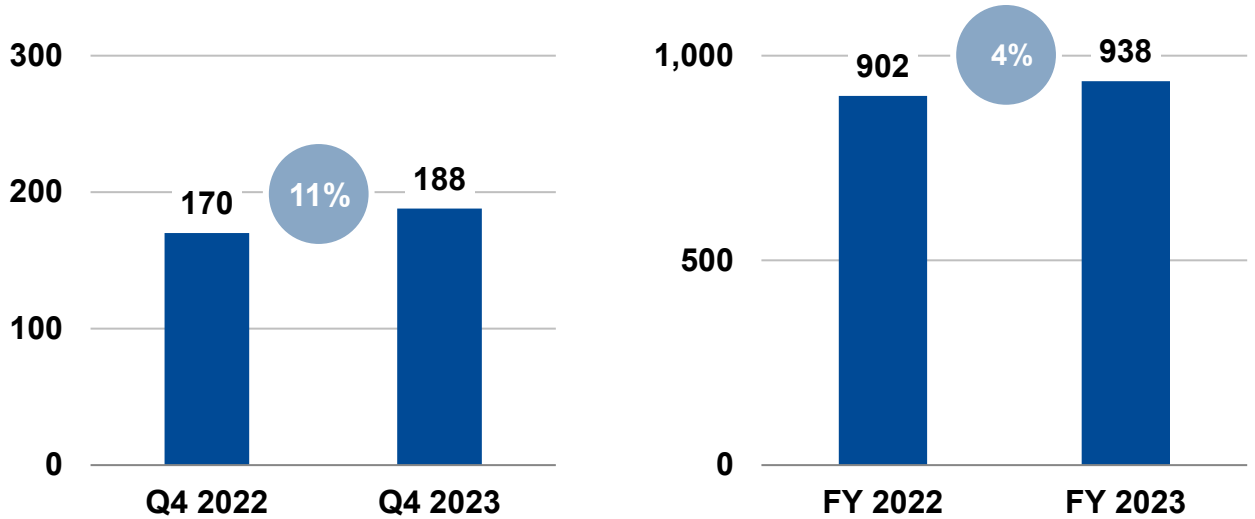


# Surface Technologies

**Sales Q4 2023 vs. Q4 2022**  
Million €



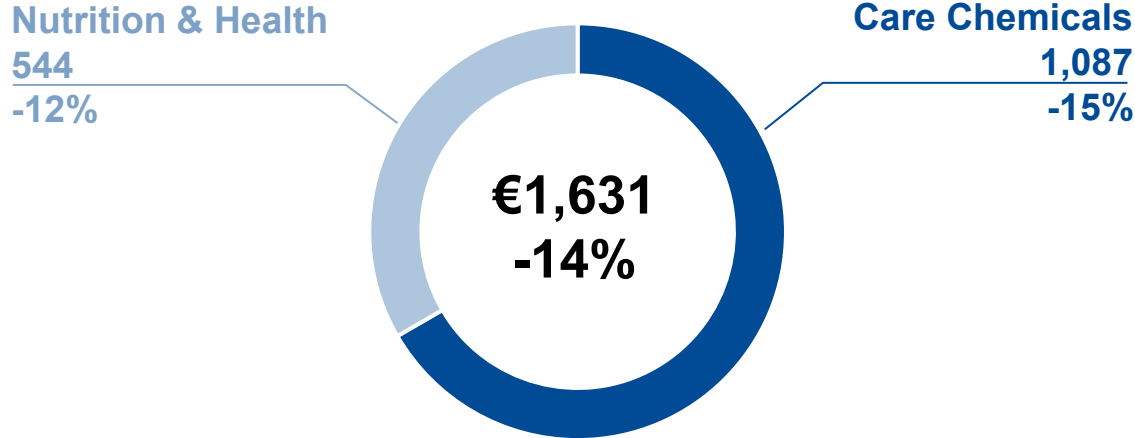
**EBIT before special items**  
Million €



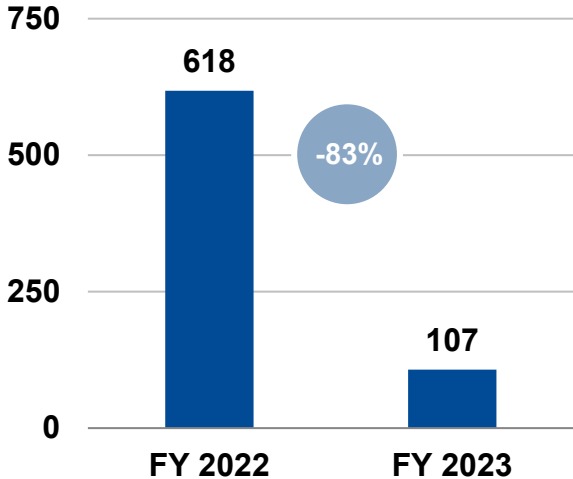
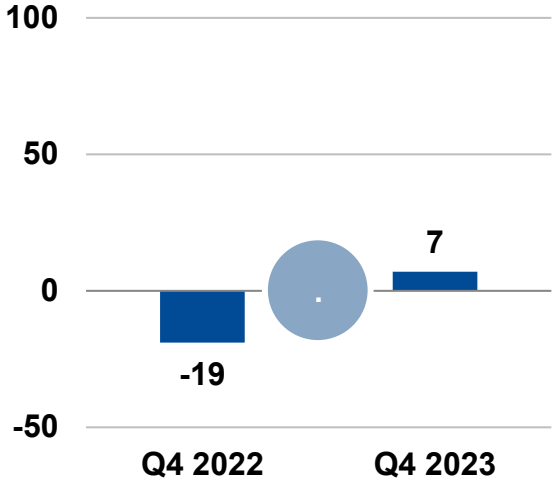
Sales development	Volumes	Prices	Portfolio	Currencies
Q4 2023 vs. Q4 2022	↓ -9.1%	↓ -16.2%	↓ -0.4%	↓ -4.7%
FY 2023 vs. FY 2022	↓ -9.6%	↓ -11.1%	↓ -0.1%	↓ -3.1%

# Nutrition & Care

**Sales Q4 2023 vs. Q4 2022**  
Million €



**EBIT before special items**  
Million €

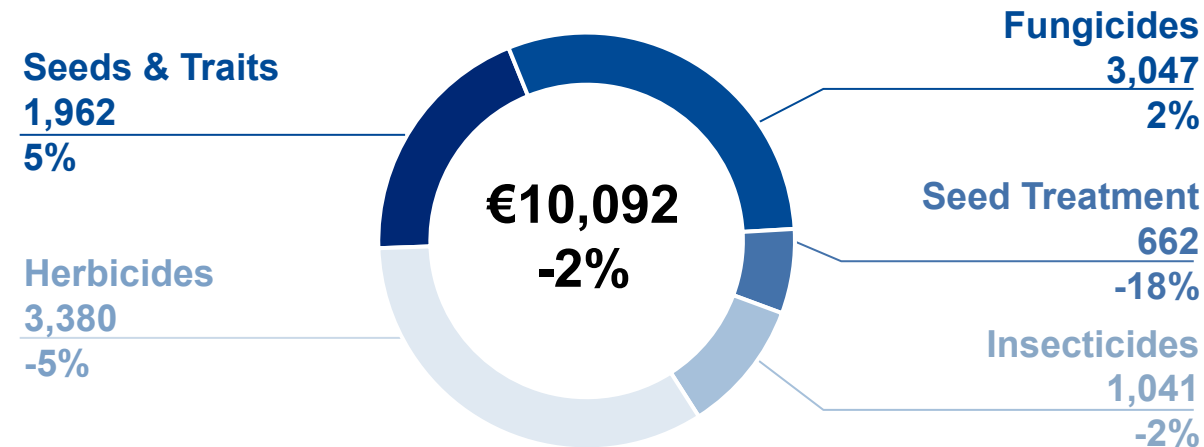


Sales development	Volumes	Prices	Portfolio	Currencies
Q4 2023 vs. Q4 2022	↑ 1.5%	↓ -13.2%	-	↓ -2.4%
FY 2023 vs. FY 2022	↓ -7.1%	↓ -5.8%	-	↓ -2.1%

# Agricultural Solutions

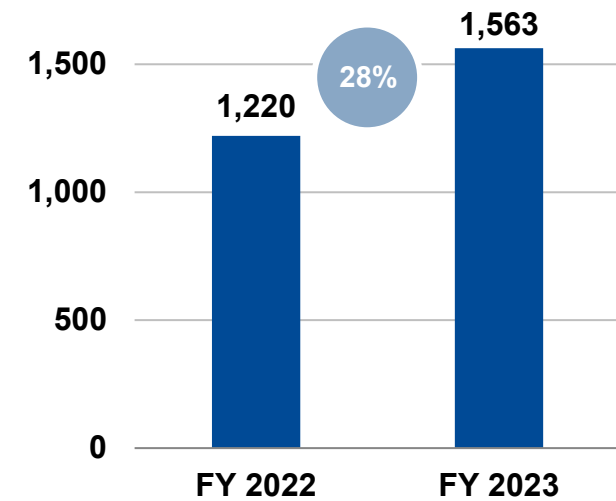
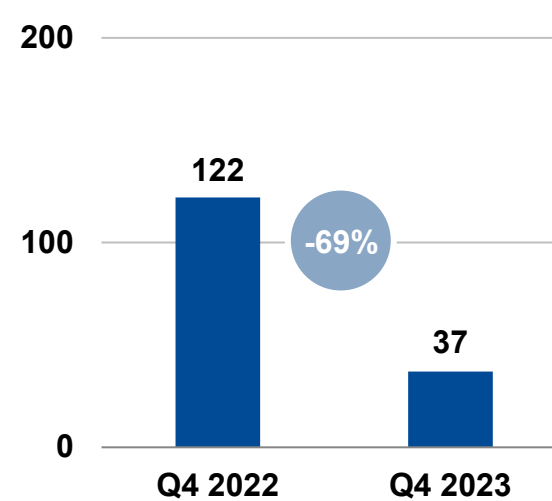
## Sales 2023 vs. 2022

Million €



## EBIT before special items

Million €



Sales development	Volumes	Prices	Portfolio	Currencies
Q4 2023 vs. Q4 2022	↑ 6.0%	↓ -4.0%	-	↓ -4.4%
FY 2023 vs. FY 2022	↓ -6.5%	↑ 8.2%	-	↓ -3.5%

# Review of “Other”

Financial figures	Q4 2023	Q4 2022	FY 2023	FY 2022
	Million €	Million €	Million €	Million €
<b>Sales</b>	<b>855</b>	<b>1,133</b>	<b>3,220</b>	<b>4,368</b>
<b>EBIT before special items</b>	<b>-135</b>	<b>-85</b>	<b>-614</b>	<b>-749</b>
Of which Costs of corporate research	-63	-105	-242	-325
Costs of corporate headquarters	-49	-60	-222	-258
Foreign currency results, hedging and other measurement effects	-16	-93	-29	33
Other businesses	69	-21	83	-43
Special items	-52	39	-164	226
<b>EBIT</b>	<b>-186</b>	<b>-46</b>	<b>-778</b>	<b>-523</b>

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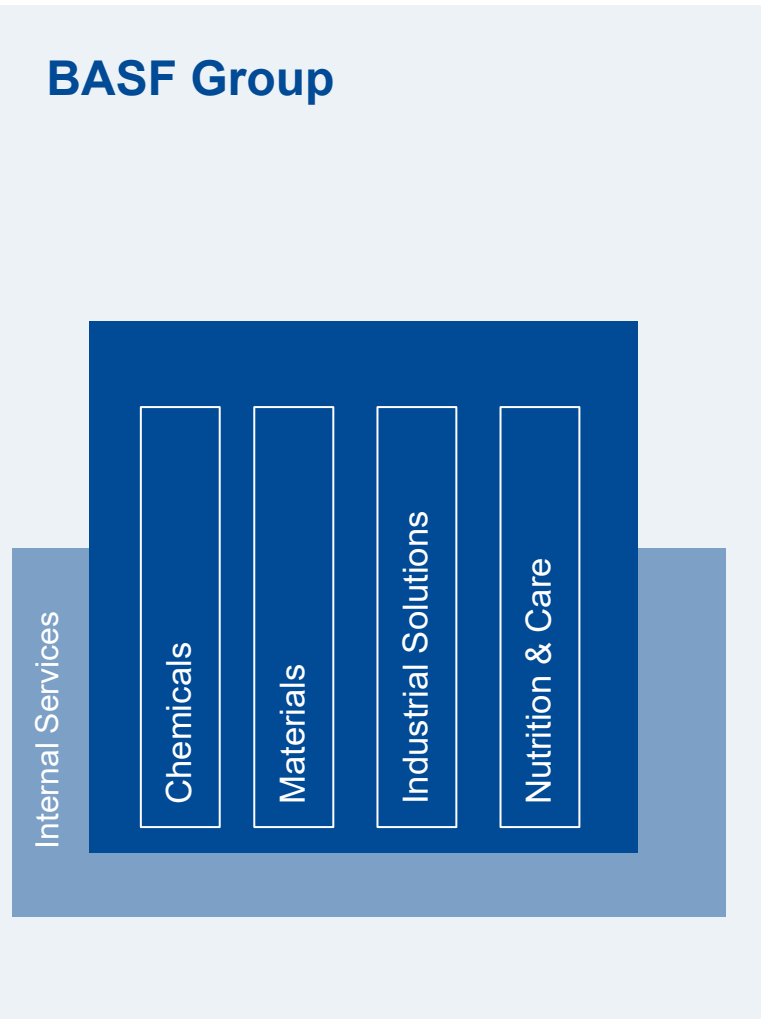
# We are delivering on the strategic transformation of our organization and businesses

- We have **embedded all business-critical services** in the operating divisions
- We have **embedded customer-focused R&D** in the operating divisions
- We have **streamlined business services, digitalization and R&D** at the company level
- We are now ready to go a step further and **manage our businesses in a more differentiated manner** that also reflects changes in the global chemical market



# Verbund businesses will benefit from focused value chain steering

## BASF Group



### Verbund businesses

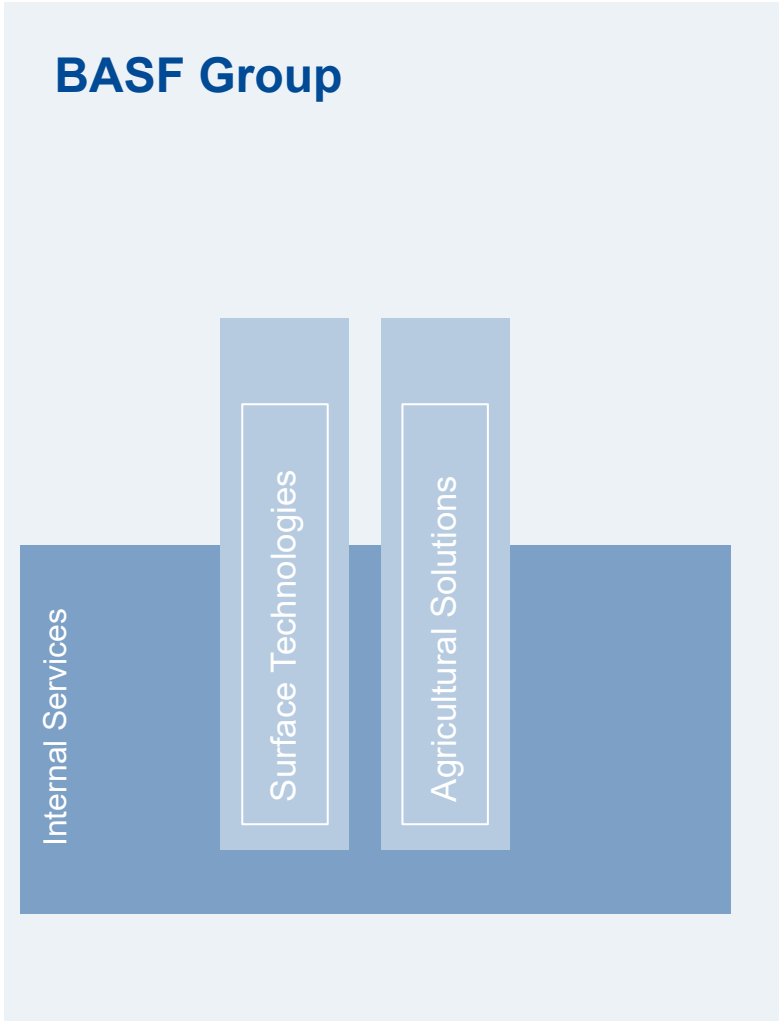
- Management along value chains
- Value generation through efficient use of resources, bundling of demand and synchronized, deeply integrated production
- Major advantages in terms of products that enable customers to achieve their net zero and circularity targets



**EBITDA bsi margin**  
**17%**  
over the cycle



# Steering of businesses less integrated into Verbund value chains tailored to industry-specific needs



### Battery Materials

- Set to become a growth driver in BASF's portfolio
- Business requires a high level of agility to respond to rapidly evolving market developments, for example by forming collaborations and partnerships



**EBITDA bsi margin**  
**≥30%**  
excluding metals  
(by 2030)

### Coatings

- Requires a high degree of flexibility and customization
- Managing complexity is crucial due to the large number of customers and formulations



**EBITDA bsi margin**  
**≥15%**  
(in the midterm)

### Agricultural Solutions

- Moved from producing crop protection products to providing farmers with agricultural solutions that connect crop protection, seeds and traits as well as digital solutions
- Generates new business models by leveraging digital solutions and increasingly integrating data and mechanical hardware



**EBITDA bsi margin**  
**≥23%**  
(in the midterm)

# Leveraging the benefits of Verbund, differentiation and an integrated company setup

## Benefits of Verbund

- Interconnected value chains
- Synergies through scale
- Efficient transformation toward net zero



## Benefits of differentiation

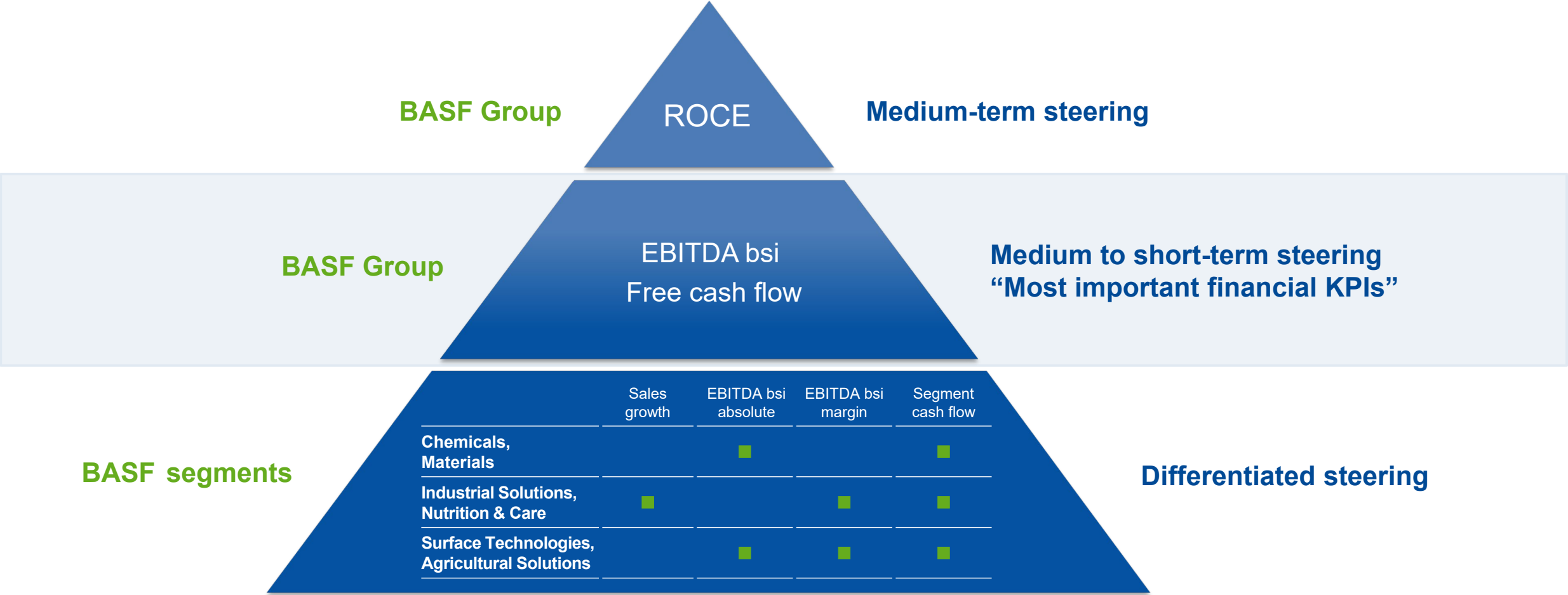
- Business models tailored to industry-specific needs
- Sharpened focus on value creation along Verbund value chains
- Leaner, simpler and more tailored processes



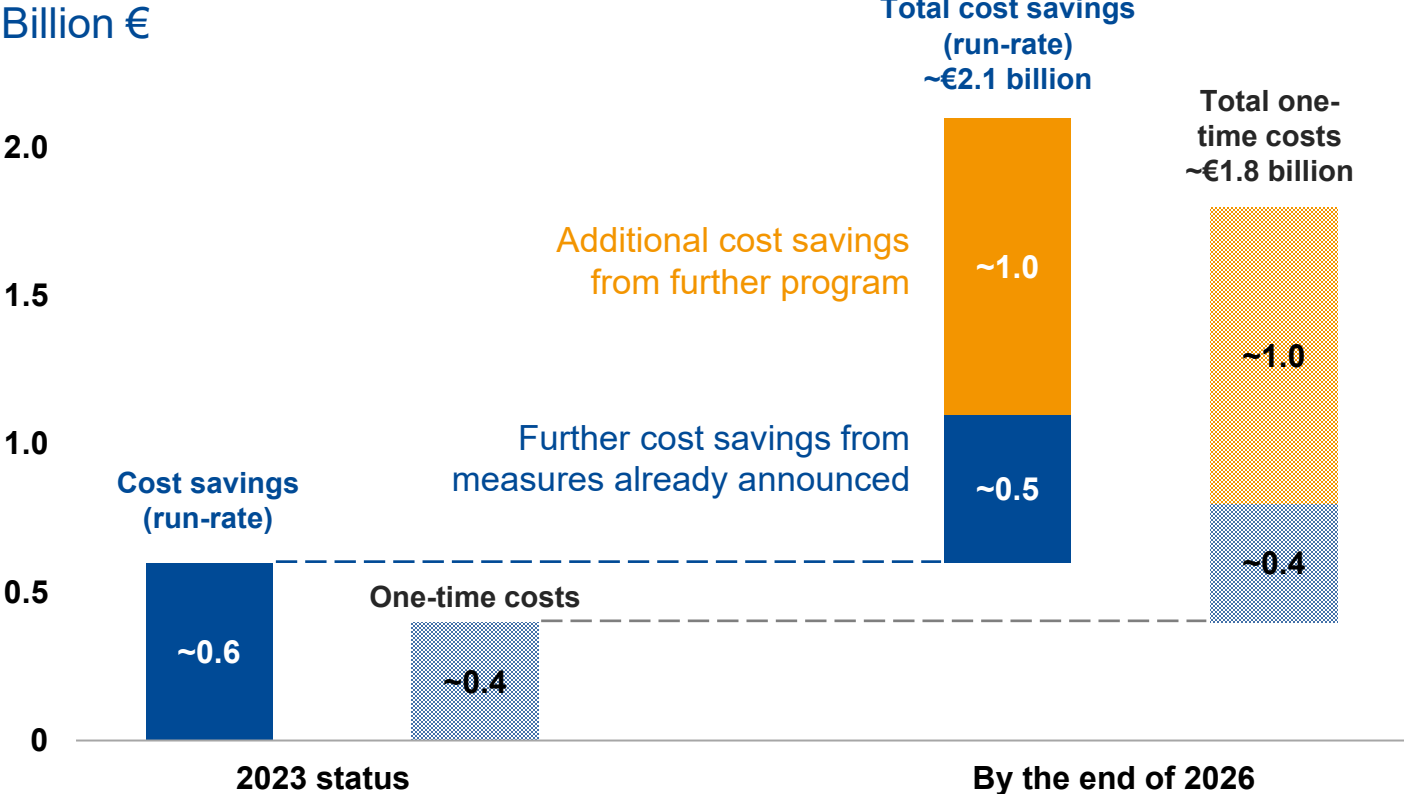
## Benefits of integrated company

- Bundled service units and Group Research
- Better customer engagement
- Better financing conditions

# Differentiated financial steering approach of the BASF Group as of 2024



# Further program with additional annual cost savings of €1 billion in Ludwigshafen by the end of 2026



- Further program will include cost savings in both production as well as non-production areas in Ludwigshafen
- Employee representatives will be involved regarding the different measures that will be further detailed in the coming months

<sup>1</sup> Run-rate by year end  
<sup>2</sup> The figures include the cost savings program in non-production units with focus on Europe, measures in the Global Business Services and Global Digital Services units outside of Europe and the cost savings related to the adaptation of production structures at Ludwigshafen Verbund site.

■ Expected annual cost savings<sup>1</sup> from further program in Ludwigshafen
 ■ Expected one-time costs for further program in Ludwigshafen  
■ Expected annual cost savings<sup>1</sup> from measures already announced<sup>2</sup>
■ Expected one-time costs for measures already announced

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# BASF targets for Scope 1 and Scope 2 emissions

**2030**

**25%**

Scope 1 and Scope 2  
CO<sub>2</sub> emission reduction  
(compared with 2018)

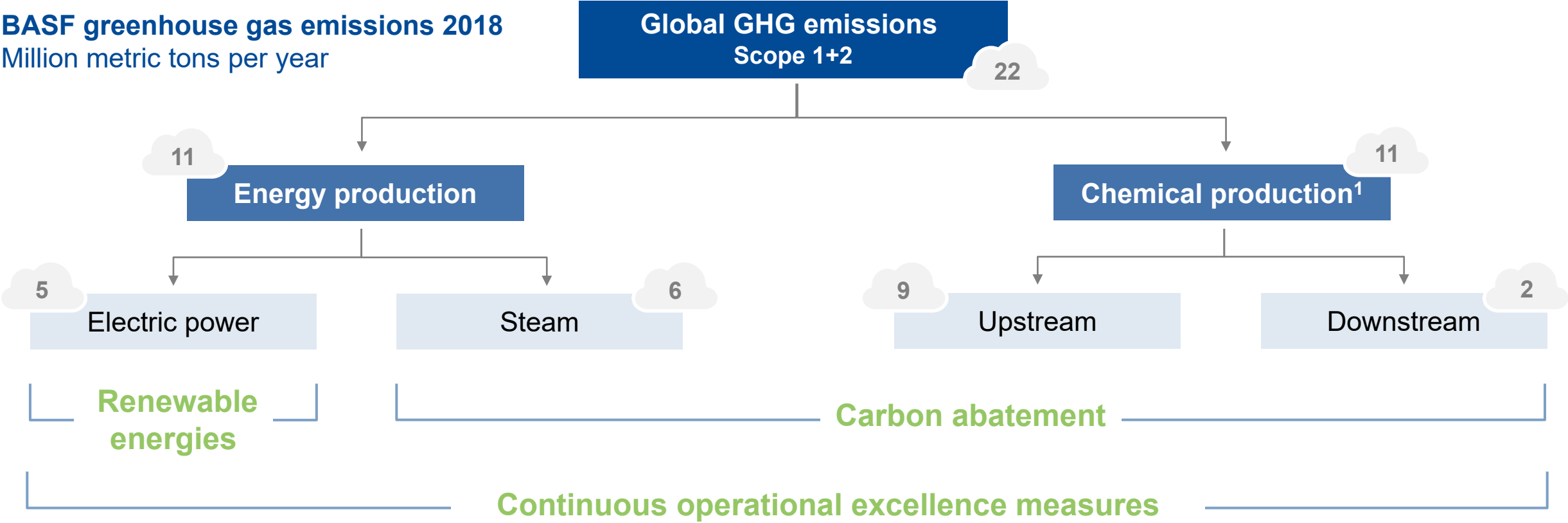
**2050**

**net zero**

Scope 1 and Scope 2  
CO<sub>2</sub> emissions

# No downstream decarbonization without upstream decarbonization

**BASF greenhouse gas emissions 2018**  
 Million metric tons per year

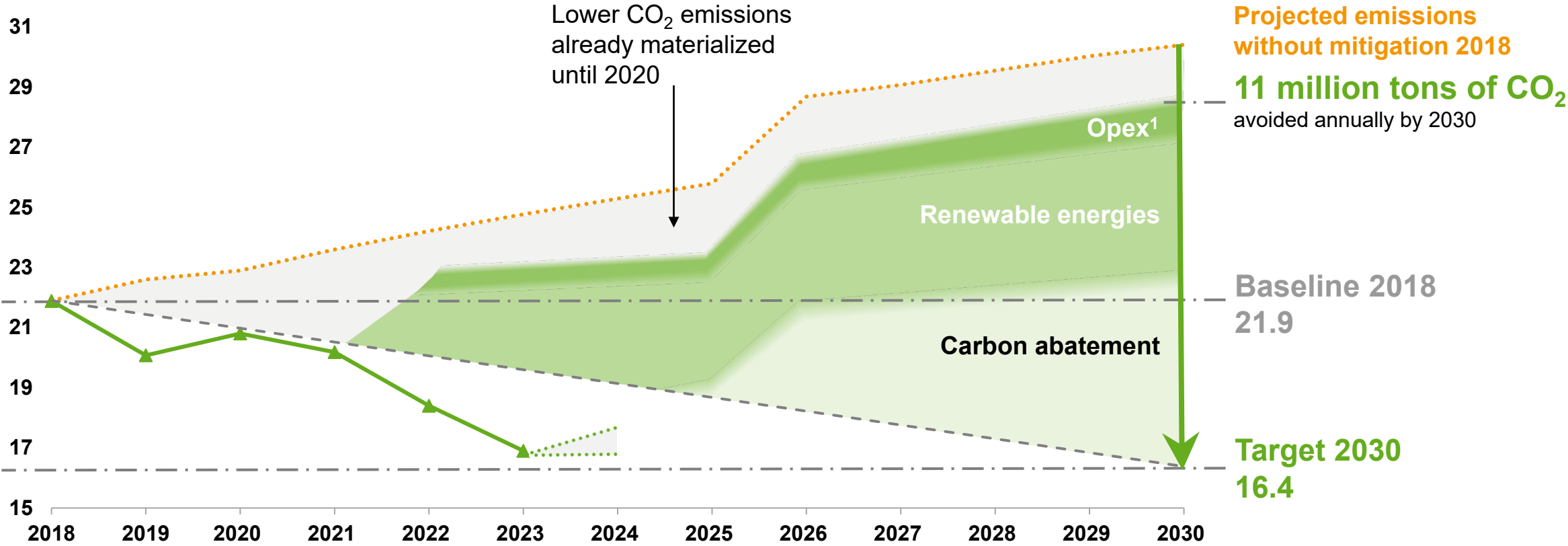




# We have a well-filled portfolio of projects to reach our 2030 target

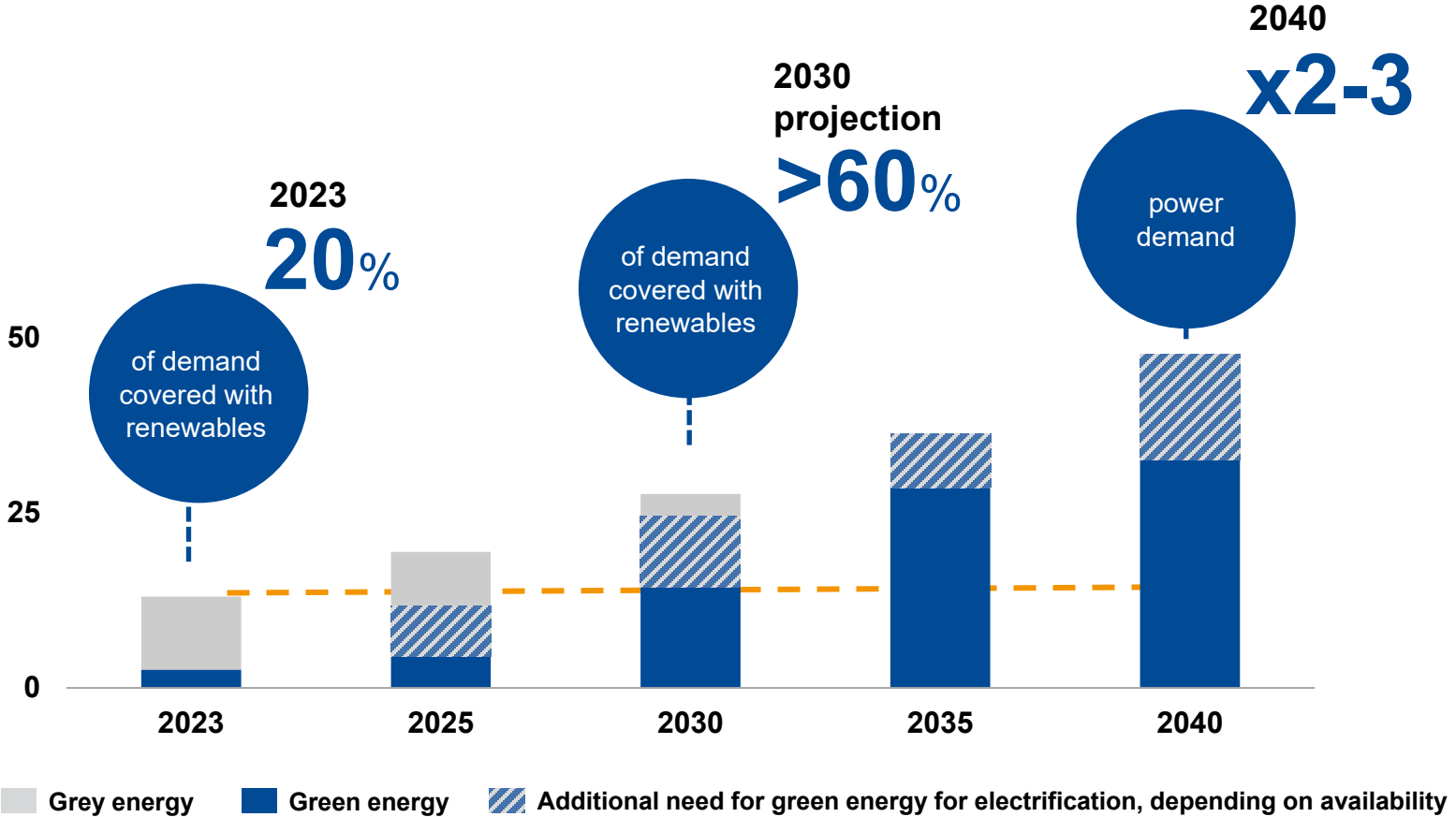
## Projected BASF greenhouse gas emissions

Million metric tons CO<sub>2</sub> equivalents



# Switching our power to renewable energy will be the main driver of emission reduction until 2025

**BASF global power demand and renewable supply projection**  
Terawatt hours



- BASF aims to source **at least 60% of its power needs from renewable sources by 2030**
- BASF **power consumption** expected to **increase strongly** due to electrification on our journey to net zero
- BASF pursues a **make-and-buy strategy** to secure access to renewable power
- Early investments in renewable power assets expected to offer **advantageous economics in the future**

# We are making progress on technologies for carbon abatement

## eFurnace



**eFurnace**<sup>1</sup> demonstration plant built in Ludwigshafen with SABIC and Linde in final stage of completion; testing of heating concepts to start in Q1 2024

Supported by:



on the basis of a decision by the German Bundestag

Funded by the European Union NextGenerationEU

## Water electrolysis



Positive funding decision for 54 MW **water electrolysis**<sup>2</sup> plant in Ludwigshafen (Hy4Chem-EI) granted in November 2023; startup planned in 2025

Supported by:

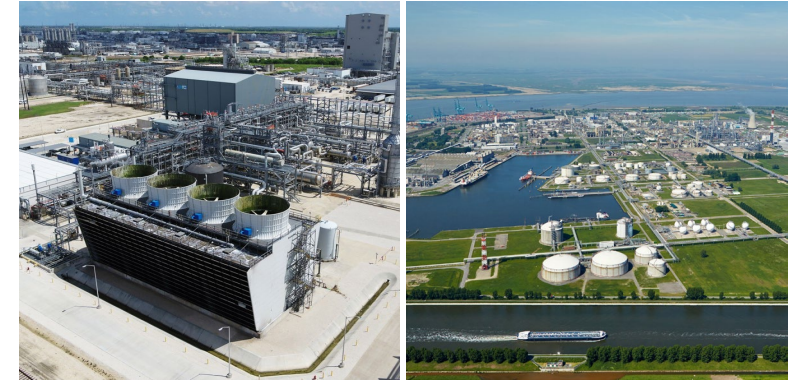


Rheinland-Pfalz

MINISTERIUM FÜR KLIMASCHUTZ, UMWELT, ENERGIE UND MOBILITÄT

on the basis of a decision by the German Bundestag

## CCS projects



BASF and Yara evaluating world-scale **blue ammonia** project using **CCS** in the United States<sup>3</sup>

**CCS project** to reduce BASF's CO<sub>2</sub> emissions in Antwerp by 1 million tons per year slated for startup in 2027



Co-funded by the European Union

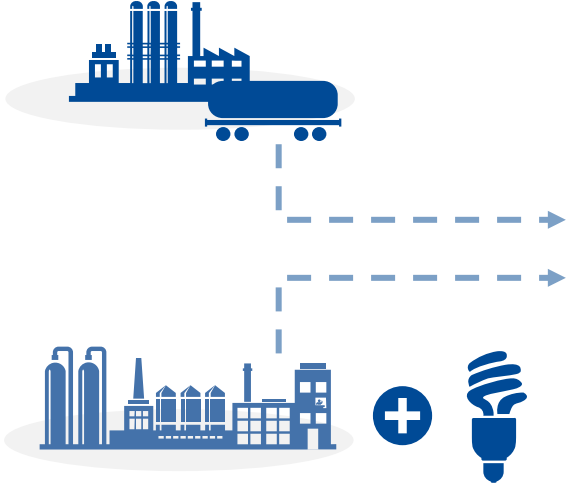
<sup>1</sup> Supported by the Federal Ministry for Economic Affairs and Climate Action (BMWK) and funded by the European Union

<sup>2</sup> Supported by the Federal Ministry for Economic Affairs and Climate Action (BMWK) and the State of Rhineland-Palatinate

<sup>3</sup> Total capacity 1.2 to 1.4 million tons p.a.

# We have built an industry-leading system enabling us to provide product carbon footprints calculated with a certified digital solution

**Scope 3**  
Emissions caused by suppliers and generation of raw materials



CO<sub>2</sub>



Product carbon footprints of sales products

Customer benefits

- Transparency on CO<sub>2</sub> emissions
- Identification of main reduction levers
- Certified software
- Transparent documentation

**Scope 1 + 2**  
Emissions caused by own operations<sup>1</sup>

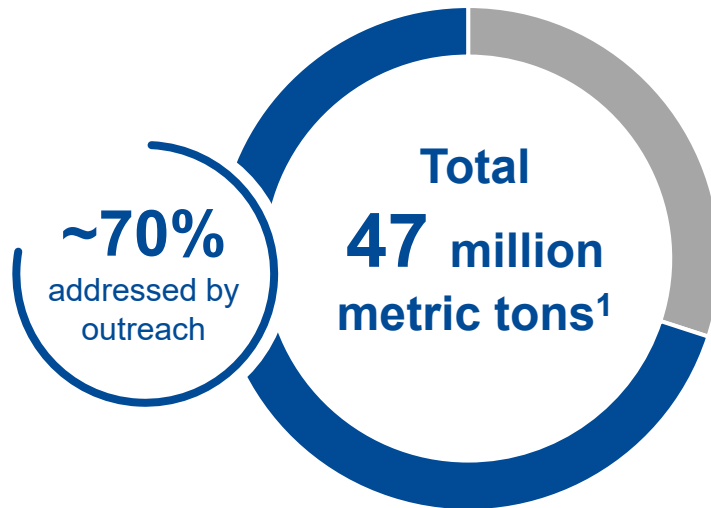
- TÜV-certified<sup>2</sup>
- Meets ISO standards<sup>3</sup>
- Calculates product carbon footprints cradle-to-gate

<sup>1</sup> Energy generation and chemical processes  
<sup>2</sup> ISO 14067:2018  
<sup>3</sup> ISO 14040:2006, 14044:2006, 14067:2018, GHG Protocol Product Standard



# We have a solid foundation for primary Scope 3.1 emission data

## BASF's CO<sub>2</sub>e emissions from raw material purchase 2023



- **Supplier CO<sub>2</sub> Management Program started in 2021** to collect primary emission data for purchased raw materials
- Collaboration through **knowledge sharing on PCF calculation methodology** ongoing to ensure engagement and quality of data
- More than **1,600 suppliers** have been approached, accounting for **~70% of our raw-materials related Scope 3.1 emissions<sup>1</sup>**
- We now have more than **800 validated product carbon footprints** for our raw materials
- **We will make product carbon footprints (PCFs) a buying criterion** to reduce our Scope 3.1 emissions and thus the PCFs of our sales products

<sup>1</sup> Greenhouse Gas Protocol Scope 3.1: Purchased goods and services: 47 million metric tons CO<sub>2</sub>e, thereof 4 million metric tons not in scope of our Scope 3.1 target from battery materials, services and technical goods; excluding greenhouse gas emissions from BASF trading business

# Our new targets: Reduce specific Scope 3.1 emissions by 15% by 2030 and achieve net-zero Scope 3.1 emissions by 2050

**2030**

**15%**

specific Scope 3.1  
CO<sub>2</sub> emission reduction  
(compared with 2022)<sup>1</sup>

**2050**

**net zero**

Scope 3.1  
CO<sub>2</sub> emissions

# TripleS method increases measurability and transparency on sustainability – developed by BASF, adopted by the industry



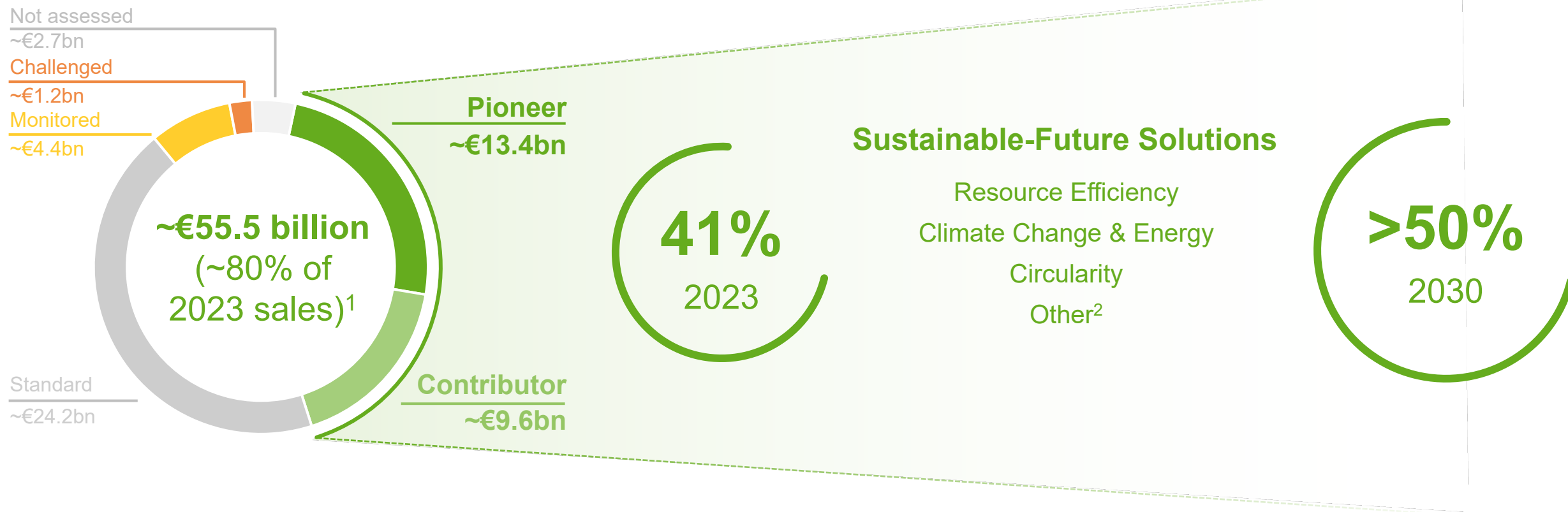
- Methodology refined after **achieving 2025 Accelerator target ahead of schedule** in 2021
- Approximately **45,000 products** are analyzed and classified worldwide
- Each product in its application is assigned to one of **five TripleS segments**
- Portfolio steered toward **climate protection, resource efficiency and circular economy** with Pioneer and Contributor products
- The World Business Council for Sustainable Development **adopted BASF's TripleS logic** for its Portfolio Sustainability Assessment (PSA)



# We aim to increase the sales share of Sustainable-Future Solutions from 41% to more than 50% by 2030

## Provisional 2023 TripleS sales<sup>1</sup>

Billion €



<sup>1</sup> Sales shares based on the analysis of the relevant portfolio carried out by the end of 2023; not included: platinum group metals within ECMS, strategically non-relevant businesses such as IT services, licenses, etc. The provisional segmentation has not been audited by KPMG. The allocation to the TripleS segments is provisional, as the reassessment of our portfolio has not yet been completed.

<sup>2</sup> "Other" comprises Health & Safety, Pollution Reduction, Biodiversity, Water Protection and Zero Hunger.

# BASF in sustainability ratings and rankings

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## MSCI ESG Research

In 2023, BASF was rated A. The analysts highlighted that BASF is present in clean tech markets and has a robust carbon mitigation and water reduction strategy.



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## CDP Disclosure Leadership

In February 2024, CDP once again awarded BASF Leadership status (A-) in the categories of climate protection, water management and forest protection..



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## Morningstar Sustainalytics

BASF belongs to the best category for “diversified chemicals” with a medium ESG risk and was recognized for its strong risk management, e.g., in the areas of CO<sub>2</sub>, emissions, wastewater and waste as well as occupational health and safety.



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## FTSE4Good Global Index

BASF was again included in the FTSE4Good Global Index in 2023.



FTSE4Good

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## ISS ESG

In 2023, BASF held its Prime Status (B-), being among the top decile rank of the companies assessed.



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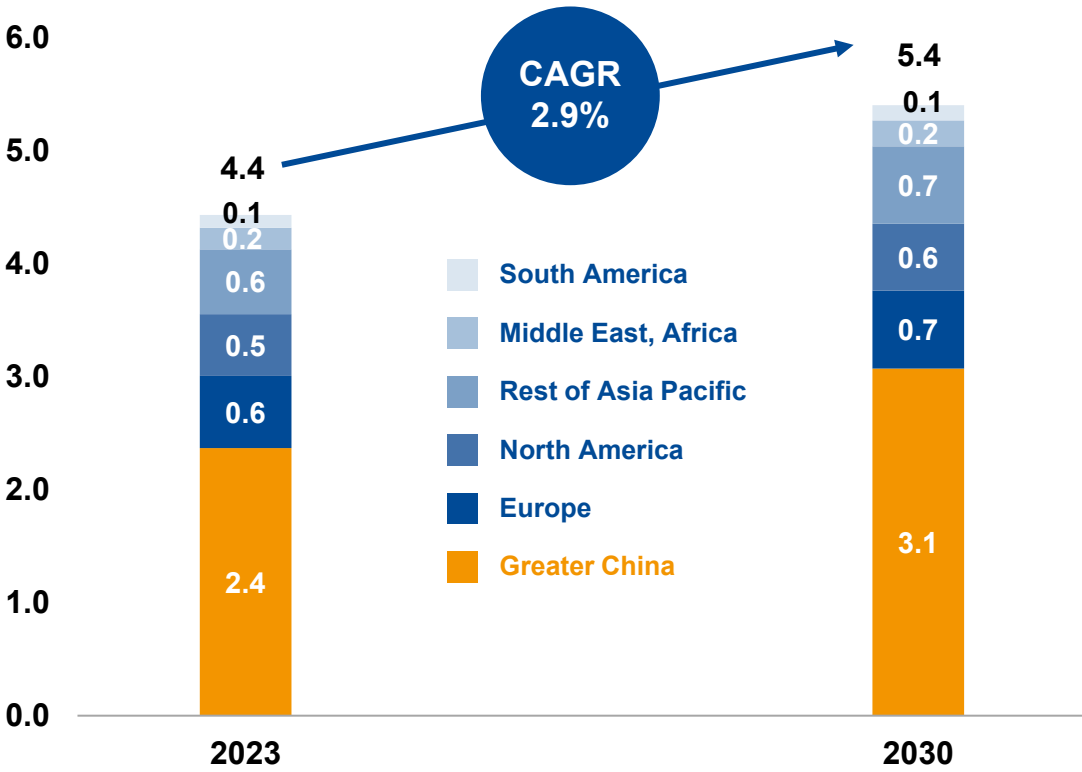
Unique position to capture growth in Asia

6

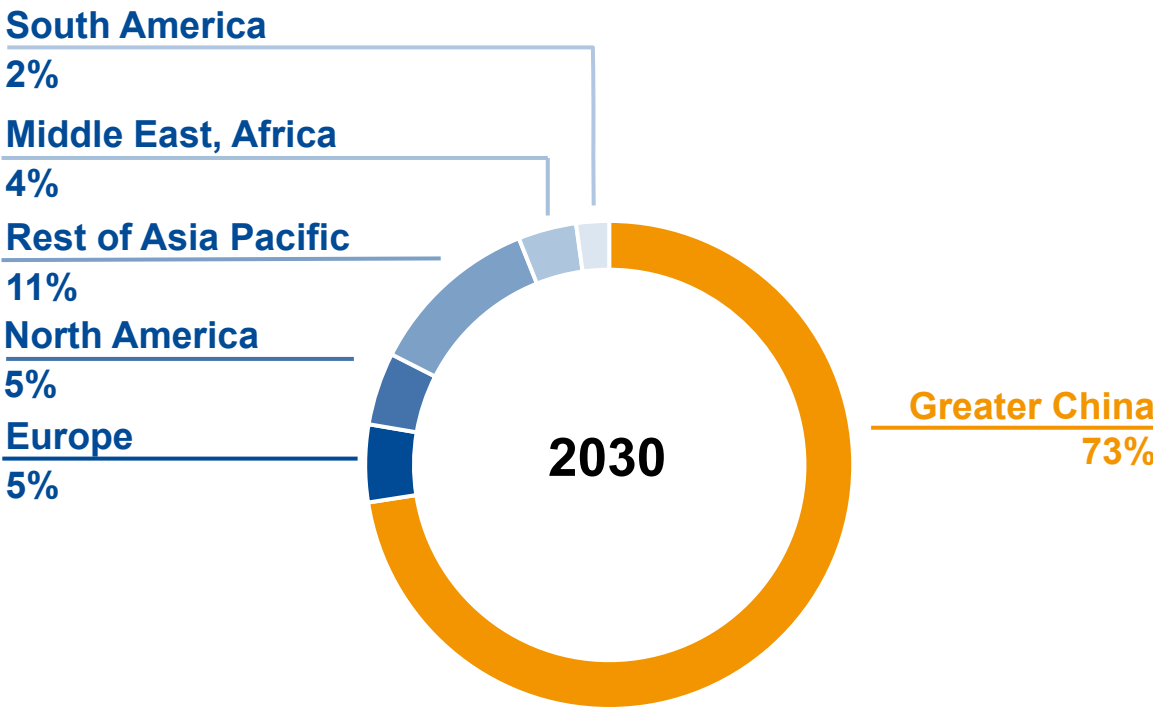
Battery materials driving electromobility and growth

# China is the major growth driver for global chemical production: ~70% of growth will come from Greater China by 2030

Real chemical production<sup>1</sup>  
trillion US\$



Share of absolute chemical production growth by region  
%



Source: BASF <sup>1</sup> Real chemical production excluding pharmaceuticals, US\$ base year 2015  
Figures may not add up due to rounding effects.

# BASF's Verbund site in Nanjing is a prime example of our success in China

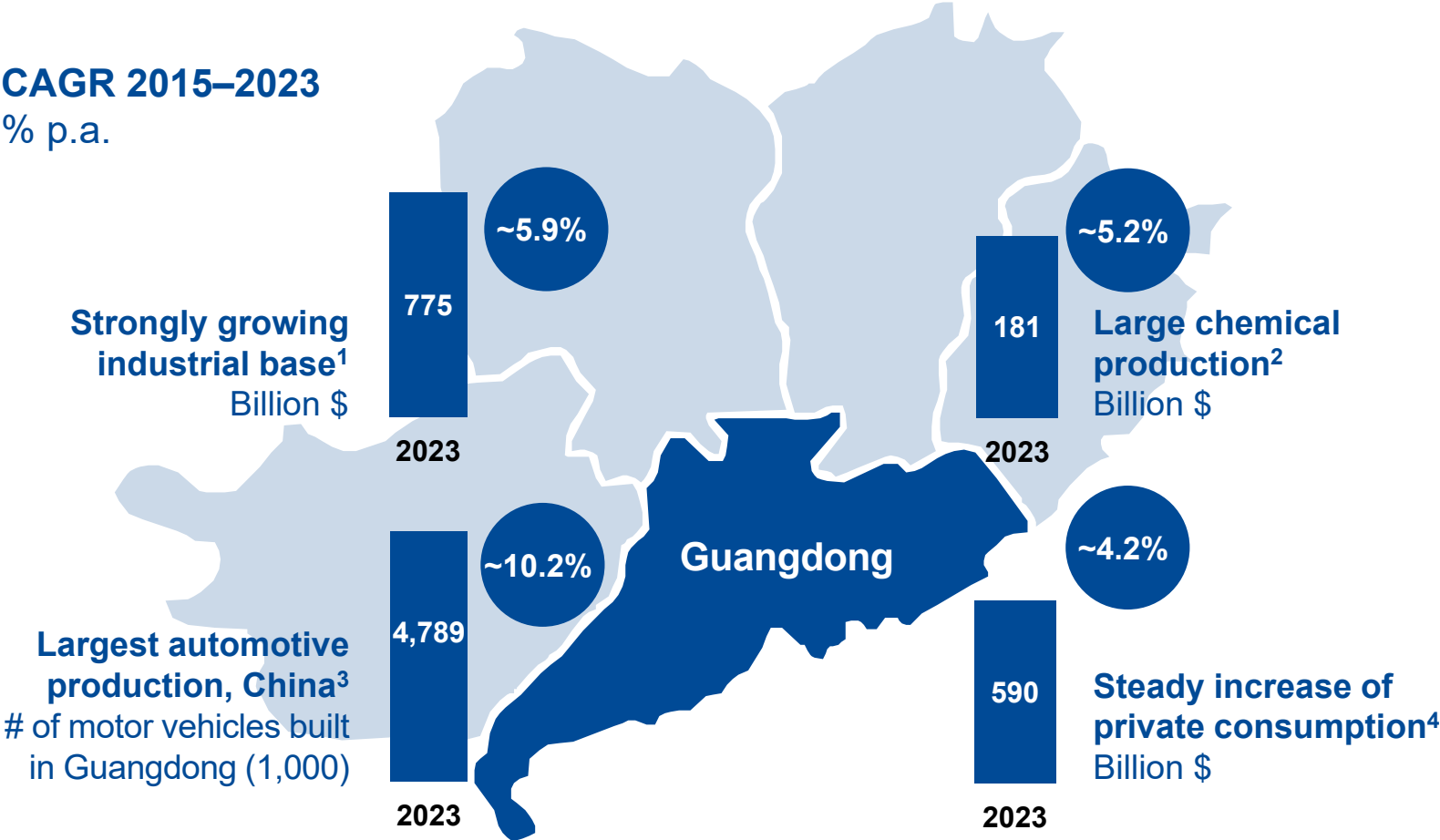


- **50:50 joint venture with Sinopec** founded in 2000, start-up in 2005, major expansions in 2011 and 2014
- Scope has **continuously expanded** over the years toward longer and more diversified value chains
- **Third-largest BASF site**, US\$5.8 billion gross investment (100%)
- Capacity: ~3 million metric tons per year; **33 production plants** including steam cracker
- Strong focus on operational excellence and consistent plant maintenance resulted in **best-in-class asset effectiveness**
- With **21% EBITDA margin<sup>1</sup>** BASF-YPC is one of the most profitable BASF sites

# Guangdong is home to key customers from fast-growing industries

## CAGR 2015–2023

% p.a.



## Market characteristics<sup>5</sup>

- Nearly 127 million residents in Guangdong province (2022)
- GDP Guangdong (2023): >\$1.92 trillion (approaching Brazil)
- GDP CAGR 2023–2038: ~4.7% p.a.
- Key customer industries: transportation, consumer goods, home and personal care, electronics
- Chemical products are generally undersupplied from local production

<sup>1</sup> Industry real output, 2015-based. Guangdong Bureau of Statistics  
<sup>2</sup> Real chemical gross output, 2015-based, inferred by gross output/value added ratio for China, Guangdong Bureau of Statistics  
<sup>3</sup> Guangdong Bureau of Statistics  
<sup>4</sup> Real private consumption, 2015-based. National Bureau of Statistics with S&P Global forecast, subject to retrospective revision  
<sup>5</sup> Guangdong Bureau of Statistics, S&P Global





# Main construction phases of the new Verbund site in Zhanjiang, China – stepwise approach

**Initial phase**  
on stream: 2022–2023

**First downstream plants:**  
Performance Materials for automotive and consumer industries

**Phase 1**  
start-up: as of 2025

Heart of the Verbund:  
**Petrochemicals plus further downstream plants**

**Phase 2**  
start-up: as of 2028

**Verbund expansion**  
and diversification

**Attractive financing conditions**  
in China

- We are financing the Zhanjiang Verbund site with a combination of equity (20%) and debt (80%)
- Equity funded by dividends from existing BASF Group companies in China
- Debt financing will be based on the Chinese capital market and local bank financing

**Engineering plastics and thermoplastic polyurethanes**

**Steam cracker**

C2 value chain

C3 value chain

C4 value chain

**Additional downstream plants**

Backward integrated into world-scale upstream plants to achieve Verbund synergies in downstream value chains



# Key financials of BASF's new Verbund site in Zhanjiang

**€4.0–5.0 billion**

Sales  
by 2030

**€1.0–1.2 billion**

EBITDA  
by 2030

**Up to €10 billion**

total capital expenditure  
until 2030

(peak: 2023–2025)

- The **greenfield character** of the new Verbund site results in a higher share of infrastructure investments compared with a brownfield project
- Infrastructure investments will be **diluted with future investments/expansions**
- The new Verbund site will be BASF's **key platform for long-term profitable and sustainable growth** in China even beyond phase 1 and phase 2

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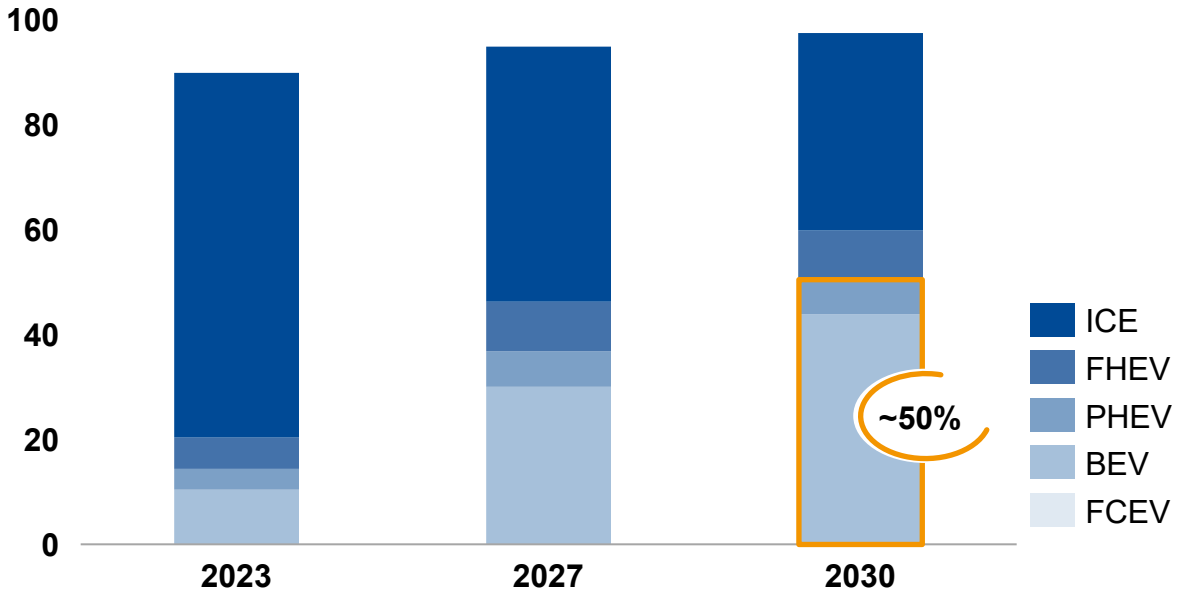
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Battery materials driving electromobility and growth

# The automotive industry is in the middle of a major transformation toward electromobility

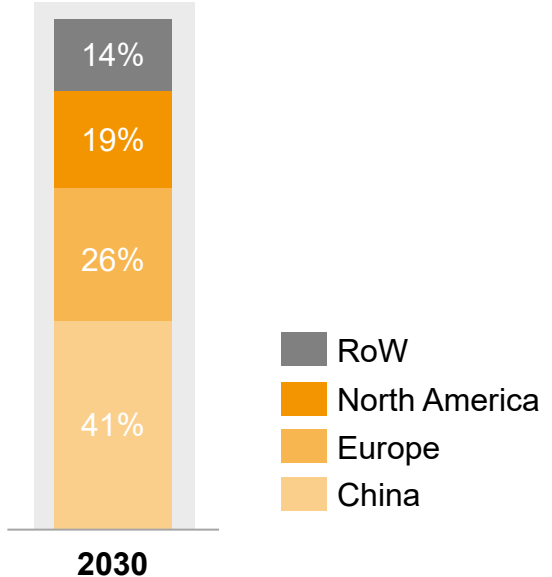
## Powertrain development

Light-duty vehicle production volume  
Million units



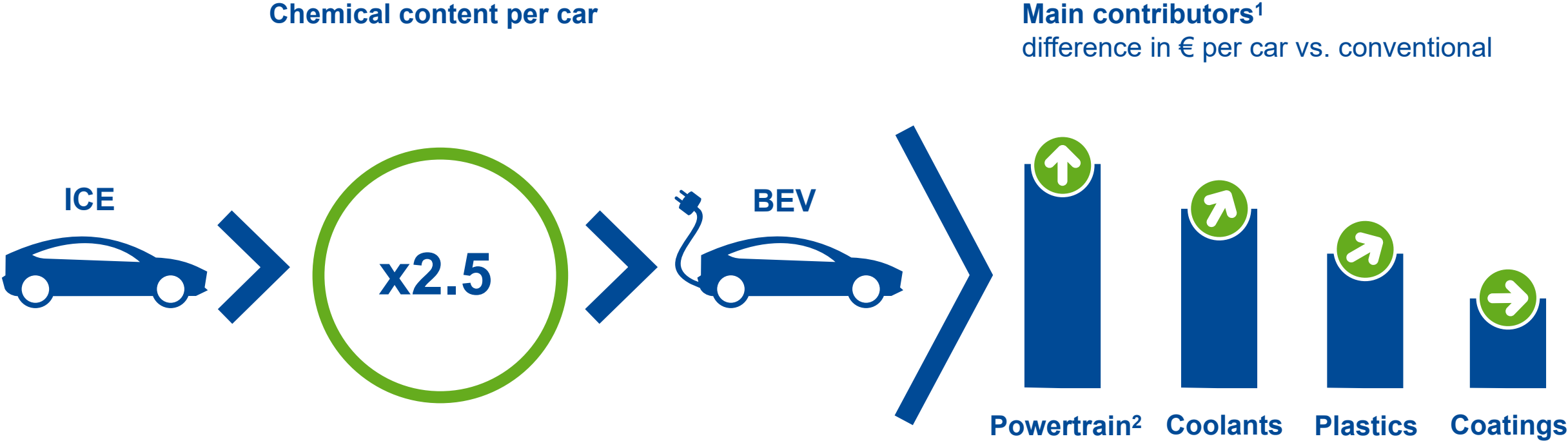
## Regional BEV split

%



By 2030, we expect that ~50% of all new cars will be BEVs and PHEVs

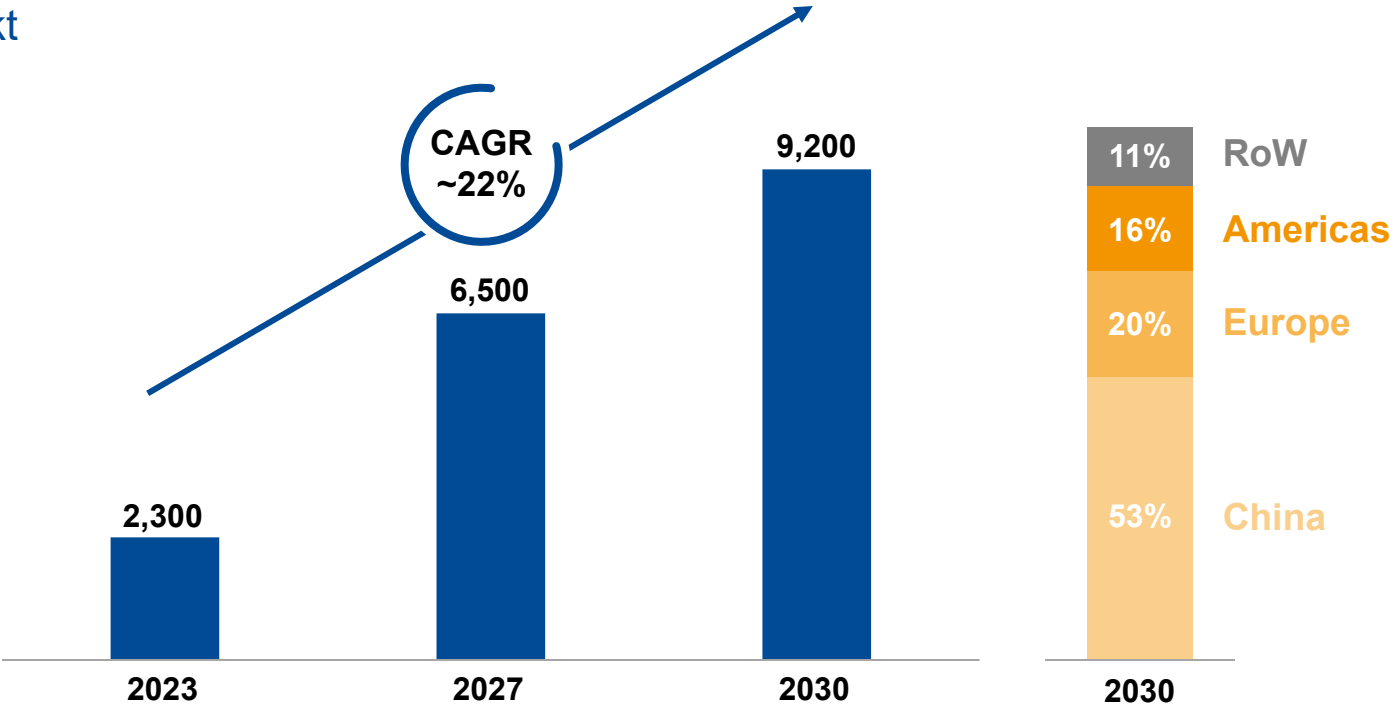
# The chemical content per car is higher in a BEV compared to ICE, with CAM as the single largest growth opportunity



The cathode active material (CAM) as key component of any battery cell more than doubles the chemical content which can be found in today's average ICE vehicle

# The CAM market will grow by ~22% per year and reach a total size of 9,200 kt by 2030

Global CAM market forecast<sup>1</sup>  
kt



Continuous growth of global EV demand, ...



... incentives and regulatory push for local supply chains ...



... accelerate the need for CAM capacity investments especially in western countries...



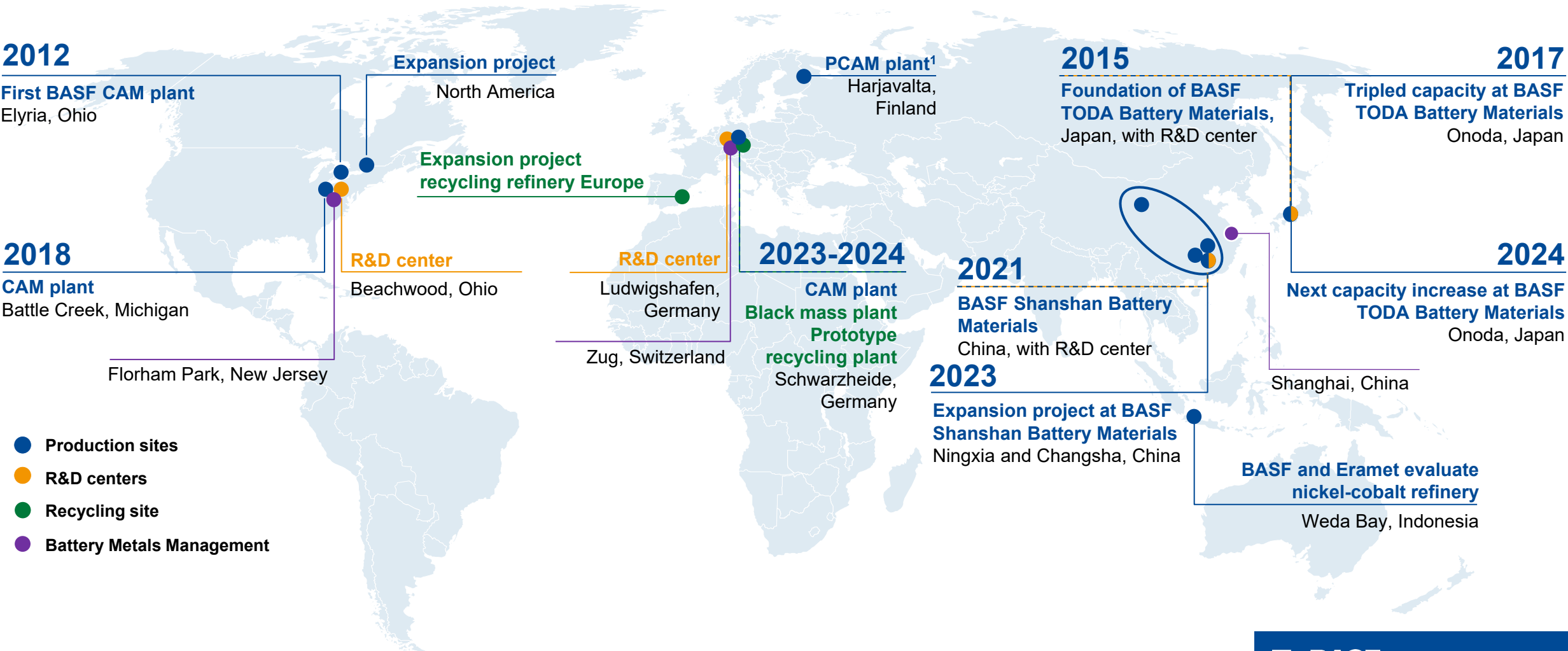
... drives demand for base metals (i.e., Ni, Co, Li)



CAM market is driven by battery performance, safety and cost, which are all key parameters for BEVs

<sup>1</sup> All applications (e-mobility, energy storage systems, consumer electronics) and all cathode chemistries; market size can vary significantly due to volatility in metal prices; status as of January 2024

# BASF has production assets and R&D hubs in close proximity to the most important BEV markets in every region



# The Battery Materials business will become a significant earnings contributor to the BASF Group

>€7 billion sales  
by 2030

~10%  
market share  
targeted

≥30%  
EBITDA bsi margin  
(excl. metals)

~€3.5–4.5 billion  
capital expenditure  
2022–2030

- Continue to ramp up existing sales of the **CAM portfolio** and **secure further commercial outlets**
- Build on **customer proximity** with our **domestic production footprint** to meet customer needs
- Realize new business opportunities and further cost reductions with **continued product development**
- Utilize our broad knowledge of the industry to **support the ongoing transformation** of the sector



We create chemistry