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 those discussed in Opportunities and Risks on pages 157 to 167 of the BASF Report 2022. BASF does not assume any obligation to update the forward-looking statements contained in this presentation above and beyond the legal requirements.
<table>
<thead>
<tr>
<th></th>
<th>Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>At a glance</td>
</tr>
<tr>
<td>2</td>
<td>Q3 2023 reporting</td>
</tr>
<tr>
<td>3</td>
<td>Measures to increase competitiveness</td>
</tr>
<tr>
<td>4</td>
<td>Pushing the transition to a sustainable economy</td>
</tr>
<tr>
<td>5</td>
<td>Unique position to capture growth in Asia</td>
</tr>
<tr>
<td>6</td>
<td>Battery materials driving electromobility and growth</td>
</tr>
</tbody>
</table>
What is driving BASF’s future growth?

Global trends provide opportunities for growth in the chemical industry

<table>
<thead>
<tr>
<th>Population growth:</th>
<th>Digitalization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driven by the emerging markets</td>
<td>Rapid growth in volume of data</td>
</tr>
<tr>
<td>+22% 2022 to 2050</td>
<td>660 zettabytes in 2030</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>China the largest chemical market:</th>
<th>Climate change:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of global chemical market</td>
<td>Required reduction of greenhouse gas emissions to achieve the 2°C goal</td>
</tr>
<tr>
<td>~55% by 2030</td>
<td>-70% by 2050</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Circular economy:</th>
<th>Electromobility:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-recycled plastic waste worldwide</td>
<td>Growing demand for battery materials</td>
</tr>
<tr>
<td>~200 million metric tons per year</td>
<td>~22% per year 2022 to 2030</td>
</tr>
</tbody>
</table>

Sources: UN, IEA, Conversio, UBS Foresight, BASF
### Unique position to deliver long-term value

<table>
<thead>
<tr>
<th>Unique Verbund concept</th>
<th>Industry-leading innovation platform</th>
<th>Strong and expanding local presence in fast growing Asian market</th>
<th>Creating value to society and contributing to a sustainable development</th>
<th>Progressive dividend policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 6 Verbund sites globally</td>
<td>- €2.3 billion R&amp;D expenses in 2022</td>
<td>- 2 Verbund sites already</td>
<td>- CO₂ emission targets:</td>
<td>- Practice to increase the dividend per share each year, or at least maintain it at the previous year's level</td>
</tr>
<tr>
<td>- 239 production sites worldwide in total</td>
<td>- ~10,000 employees in R&amp;D</td>
<td>- ~70 production sites</td>
<td>- 25% reduction of Scope 1 and 2 emissions by 2030 (compared with 2018)</td>
<td>- Dividend of €3.40 per share for 2022</td>
</tr>
<tr>
<td>- 6.2 million metric tons of CO₂ avoided globally in 2022</td>
<td>- Sales of ~€12 billion in 2022 with products launched during last 5 years</td>
<td>- €21.8 billion¹ sales in 2022</td>
<td>- 15% reduction of specific Scope 3.1 emissions by 2030 (compared with 2022)</td>
<td></td>
</tr>
</tbody>
</table>

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

² Scope 1, Scope 2 and Scope 3.1

---

© BASF

We create chemistry

December 2023 | BASF Capital Market Story
The BASF Group’s segments

Chemicals
The Chemicals segment supplies BASF’s other segments and customers with basic chemicals and intermediates.
- Sales 2022: €14,895 million
- EBIT before specials items 2022: €1,956 million

Materials
The Materials segment offers advanced materials and their precursors for the plastics and plastics processing industries.
- Sales 2022: €18,443 million
- EBIT before specials items 2022: €1,840 million

Industrial Solutions
The Industrial Solutions segment develops and markets ingredients and additives for industrial applications.
- Sales 2022: €9,992 million
- EBIT before specials items 2022: €1,091 million

Surface Technologies
The Surface Technologies segment offers chemical solutions for surfaces and automotive coatings, as well as battery materials and catalysts.
- Sales 2022: €21,283 million
- EBIT before specials items 2022: €902 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 2022: €8,066 million
- EBIT before specials items 2022: €618 million

Agricultural Solutions
The Agricultural Solutions segment is an integrated provider of seeds, crop protection and digital solutions for the agricultural sector.
- Sales 2022: €10,280 million
- EBIT before specials items 2022: €1,220 million

Other not depicted on the slide: Sales 2022: €4,368 million, EBIT before special items 2022: -€749 million
Our unique Verbund concept is one of BASF’s greatest assets with multiple benefits strengthening the portfolio

Production
- 6.2 million metric tons of CO₂ emissions avoided globally in 2022
- Integration enables drop-in solutions for bio-based and recycled feedstock for low-carbon products

Value chains
- Ensure competitive supply of key raw materials and products to all segments while avoiding CO₂ emissions

Technologies
- Leverage technological advantages and innovation across all segments
- Unique expertise in developing and integrating new, low-emission technologies

Markets
- Create customer relevance through size and broad portfolio

Digitalization
- Harvest the advantages offered by digitalization across BASF, for example, by calculating product carbon footprints
We operate close to our customers in all regions worldwide

Selected sites
Verbund sites
Planned Verbund site

BASF sales by industry 2022

<table>
<thead>
<tr>
<th>Industry</th>
<th>Sales Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct customers</td>
<td>&gt;20%</td>
</tr>
<tr>
<td>Chemicals and plastics</td>
<td></td>
</tr>
<tr>
<td>Transportation (respectively)</td>
<td></td>
</tr>
<tr>
<td>10–20%</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td></td>
</tr>
<tr>
<td>Consumer goods (respectively)</td>
<td></td>
</tr>
<tr>
<td>&lt;10%</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
</tr>
<tr>
<td>Electronics</td>
<td></td>
</tr>
<tr>
<td>Energy and resources</td>
<td></td>
</tr>
<tr>
<td>Health and nutrition (respectively)</td>
<td></td>
</tr>
</tbody>
</table>

North America
Sales (million €) 23,869
Employees 16,036

Asia Pacific
Sales (million €) 21,823
Employees 20,452

Europe
Sales (million €) 33,922
Employees 67,958

South America, Africa, Middle East
Sales (million €) 7,712
Employees 7,035

Sales 2022 by location of customer

North America
Sales (million €) 23,869
Employees 16,036

Asia Pacific
Sales (million €) 21,823
Employees 20,452

South America, Africa, Middle East
Sales (million €) 7,712
Employees 7,035

Europe
Sales (million €) 33,922
Employees 67,958

BASF sales by industry 2022

<table>
<thead>
<tr>
<th>Industry</th>
<th>Sales Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct customers</td>
<td>&gt;20%</td>
</tr>
<tr>
<td>Chemicals and plastics</td>
<td></td>
</tr>
<tr>
<td>Transportation (respectively)</td>
<td></td>
</tr>
<tr>
<td>10–20%</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td></td>
</tr>
<tr>
<td>Consumer goods (respectively)</td>
<td></td>
</tr>
<tr>
<td>&lt;10%</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
</tr>
<tr>
<td>Electronics</td>
<td></td>
</tr>
<tr>
<td>Energy and resources</td>
<td></td>
</tr>
<tr>
<td>Health and nutrition (respectively)</td>
<td></td>
</tr>
</tbody>
</table>
Priorities for the use of cash

1. Organic growth
   - Capex budget for 2023 to 2027 reduced to €24.8 billion (original capex budget: €28.8 billion)
   - Around €2.3 billion in R&D expenses per year

2. Progressive dividend
   - 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\(^1\) support dividend policy

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

4. Share buybacks
   - 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

\(^{1}\) As of September 30, 2023: 48.8%
We delivered on our priorities for the use of cash between 2018 and 2022

Use of cash of BASF Group 2018–2022

~€50 billion

1. Organic growth
   - We have spent €21.0 billion on capital expenditures and €10.7 billion on R&D

2. Progressive dividend
   - We have paid out a total of €15.8 billion in dividends to shareholders

3. Portfolio upgrading
   - We have made net payments related to acquisitions and divestitures amounting to €1.4 billion

4. Share buybacks
   - We repurchased shares for around €1.4 billion between January 2022 and February 2023

Share buybacks: 3%
Portfolio upgrading: 3%
Dividend: 31%
Organic growth: 63%
Capex reduction by ~€4.0 billion from 2023 to 2027

We respond flexibly to changes in the market environment:
- Expected demand development
- Regional supply situation

We focus on capital discipline across the entire portfolio of BASF Group
Major levers for capex reduction

Ongoing businesses
- Postpone non-critical projects
- Focus on highly capex-efficient measures, e.g., debottlenecking
- Postpone planned replacement investments

Growth projects
- Zhanjiang Verbund site
  - Leverage favorable procurement environment in China
  - Adjust further investments to market demand
- Battery materials
  - Use flexibility in the scheduling of investments
  - Evaluate partnerships

Net zero transformation
- Maintain overall investment scope with focus on CO2 reduction, renewables and recycling
- Fund certain investments, e.g., wind farms, via project financing
- Strike the right balance between power purchase agreements and own investments
Capex now focused on Zhanjiang Verbund site and battery materials

Capital expenditures 2018–Oct. 2023 YTD
Relative share of spend per year

Selected projects (completed):
- Acetylene plant, Ludwigshafen
- Vitamin A expansion, Ludwigshafen
- EO expansion, Antwerp

Selected projects (in execution):
- HMD plant in Chalampé, France
- MDI plant in Geismar, Louisiana

Zhanjiang Verbund site
Battery materials
Preparing for the future: BASF’s Verbund site project in Zhanjiang is well on track

Project execution on time and in budget

- Second downstream plant (TPU) successfully started up in September 2023
- Construction activities stepped up, with currently more than 15,000 construction workers on site every day
- Stringent project execution; favorable sourcing environment in China is leveraged

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
Preparing for the future: BASF is the first company to establish a co-located battery materials and recycling center in Europe

- BASF is the first company to establish a co-located battery materials and recycling center and close the loop in the European battery value chain
- New plant is first production facility for high-performance cathode active materials (CAM) in Germany and first fully automated large-scale CAM production facility in Europe
- Supply of products tailored to the specific needs of cell manufacturers and automotive OEMs in Europe; plant fully sold out for the next years
- Construction of a world-class battery recycling plant to produce black mass already started; production expected to begin in 2024
- With these investments, BASF is supporting the European market and at the same time enabling faster growth for its global business
Preparing for the future: BASF’s major projects in the United States

Third and final phase of the MDI expansion project at the Verbund site in Geismar, Louisiana, is fully on track

- Additional upstream units and a splitter to increase production capacity to approximately 600,000 metric tons per year by 2026
- Investment of $780 million in final expansion phase (2022–2025)
- Including the first and second phases, the MDI expansion project is BASF’s largest wholly owned investment in the United States

BASF and Yara evaluate low-carbon blue ammonia project

- Joint study to develop and construct a world-scale low-carbon blue ammonia production facility with carbon capture in the U.S. Gulf Coast region
- Feasibility study of a plant with a total annual capacity of 1.2 to 1.4 million tons
- Approximately 95% of the CO₂ generated from the production process is aimed to be captured and permanently stored in the ground
- Project underlines BASF’s commitment to drive the sustainable transformation of the chemical industry
BASF’s industry-leading innovation platform ensures long-term organic growth

R&D expenses 2022

Corporate research, Other
17%

Agricultural Solutions
41%

€2,298 million

Key facts 2022

- R&D expenses to sales ratio 2.6%
- Commitment to R&D with annual spending of ~€2.3 billion
- ~10,000 employees in R&D
- ~1,013 new patents filed in 2022
- Research Verbund: Academic Research Alliances are complemented by cooperations with ~220 universities and research institutes
- ~€12 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 2022 and 2032
Attractive shareholder return – also in challenging times

Key facts 2022

- Dividend of €3.40 per share
- Total payout of €3.0 billion\(^2\) fully covered by our free cash flow of €3.3 billion in 2022
- Dividend yield of 7.3% based on the share price of €46.39 at year end 2022

Dividend per share

<table>
<thead>
<tr>
<th>Year</th>
<th>Dividend (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2.70</td>
</tr>
<tr>
<td>2014</td>
<td>2.80</td>
</tr>
<tr>
<td>2015</td>
<td>2.90</td>
</tr>
<tr>
<td>2016</td>
<td>3.00</td>
</tr>
<tr>
<td>2017</td>
<td>3.10</td>
</tr>
<tr>
<td>2018</td>
<td>3.20</td>
</tr>
<tr>
<td>2019</td>
<td>3.30</td>
</tr>
<tr>
<td>2020</td>
<td>3.40</td>
</tr>
<tr>
<td>2021</td>
<td>3.40</td>
</tr>
<tr>
<td>2022</td>
<td>3.40</td>
</tr>
</tbody>
</table>

Yield\(^1\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Yield (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>3.5%</td>
</tr>
<tr>
<td>2014</td>
<td>4.0%</td>
</tr>
<tr>
<td>2015</td>
<td>4.1%</td>
</tr>
<tr>
<td>2016</td>
<td>3.4%</td>
</tr>
<tr>
<td>2017</td>
<td>3.4%</td>
</tr>
<tr>
<td>2018</td>
<td>5.3%</td>
</tr>
<tr>
<td>2019</td>
<td>4.9%</td>
</tr>
<tr>
<td>2020</td>
<td>5.1%</td>
</tr>
<tr>
<td>2021</td>
<td>5.5%</td>
</tr>
<tr>
<td>2022</td>
<td>7.3%</td>
</tr>
</tbody>
</table>

\(^1\) Dividend yield based on share price at year end
\(^2\) Based on the 893,854,929 shares outstanding as of December 31, 2022
Dividend payments supported by strong cash flow generation

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

Cash flows from operating activities, free cash flow, dividends attributable to shareholders of BASF SE

Oct. 2023 YTD

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash flows from operating activities</th>
<th>Free cash flow</th>
<th>Dividends attributable to shareholders of BASF SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>8,100</td>
<td>3,210</td>
<td>2,480</td>
</tr>
<tr>
<td>2014</td>
<td>6,958</td>
<td>2,664</td>
<td>2,162</td>
</tr>
<tr>
<td>2015</td>
<td>9,446</td>
<td>3,634</td>
<td>2,572</td>
</tr>
<tr>
<td>2016</td>
<td>7,717</td>
<td>3,572</td>
<td>2,755</td>
</tr>
<tr>
<td>2017</td>
<td>8,785</td>
<td>4,789</td>
<td>2,847</td>
</tr>
<tr>
<td>2018</td>
<td>7,939</td>
<td>4,045</td>
<td>2,939</td>
</tr>
<tr>
<td>2019</td>
<td>7,447</td>
<td>3,650</td>
<td>3,031</td>
</tr>
<tr>
<td>2020</td>
<td>7,709</td>
<td>3,333</td>
<td>3,072</td>
</tr>
<tr>
<td>2021</td>
<td>7,245</td>
<td>3,713</td>
<td>3,035</td>
</tr>
<tr>
<td>2022</td>
<td>7,709</td>
<td>3,333</td>
<td>3,072</td>
</tr>
<tr>
<td>2023</td>
<td>5,142</td>
<td>1,290</td>
<td>1,290</td>
</tr>
</tbody>
</table>

Ø €7.7 billion

Ø €3.4 billion
Portfolio developed in line with 2018 strategy

Transactions 2018–2023
Circle size represents net sales in €

Acquisitions
- Selective acquisitions with transformative character for distinct growth businesses
- Since 2018, BASF has acquired businesses with net sales of nearly €4 billion

Divestitures
- Businesses with limited differentiation potential divested
- Since 2018, BASF has sold businesses with net sales of €5 billion
Wintershall Dea is the major divestiture that remains to be completed

- BASF stands by its strategic goal of selling its 72.7% share in Wintershall Dea and continues to evaluate monetization options
- Wintershall Dea is currently in the process of legally separating its Russia-related business; the separation is planned to be completed by mid-2024
- Federal investment guarantees in place for Russian assets
- For the business year 2022, BASF received ~€290 million as common dividend from Wintershall Dea
- Wintershall Dea is adjusting its company structure:
  - Annual cost savings of €200 million planned
  - Management board reduced from five to three members
  - Reduction of around 500 jobs company-wide expected
Outlook 2023 for BASF Group

Outlook 2023

<table>
<thead>
<tr>
<th></th>
<th>€73 billion – €76 billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>€73 billion – €76 billion</td>
</tr>
<tr>
<td>EBIT before special items</td>
<td>€4.0 billion – €4.4 billion</td>
</tr>
<tr>
<td>ROCE</td>
<td>6.5% – 7.1%</td>
</tr>
<tr>
<td>CO₂ emissions</td>
<td>17.0 – 17.6 million metric tons</td>
</tr>
</tbody>
</table>

Underlying assumptions

- Growth in gross domestic product: 2.0%
- Growth in industrial production: 1.0%
- Growth in chemical production: 0.0%
- Average euro/dollar exchange rate: $1.10 per euro
- Average annual oil price (Brent crude): $80 per barrel
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 CO₂ 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
Agenda

1. At a glance
2. Q3 2023 reporting
3. Measures to increase competitiveness
4. Pushing the transition to a sustainable economy
5. Unique position to capture growth in Asia
6. Battery materials driving electromobility and growth
### BASF Group Q3 2023 and Q1–Q3 2023: Financial figures

<table>
<thead>
<tr>
<th>Financial figures</th>
<th>Q3 2023</th>
<th>Change</th>
<th>Q1–Q3 2023</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Million €</td>
<td>%</td>
<td>Million €</td>
<td>%</td>
</tr>
<tr>
<td>Sales</td>
<td>15,735</td>
<td>-28.3</td>
<td>53,031</td>
<td>-22.0</td>
</tr>
<tr>
<td>EBITDA before special items</td>
<td>1,545</td>
<td>-33.5</td>
<td>6,354</td>
<td>-32.1</td>
</tr>
<tr>
<td>EBITDA</td>
<td>1,363</td>
<td>-39.6</td>
<td>6,081</td>
<td>-35.0</td>
</tr>
<tr>
<td>EBIT before special items</td>
<td>575</td>
<td>-57.3</td>
<td>3,514</td>
<td>-46.0</td>
</tr>
<tr>
<td>EBIT</td>
<td>394</td>
<td>-69.6</td>
<td>3,235</td>
<td>-49.7</td>
</tr>
<tr>
<td>Net income from shareholdings</td>
<td>-245</td>
<td>.</td>
<td>30</td>
<td>.</td>
</tr>
<tr>
<td>Net income</td>
<td>-249</td>
<td>.</td>
<td>1,812</td>
<td>-57.1</td>
</tr>
</tbody>
</table>
Strong cash flow generation in Q3 2023

Q3 2023

<table>
<thead>
<tr>
<th>Million €</th>
<th>Cash flows from operating activities</th>
<th>Payments made for property, plant and intangible assets</th>
<th>Free cash flow</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,686</td>
<td>-1,221</td>
<td>1,465</td>
</tr>
</tbody>
</table>

Q1–Q3 2023

<table>
<thead>
<tr>
<th>Million €</th>
<th>Cash flows from operating activities</th>
<th>Payments made for property, plant and intangible assets</th>
<th>Free cash flow</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,848</td>
<td>-3,361</td>
<td>488</td>
</tr>
</tbody>
</table>

Q3 2023 vs. Q3 2022

- Cash flows from operating activities improved by €384 million to €2.7 billion
- Increased focus on reducing inventory levels pays off; changes in net working capital led to a cash inflow of €1.9 billion
- Payments made for property, plant and equipment and intangible assets rose by €215 million to €1.2 billion
- Free cash flow increased by €170 million to €1.5 billion
Strong balance sheet

Balance sheet September 30, 2023, vs. December 31, 2022
Billion €

- **Total assets** decreased by €1.9 billion to €82.6 billion
- **Net debt** amounted to €18.9 billion – an increase compared with year-end 2022 but a decrease compared with June 30, 2023
- **Equity ratio: 48.8%**
  (Dec. 31, 2022: 48.4%)
- BASF has **good credit ratings**, especially compared with competitors

### Comparison:

<table>
<thead>
<tr>
<th>Category</th>
<th>Sep. 30, 2023</th>
<th>Dec. 31, 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Noncurrent assets</strong></td>
<td>48.2</td>
<td>47.1</td>
</tr>
<tr>
<td><strong>Inventories</strong></td>
<td>15.1</td>
<td>16.0</td>
</tr>
<tr>
<td><strong>Accounts receivable, trade</strong></td>
<td>11.8</td>
<td>12.1</td>
</tr>
<tr>
<td><strong>Other assets</strong></td>
<td>5.0</td>
<td>6.6</td>
</tr>
<tr>
<td><strong>Liquid funds</strong></td>
<td>2.5</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>82.6</td>
<td>84.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Sep. 30, 2023</th>
<th>Dec. 31, 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equity</strong></td>
<td>40.3</td>
<td>40.9</td>
</tr>
<tr>
<td><strong>Financial debt</strong></td>
<td>21.4</td>
<td>19.0</td>
</tr>
<tr>
<td><strong>Other liabilities</strong></td>
<td>20.9</td>
<td>24.6</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>84.5</td>
<td>84.5</td>
</tr>
</tbody>
</table>
Chemicals

Sales Q3 2023 vs. Q3 2022
Million €

<table>
<thead>
<tr>
<th>Sales development</th>
<th>Volumes</th>
<th>Prices</th>
<th>Portfolio</th>
<th>Currencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2023 vs. Q3 2022</td>
<td>↓ -9.9%</td>
<td>↓ -22.9%</td>
<td>-</td>
<td>↓ -3.2%</td>
</tr>
</tbody>
</table>

EBIT before special items
Million €

<table>
<thead>
<tr>
<th>Quarter</th>
<th>EBIT before special items</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3</td>
<td>323</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>-79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1</td>
<td>241</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>202</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>47</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Intermediates
697
-32%

Petrochemicals
1,733
-37%

€2,430
-36%
## Materials

### Sales Q3 2023 vs. Q3 2022

**Million €**

<table>
<thead>
<tr>
<th>Sales development</th>
<th>Volumes</th>
<th>Prices</th>
<th>Portfolio</th>
<th>Currencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2023 vs. Q3 2022</td>
<td>↓ -5.7%</td>
<td>↓ -18.6%</td>
<td>-</td>
<td>↓ -4.7%</td>
</tr>
</tbody>
</table>

### EBIT before special items

**Million €**

- Performance Materials: €1,765 (-22%)
- Monomers: €1,584 (-35%)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Sales (Million €)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2022</td>
<td>277</td>
</tr>
<tr>
<td>Q4 2022</td>
<td>144</td>
</tr>
<tr>
<td>Q1 2023</td>
<td>243</td>
</tr>
<tr>
<td>Q2 2023</td>
<td>265</td>
</tr>
<tr>
<td>Q3 2023</td>
<td>158</td>
</tr>
</tbody>
</table>
Industrial Solutions

Sales Q3 2023 vs. Q3 2022
Million €

-31%  

Performance Chemicals
747

€1,948
-28%

EBIT before special items
Million €

Dispersions & Resins
1,201
-25%

Sales Q3 2023 vs. Q3 2022

<table>
<thead>
<tr>
<th>Sales development</th>
<th>Volumes</th>
<th>Prices</th>
<th>Portfolio</th>
<th>Currencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2023 vs. Q3 2022</td>
<td>↓ -11.3%</td>
<td>↓ -9.7%</td>
<td>↓ -2.4%</td>
<td>↓ -4.1%</td>
</tr>
</tbody>
</table>
Surface Technologies

Sales Q3 2023 vs. Q3 2022
Million €

<table>
<thead>
<tr>
<th>Sales development</th>
<th>Volumes</th>
<th>Prices</th>
<th>Portfolio</th>
<th>Currencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2023 vs. Q3 2022</td>
<td>↓ -11.0%</td>
<td>↓ -11.1%</td>
<td>↓ -0.1%</td>
<td>↓ -4.9%</td>
</tr>
</tbody>
</table>

EBIT before special items
Million €

Sales Q3 2023 vs. Q3 2022
Million €

<table>
<thead>
<tr>
<th>Coatings</th>
<th>Catalysts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,106</td>
<td>2,781</td>
</tr>
<tr>
<td>-1%</td>
<td>-34%</td>
</tr>
</tbody>
</table>

€3,887  
-27%

239  
170  
263  
230  
257  

Q3 2022  
Q4 2022  
Q1 2023  
Q2 2023  
Q3 2023  

-34%
Nutrition & Care

Sales Q3 2023 vs. Q3 2022
Million €

<table>
<thead>
<tr>
<th>Category</th>
<th>Q3 2023 vs. Q3 2022</th>
<th>Sales Q3 2023 vs. Q3 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition &amp; Health</td>
<td>-12%</td>
<td>-19</td>
</tr>
<tr>
<td>Care Chemicals</td>
<td>-24%</td>
<td>-15</td>
</tr>
</tbody>
</table>

EBIT before special items
Million €

<table>
<thead>
<tr>
<th>Quarter</th>
<th>EBIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3</td>
<td>180</td>
</tr>
<tr>
<td>Q4</td>
<td>-19</td>
</tr>
<tr>
<td>Q1</td>
<td>82</td>
</tr>
<tr>
<td>Q2</td>
<td>33</td>
</tr>
<tr>
<td>Q3</td>
<td>-15</td>
</tr>
</tbody>
</table>

Sales development

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Volumes</th>
<th>Prices</th>
<th>Portfolio</th>
<th>Currencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2023 vs. Q3 2022</td>
<td>-6.3%</td>
<td>-10.7%</td>
<td>-</td>
<td>-3.6%</td>
</tr>
</tbody>
</table>
Agricultural Solutions

Sales Q3 2023 vs. Q3 2022

<table>
<thead>
<tr>
<th>Million €</th>
<th>Q3 2022</th>
<th>Q3 2023</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>2,142</td>
<td>1,744</td>
<td>-19%</td>
</tr>
</tbody>
</table>

EBIT before special items

<table>
<thead>
<tr>
<th>Million €</th>
<th>Q3 2022</th>
<th>Q4 2022</th>
<th>Q1 2023</th>
<th>Q2 2023</th>
<th>Q3 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIT</td>
<td>7</td>
<td>122</td>
<td>1,260</td>
<td>213</td>
<td>53</td>
</tr>
</tbody>
</table>

Sales development Volumes Prices Portfolio Currencies

<table>
<thead>
<tr>
<th></th>
<th>Q3 2023 vs. Q3 2022</th>
<th>Volumes</th>
<th>Prices</th>
<th>Portfolio</th>
<th>Currencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-18.7%</td>
<td>↓ -18.7%</td>
<td>↑ 4.9%</td>
<td>-</td>
<td>↓ -4.8%</td>
</tr>
</tbody>
</table>
# Review of “Other”

<table>
<thead>
<tr>
<th>Financial figures</th>
<th>Q3 2023</th>
<th>Q3 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Million €</td>
<td>Million €</td>
</tr>
<tr>
<td>Sales</td>
<td>689</td>
<td>1,153</td>
</tr>
<tr>
<td>EBIT before special items</td>
<td>-46</td>
<td>22</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs of corporate research</td>
<td>-59</td>
<td>-73</td>
</tr>
<tr>
<td>Costs of corporate headquarters</td>
<td>-54</td>
<td>-65</td>
</tr>
<tr>
<td>Foreign currency results, hedging and other measurement effects</td>
<td>3</td>
<td>38</td>
</tr>
<tr>
<td>Other businesses</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Special items</td>
<td>-37</td>
<td>-5</td>
</tr>
<tr>
<td>EBIT</td>
<td>-83</td>
<td>17</td>
</tr>
</tbody>
</table>
Agenda

1. At a glance
2. Q3 2023 reporting
3. Measures to increase competitiveness
4. Pushing the transition to a sustainable economy
5. Unique position to capture growth in Asia
6. Battery materials driving electromobility and growth
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
The global chemical market environment has changed since 2018

Industry-specific pure-play competitors

New efficient and focused competitors for the Verbund

Shifting demand pattern toward Asia

We are also changing the way we steer BASF
Verbund businesses will benefit from focused value chain steering

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

BASF Group

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

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

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
- ≥30% excluding metals (by 2030)
- ≥15% (in the midterm)
- ≥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
We will also steer BASF differently at the Group level

Today

Corporate steering
- Corporate KPIs
  - Sales/organic volume growth
  - EBIT before special items
  - EBITDA before special items
  - ROCE ("most important KPI")
  - Capital expenditures

As of 2024

Corporate KPIs
- EBITDA before special items
- Cash flows from operating activities
- Capital expenditures

Short-term steering (annual)

Mid-term steering (next 4 years)

Corporate KPIs
- EBITDA before special items
- Free cash flow
- ROCE

Free cash flow
Most important financial KPIs for steering and external reporting purposes going forward

BASF Group

ROCE
Mid-term strategic steering

EBITDA bsi
Free cash flow
Mid and short-term steering
“most important financial KPIs”

BASF’s segments and divisions

Differentiated steering – main financial KPIs

<table>
<thead>
<tr>
<th>Segment</th>
<th>Sales growth</th>
<th>EBITDA bsi absolute</th>
<th>EBITDA bsi margin</th>
<th>Segment cash flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemicals, Materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Solutions, Nutrition &amp; Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface Technologies, Agricultural Solutions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Forecast in BASF Report 2023 will reflect the new most important financial KPIs

**Today**

<table>
<thead>
<tr>
<th>Forecast by segment</th>
<th>Sales (Million €)</th>
<th>EBIT before special items (Million €)</th>
<th>ROCE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>2023 forecast</td>
<td>2023 forecast</td>
<td>2023 forecast</td>
</tr>
<tr>
<td>Chemicals</td>
<td>14,895</td>
<td>1,956</td>
<td>15.6%</td>
</tr>
<tr>
<td>Materials</td>
<td>18,443</td>
<td>1,840</td>
<td>14.9%</td>
</tr>
<tr>
<td>Industrial Solutions</td>
<td>9,992</td>
<td>1,091</td>
<td>16.0%</td>
</tr>
<tr>
<td>Surface Technologies</td>
<td>21,283</td>
<td>902</td>
<td>3.9%</td>
</tr>
<tr>
<td>Nutrition &amp; Care</td>
<td>8,066</td>
<td>618</td>
<td>7.6%</td>
</tr>
<tr>
<td>Agricultural Solutions</td>
<td>10,260</td>
<td>1,220</td>
<td>7.1%</td>
</tr>
<tr>
<td>Other</td>
<td>4,368</td>
<td>-749</td>
<td>-</td>
</tr>
<tr>
<td>BASF Group</td>
<td>87,327</td>
<td>€73 billion-€76 billion</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

**As of 2024**

<table>
<thead>
<tr>
<th>Million €</th>
<th>EBITDA before special items</th>
<th>Free cash flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>2024 forecast</td>
<td>2023</td>
</tr>
<tr>
<td>BASF Group</td>
<td>xxx–xxx</td>
<td>xxx –xxx</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Million €</th>
<th>EBITDA before special items</th>
<th>Segment cash flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>2024 forecast</td>
<td>2023</td>
</tr>
<tr>
<td>Chemicals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Solutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface Technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition &amp; Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural Solutions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Together with initiatives in global service units on track to reduce annual costs by ~€1.1 billion by end of 2026

- Expected annual cost savings increased to: >€600 million\(^1\)
  (from >€500 million) by the end of 2024 and >€700 million by the end of 2026

- Estimated affected positions: ~2,600\(^2\)

1 Annual run rate of >€300 million confirmed to be achieved by the end of 2023
2 Net effect; this figure includes new positions to be created, in particular in hubs

Cost savings program with focus on Europe

Adaptation of Verbund structures in Ludwigshafen

- Expected annual cost savings by the end of 2026 confirmed: >€200 million

- Estimated affected positions: ~700
Adaptation of Verbund structures in Ludwigshafen to improve the competitiveness of the site; measures to be concluded by end of 2026

<table>
<thead>
<tr>
<th>Affected production assets</th>
<th>Fixed cost reduction</th>
<th>Natural gas demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% of the asset replacement value at the site</td>
<td>&gt;€200 million per year</td>
<td>-4.8 TWh/a (~15% of 2021)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expected affected positions</th>
<th>Power demand</th>
<th>CO₂ emissions¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>~700</td>
<td>-0.7 TWh/a (~11% of 2021)</td>
<td>-0.9 Mt/a (~12% of 2021)</td>
</tr>
</tbody>
</table>

¹ Expected Scope 1 and Scope 2 emission reduction for BASF SE
Technical optimization and substitution have significantly reduced the overall natural gas demand at the Ludwigshafen site.

Gas supply threshold in % based on average consumption in 2021

- Spring 2022: ~50%
- End of 2022: ~30%
- End of 2023: 20%

Measures implemented in 2023

- Conversion of two gas turbines in combined heat and power plants to allow operation with either gas or fuel oil
- Natural gas saving measures have been implemented in production facilities, e.g., using the by-product ethane from our steam crackers to feed our acetylene plant

Measures to be implemented by end of 2024

- Accelerate access to renewable energy
- Invest in green hydrogen production (electrolyzer)
- Continue procurement of LNG and secure access to terminal capacities
- Continue flexible switch between power import and own production
Agenda

1. At a glance
2. Q3 2023 reporting
3. Measures to increase competitiveness
4. Pushing the transition to a sustainable economy
5. Unique position to capture growth in Asia
6. Battery materials driving electromobility and growth
BASF targets for Scope 1 and Scope 2 emissions

2030

25%
Scope 1 and Scope 2 CO₂ emission reduction (compared with 2018)

2050

net zero
Scope 1 and Scope 2 CO₂ emissions
No downstream decarbonization without upstream decarbonization

BASF greenhouse gas emissions 2018
Million metric tons per year

Global GHG emissions
Scope 1+2

Energy production

Chemical production

1 Includes emissions from process energy

Renewable energies

Continuous operational excellence measures

Carbon abatement
Our roadmap is backed by robust calculations and solid planning

Projected BASF greenhouse gas emissions
Million metric tons CO₂ equivalents

- Lower CO₂ emissions already materialized until 2020
- Projected emissions without mitigation 2018
- 11 million tons of CO₂ avoided annually by 2030

Baseline 2018: 21.9
Target 2030: 16.4

Projected emissions
Opex¹ avoided annually by 2030
Renewable energies
Carbon abatement

¹ Operational excellence measures
Switching our power to renewable energy will be the main driver of emission reduction until 2025

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

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

Terawatt hours

- **2022**: 16% of demand covered with renewables
- **2030 projection**: >60% of demand covered with renewables
- **2040 x2-3**

Additional need for green energy for electrification, depending on availability of demand covered with renewables.
On track to reaching at least 60% renewable electricity worldwide by 2030

Projected figures for 2026 by region, considering signed contracts and own production

- **North America**: ~25%
- **South America**: 100%
- **Europe**: ~50%
- **Asia Pacific**: ~50%
- **China**: ~65%

1 Including China
We are making progress on technologies for carbon abatement

**eFurnace**

Demonstration plant built in Ludwigshafen with SABIC and Linde in final stage of completion; testing of heating concepts to start in Q1 2024

**Water electrolysis**

Positive funding decision for 54 MW water electrolysis plant in Ludwigshafen (Hy4Chem-EI) granted in November 2023; startup planned in 2025

**CCS projects**

BASF and Yara evaluating world-scale blue ammonia project using CCS in the United States

CCS project to reduce BASF’s CO₂ emissions in Antwerp by 1 million tons per year slated for startup in 2027

---

1 Supported by the Federal Ministry for Economic Affairs and Climate Action (BMWK) and funded by the European Union
2 Supported by the Federal Ministry for Economic Affairs and Climate Action (BMWK) and the State of Rhineland-Palatinate
3 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

**Scope 1 + 2**
Emissions caused by own operations

- TÜV-certified
- Meets ISO standards
- Calculates product carbon footprints cradle-to-gate

**Customer benefits**
- Transparency on CO₂ emissions
- Identification of main reduction levers
- Certified software
- Transparent documentation
We have a solid foundation for primary Scope 3.1 emission data

BASF’s CO₂e emissions from raw material purchase 2022

- Supplier CO₂ 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 2,000 suppliers have been approached, accounting for ~70% of our relevant Scope 3.1 emissions
- We have now validated primary data for more than 25% of our relevant Scope 3.1 emissions
- We will make PCFs a buying criterion to reduce our Scope 3.1 emissions and thus the PCF of our sales products

~70% addressed by outreach

Total 51 million metric tons

1 Greenhouse gas protocol Scope 3.1: Purchased goods and services: 51 million metric tons CO₂e, thereof 3 million metric tons from technical goods and services (not in scope of Supplier CO₂ Management Program) and from battery materials
Our new targets: Reduce specific Scope 3.1 emissions by 15% by 2030 and achieve net-zero Scope 3.1 emissions by 2050

1 Corresponds to a reduction from 1.57 to 1.34 kilograms of CO₂e per kilogram of raw material bought; calculated on the basis of relevant Scope 3.1 emissions of 48 million metric tons.
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 42% to more than 50% by 2030

Forecasted 2023 TripleS sales
Billion €

- Not assessed: ~€2bn
- Challenged: ~€1bn
- Monitored: ~€5bn
- Standard: ~€25bn
- Contributor: ~€9bn
- Pioneer: ~€15bn
- Sustainable-Future Solutions: ~€57 billion (~80% of 2023 sales)

1 Based on lower end of forecast range; not included: platinum group metals within ECMS, strategically non-relevant businesses such as IT services, licenses, etc.

1 "Other" comprises Health & Safety, Pollution Reduction, Biodiversity, Water Protection and Zero Hunger

2 42% 2023

>50% 2030

Resource Efficiency
Climate Change & Energy
Circularity
Other

We create chemistry
BASF in sustainability ratings and rankings

**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.

**CDP Disclosure Leadership**
In 2022, BASF achieved scores of A in “Water” and A- in “Climate” and “Forests,” thus attaining leadership status in all categories we are participating in.

**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 CO₂ emissions, wastewater and waste as well as occupational health and safety.

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

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

1. At a glance
2. Q3 2023 reporting
3. Measures to increase competitiveness
4. Pushing the transition to a sustainable economy
5. Unique position to capture growth in Asia
6. Battery materials driving electromobility and growth
China is the major growth driver for global chemical production: ~80% of growth will come from Greater China by 2030

Real chemical production\(^1\)

<table>
<thead>
<tr>
<th>Region</th>
<th>2022</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater China</td>
<td>2.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Europe</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>North America</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Middle East, Africa</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Rest of Asia Pacific</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>South America</td>
<td>0.2</td>
<td>0.1</td>
</tr>
</tbody>
</table>

CAGR 2.5%

Share of absolute chemical production growth by region %

- Greater China: 81%
- South America: 2%
- Middle East, Africa: 4%
- Rest of Asia Pacific: 9%
- North America: 4%
- Europe: 0%

Source: BASF \(^1\) 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

- 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 23% EBITDA margin¹ BASF-YPC is one of the most profitable BASF sites
Guangdong is home to key customers from fast-growing industries

CAGR 2015–2022
% p.a.

Strongly growing industrial base¹
Billion $

Largest automotive production, China³
# of motor vehicles built in Guangdong (1,000)

Large chemical production²
Billion $

Steady increase of private consumption⁴
Billion $

Market characteristics⁵

- Nearly 127 million residents in Guangdong province (2022)
- GDP Guangdong (2022): >$1.9 trillion (exceeding Brazil)
- GDP CAGR 2022–2037: ~4.8% p.a.
- Key customer industries: transportation, consumer goods, home and personal care, electronics
- Chemical products are generally undersupplied from local production

¹ Industry real output, 2015-based. Guangdong Bureau of Statistics
² Real chemical gross output, 2015-based, inferred by gross output/value added ratio for China, Guangdong Bureau of Statistics
³ Guangdong Bureau of Statistics
⁴ Real private consumption, 2015-based. National Bureau of Statistics with S&P Global forecast, subject to retrospective revision
⁵ Guangdong Bureau of Statistics, S&P Global
Location in Zhanjiang enables BASF to capture long-term profitable growth in the fastest growing chemical market worldwide

- **Customers:** Proximity to the economic centers of China’s fastest growing province Guangdong; shortest sea routes to Southeast Asia
- **Excellence in production:** Integrated Verbund platform, cutting edge technologies, smart solutions, deep seaport, world-class logistics
- **Developing downstream value chains:** BASF will focus on products that are in high demand, with options for further expansion
- **Differentiating from competitors beyond products:** Front-runner position in sustainability and circular economy
- **Leveraging industry ecosystems:** BASF will benefit from collaborations with neighbors and government incentives
- **Foreign trade advantages:** Guangdong province intends to set up Donghai Island as a free trade zone

The inset illustration is indicative and is not an accurate map of the depicted area.
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

Engineering plastics and thermoplastic polyurethanes

Phase 1
start-up: as of 2025

Heart of the Verbund: Petrochemicals plus further downstream plants

Steam cracker

C2 value chain
C3 value chain
C4 value chain

Phase 2
start-up: as of 2028

Verbund expansion and diversification

Additional downstream plants

Update on progress

- First downstream plants started up in August 2022 and in September 2023
- The construction of the core of the Verbund is in full swing
- Stepwise construction approach allows for flexibility, especially with regard to phase 2

Backward integrated into world-scale upstream plants to achieve Verbund synergies in downstream value chains
Verbund site Zhanjiang uses latest technologies to reduce CO₂ footprint compared with standard gas-powered petrochemical site

Projected CO₂ emissions of BASF at Verbund site in South China
Million metric tons

1.8

Accelerated supply of 100% renewable electricity targeted

1.8

Phase 1 full start-up

2050 net zero

6–9

4.1

Cracker Verbund integration

Syngas incl. CO₂ recycling

Cracker eDrive

Power supply

Renewable energy

Coal-powered petrochemical site of similar scope

Gas-powered petrochemical site
Key financials of BASF’s new Verbund site in Zhanjiang

Projected key financials by 2030

- **€4.0–5.0 billion** sales
- **€1.0–1.2 billion** EBITDA
- **Up to €10 billion** total capital expenditure (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.
BASF’s new Verbund site in Zhanjiang: Key takeaways

China’s macroeconomic environment is robust and develops toward more self-sufficiency and sustainability.

Guangdong province is the economic growth engine of China and a powerhouse of BASF’s key customer industries.

BASF is very well positioned to capture future growth in China by leveraging its unique Verbund know-how and longstanding relationships.

BASF has a proven track record of strong top line and earnings growth in Greater China.

The new Verbund site will be a key platform for long-term profitable and sustainable growth of BASF Group.
1. At a glance
2. Q3 2023 reporting
3. Measures to increase competitiveness
4. Pushing the transition to a sustainable economy
5. Unique position to capture growth in Asia
6. Battery materials driving electromobility and growth
The automotive industry is in the middle of a major transformation toward electromobility

By 2030, we expect that >45% of all new cars will be BEVs and PHEVs with China and Europe representing >70% of global demand.
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.

1 Only representative for relative change in projected sales
2 Emission catalyst vs. cathode active material (both incl. metals)
The CAM market will grow by ~24% per year and reach a total size of 7,700 kt by 2030

Global CAM market forecast\(^1\)

kt

Rapid growth of global EV demand …

... accelerates the need for global CAM capacity investments and …

... 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

\(^1\) 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 February 2023
Product innovation enables the broadest CAM portfolio in the industry, and we continue to add new solutions.

**HED™ products**
- High energy density NCA and NCM cathode materials
- Ni content ranging from 60% to >90%
- Already used in xEV applications today

**Ultra-high Ni**
- Ultra-high Ni CAM, ≥220 Ah/kg
- Ni >90%, Co <5%
- Up to stabilized LNO
- Pushing boundaries for high-performance applications

**Co-free CAM**
- Ni-rich NMx
- Over-lithiated Mn-rich, e.g., NCM-307
- Focus on lower cost and improved safety
- Candidate for mass market entry due to price advantage

Our technology toolbox offers customized solutions for all cell formats and provides a basis for innovations beyond classical lithium-ion batteries.
BASF has production assets and R&D hubs in close proximity to the most important BEV markets in every region

2012
First CAM production facility in Elyria, Ohio

2018
Second CAM production facility in Battle Creek, Michigan

2015
Foundation of BASF TODA Battery Materials, Japan, with R&D center

2020
BASF and Eramet evaluate nickel-cobalt refining complex in Weda Bay, Indonesia

2021
BASF Shanshan Battery Materials with R&D Center serving the largest battery materials market, China

2022
Intention to acquire land for production (CAM, PCAM) and recycling in Bécancour, Canada

2022–2024
CAM production facility, battery recycling prototype plant and black mass recycling plant in Schwarzheide, Germany

2023
CAM precursor production facility in Harjavalta, Finland

2017
Tripled capacity at BASF TODA Battery Materials in Onoda, Japan

2024
Next capacity increase at BASF TODA Battery Materials in Onoda, Japan

Production sites
Research & development hubs
The Battery Materials business will become a significant earnings contributor to the BASF Group

- 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

>€1.5 billion sales by 2023
>€7 billion sales by 2030

>10% market share targeted

≥30% EBITDA bsi margin (excl. metals)

~€3.5–4.5 billion capital expenditure 2022–2030
BASF Battery Materials – best-in-class CO₂ footprint and closing the loop

- Broad CAM product offering
- Strong IP position
- Extensive R&D capabilities
- Unique expertise in PCAM chemistry
- Make-or-buy optionality with a global production footprint
- Secure supply and backward integration
- High sustainability standards
- Recycling capabilities and closed loop offering
- Up to 25% CO₂ reduction of our CAMs through recycling material

The battery materials and recycling business is set to become one of the key growth engines in BASF’s portfolio, establishing a leading and profitable position.
We create chemistry