BASF Capital Market Story
Dr. Hans-Ulrich Engel, CFO
Berenberg German Corporate Conference USA 2022 (Virtual)
January 11, 2022
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 158 to 166 of the BASF Report 2020. BASF does not assume any obligation to update the forward-looking statements contained in this presentation above and beyond the legal requirements.
Agenda

1. At a glance
2. Strategy implementation in full swing
3. Unique position to capture growth in Asia
4. Battery materials driving electromobility and future growth
5. Pushing the transition to a sustainable economy
6. Reporting
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>+25%</th>
<th>Digitalization:</th>
<th>456 zettabytes in 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driven by the emerging markets</td>
<td>2020 to 2050</td>
<td>Rapid growth in volume of data</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>China the largest market:</th>
<th>~50%</th>
<th>Climate change:</th>
<th>~70% by 2050 (baseline 1990)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of global chemical market</td>
<td>by 2030</td>
<td>Required reduction of greenhouse gas emissions to achieve the 2°C goal</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Circular economy:</th>
<th>~200 million metric tons per year</th>
<th>Electromobility:</th>
<th>~21% per year 2021 to 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-recycled plastics worldwide</td>
<td></td>
<td>Growing demand for battery materials</td>
<td></td>
</tr>
</tbody>
</table>

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

## Unique Verbund concept
- 6 Verbund sites globally
- 241 additional production sites worldwide
- 6.2 million metric tons of CO₂ avoided globally in 2020

## Industry-leading innovation platform
- €2.1 billion R&D expenditures in 2020
- ~10,000 employees in R&D
- Sales of ~€10 billion in 2020 with products launched during last 5 years

## Strong and expanding local presence in fast growing Asian market
- 2 Verbund sites already
- >70 production sites
- €15.4 billion¹ sales in 2020
- Strong volume and earnings development of BASF in Greater China

## Creating value to society and contributing to a sustainable development
- Target: 25% CO₂ emission reduction by 2030 (compared with 2018)²
- We aim to achieve net zero CO₂ emissions² by 2050
- Achieve €22 billion in Accelerator sales by 2025 (2020: €16.7 billion)

## Progressive dividend policy
- Aim to increase the dividend per share every year
- Dividend of €3.30 per share for 2020

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¹ Sales in Asia Pacific by location of customer. Only includes sales from BASF entities fully consolidated according to IFRS 10/11
² The goal includes Scope 1 and Scope 2 emissions. Other greenhouse gases are converted into CO₂ equivalents according to the Greenhouse Gas Protocol
## Our ambitious financial targets

<table>
<thead>
<tr>
<th>Profitable growth</th>
<th>Target</th>
<th>2020 status</th>
<th>SDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieve a return on capital employed (ROCE)(^1) considerably above the cost of capital percentage every year</td>
<td>&gt; 9%</td>
<td>1.7%</td>
<td></td>
</tr>
<tr>
<td>Grow sales volumes faster than global chemical production every year</td>
<td>&gt;-0.4%</td>
<td>-0.5%</td>
<td></td>
</tr>
<tr>
<td>Increase EBITDA before special items by 3% to 5% per year</td>
<td>+3–5%</td>
<td>-10.7%</td>
<td></td>
</tr>
<tr>
<td>Increase the dividend per share every year based on a strong free cash flow</td>
<td>&gt; €3.30</td>
<td>€3.30</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Return on capital employed (ROCE) is a measure of the profitability of our operations. We calculate this indicator as the EBIT generated by the segments as a percentage of the average cost of capital basis.
# Our ambitious non-financial targets

**Effective climate protection**

<table>
<thead>
<tr>
<th>Target</th>
<th>2020 status</th>
<th>SDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 16.4 million metric tons</td>
<td>20.8 million metric tons</td>
<td></td>
</tr>
</tbody>
</table>

We want to **reduce our absolute CO₂ emissions**² by 25 percent by 2030 (development of carbon emissions compared with baseline 2018)³

**We aim to achieve net zero CO₂ emissions**² by 2050

**Resource efficiency and safe production**

<table>
<thead>
<tr>
<th>Target</th>
<th>2020 status</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 0.1</td>
<td>0.3</td>
</tr>
</tbody>
</table>

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

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

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

| 100% | 46.2% |

**Sustainable product portfolio**

<table>
<thead>
<tr>
<th>Target</th>
<th>2020 status</th>
</tr>
</thead>
<tbody>
<tr>
<td>€22.0 billion</td>
<td>€16.7 billion</td>
</tr>
</tbody>
</table>

Achieve **€22 billion in Accelerator sales**⁴ by 2025

**Employee engagement and diversity**

<table>
<thead>
<tr>
<th>Target</th>
<th>2020 status</th>
</tr>
</thead>
<tbody>
<tr>
<td>30%</td>
<td>24.3%</td>
</tr>
</tbody>
</table>

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

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

**Responsible procurement**

| 90% | 80% |

Cover 90% of our relevant spend⁵ with **sustainability evaluations** by 2025

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

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¹ Targets as published in the BASF Report 2020, CO₂ targets updated on March 26, 2021
² The goal includes Scope 1 and Scope 2 emissions. Other greenhouse gases are converted into CO₂ equivalents according to the Greenhouse Gas Protocol.
³ 2030 target compared with 1990: 60% CO₂ reduction
⁴ Products with substantial contribution to sustainability
⁵ Relevant spend; based on risk matrices, purchasers' assessments and other sources
## BASF Group Q3 2021 and Q1–Q3 2021: Financial figures

<table>
<thead>
<tr>
<th>Financial figures</th>
<th>Q3 2021 (million €)</th>
<th>Change +/- (million €)</th>
<th>Q1–Q3 2021 (million €)</th>
<th>Change +/- (million €)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>19,669</td>
<td>5,858</td>
<td>58,822</td>
<td>15,578</td>
</tr>
<tr>
<td>EBITDA before special items</td>
<td>2,771</td>
<td>1,229</td>
<td>9,169</td>
<td>3,819</td>
</tr>
<tr>
<td>EBITDA</td>
<td>2,729</td>
<td>1,685</td>
<td>9,104</td>
<td>4,562</td>
</tr>
<tr>
<td>EBIT before special items</td>
<td>1,865</td>
<td>1,284</td>
<td>6,541</td>
<td>4,094</td>
</tr>
<tr>
<td>EBIT</td>
<td>1,822</td>
<td>4,460</td>
<td>6,449</td>
<td>7,572</td>
</tr>
<tr>
<td>Net income from shareholdings</td>
<td>86</td>
<td>133</td>
<td>110</td>
<td>1,113</td>
</tr>
<tr>
<td>Net income</td>
<td>1,253</td>
<td>3,375</td>
<td>4,625</td>
<td>6,740</td>
</tr>
<tr>
<td>Reported EPS (€)</td>
<td>1.36</td>
<td>3.67</td>
<td>5.03</td>
<td>7.33</td>
</tr>
<tr>
<td>Adjusted EPS (€)</td>
<td>1.56</td>
<td>0.96</td>
<td>5.59</td>
<td>3.48</td>
</tr>
<tr>
<td>Cash flows from operating activities</td>
<td>1,896</td>
<td>-204</td>
<td>3,908</td>
<td>596</td>
</tr>
</tbody>
</table>
Outlook 2021 for BASF Group

<table>
<thead>
<tr>
<th>Outlook 2021</th>
<th>revised forecast</th>
<th>previous forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>€76 billion – €78 billion</td>
<td>€74 billion – €77 billion</td>
</tr>
<tr>
<td>EBIT before special items</td>
<td>€7.5 billion – €8.0 billion</td>
<td>€7.0 billion – €7.5 billion</td>
</tr>
<tr>
<td>ROCE</td>
<td>13.2% – 14.1%</td>
<td>12.1% – 12.9%</td>
</tr>
<tr>
<td>Accelerator sales</td>
<td>€21.5 billion – €22.5 billion</td>
<td>€21 billion – €22 billion</td>
</tr>
<tr>
<td>CO₂ emissions</td>
<td>20.5 – 21.5 million metric tons</td>
<td>20.5 – 21.5 million metric tons</td>
</tr>
</tbody>
</table>

Underlying assumptions for 2021 (previous assumptions in parentheses)

- Growth in gross domestic product: 5.3% (5.5%)
- Growth in industrial production: 6.0% (6.5%)
- Growth in chemical production: 6.0% (6.5%)
- Average euro/dollar exchange rate: $1.20 per euro (unchanged)
- Average annual oil price (Brent): $70 per barrel ($65 per barrel)
BASF’s diversified portfolio with market-oriented segment structure provides resilience and supports customer orientation.

Since July 1, 2021, the division “Dispersions & Pigments” is named “Dispersions & Resins”.

1 Since July 1, 2021, the division “Dispersions & Pigments” is named “Dispersions & Resins”.
### Each segment has a clear and compelling path forward

<table>
<thead>
<tr>
<th></th>
<th>Chemicals</th>
<th>Materials</th>
<th>Industrial Solutions</th>
<th>Surface Technologies</th>
<th>Nutrition &amp; Care</th>
<th>Agricultural Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of sales 2020¹</td>
<td>14%</td>
<td>18%</td>
<td>13%</td>
<td>28%</td>
<td>10%</td>
<td>13%</td>
</tr>
<tr>
<td>EBITDA bsi 2020¹</td>
<td>€1.3 billion</td>
<td>€1.7 billion</td>
<td>€1.2 billion</td>
<td>€1.0 billion</td>
<td>€1.2 billion</td>
<td>€1.7 billion</td>
</tr>
<tr>
<td>Core theme</td>
<td>Verbund</td>
<td>Advanced materials</td>
<td>Additives platform</td>
<td>Surface modification platform</td>
<td>Consumer ingredients</td>
<td>Integrated offering of crop protection, seeds &amp; traits, digital solutions</td>
</tr>
<tr>
<td>Innovation focus</td>
<td>Improved or new processes</td>
<td>Applications, biomaterials</td>
<td>Formulations</td>
<td>Battery materials, surface effects</td>
<td>Biotechnology, formulations</td>
<td>Crop protection, seeds &amp; traits, digital farming</td>
</tr>
<tr>
<td>Capex relevance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M&amp;A relevance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainability</td>
<td>ChemCycling™</td>
<td>Bio-based materials</td>
<td>More from less</td>
<td>Low-emission mobility</td>
<td>Bio-based and natural, traceability</td>
<td>Better with less</td>
</tr>
</tbody>
</table>

¹ Other (sales 2020: €2.4 billion, EBITDA bsi 2020: –€609 million) not depicted on this slide
Our unique Verbund concept is one of BASF’s greatest assets with multiple benefits strengthening the portfolio

- 6.2 million metric tons of CO₂ emissions avoided globally in 2020
- Integration enables drop-in solutions for bio-based and recycled feedstock for low-carbon products
- Leverage technological advantages and innovation across all segments
- Unique expertise in developing and integrating new, low-emission technologies
- Ensure competitive supply of key raw materials and products to all segments while avoiding CO₂ emissions
- Harvest the advantages offered by digitalization across BASF, for example, by calculating product carbon footprints
- Create customer relevance through size and broad portfolio
We operate close to our customers in all regions worldwide

North America
Sales (million €) 15,709
Employees 16,948

Asia Pacific
Sales (million €) 15,406
Employees 17,753

South America, Africa, Middle East
Sales (million €) 4,905
Employees 6,752

BASF sales by industry 2020

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

1 In each case
Use of cash – clear focus on long-term shareholder value

- **Organic growth**
  - €22.9 billion capex budget 2021–2025
  - Proceeds from divestitures to support BASF’s major growth projects
  - Around €2.0 billion in R&D expenses per year

- **Progressive dividend**
  - Aim to increase dividend per share every year
  - Solid balance sheet and strong free cash flow support dividend policy

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

- **Share buybacks**
  - On January 4, 2022, BASF resolved on share buyback program with a volume of up to €3 billion
  - Program shall start in January 2022 and be concluded by the end of December 2023, at the latest

1 Subject to a renewed authorization to repurchase own shares by the Annual Shareholders’ Meeting of BASF SE on April 29, 2022.
BASF Group: High capex discipline in ongoing business to support investments in growth projects

Capex budget by type of investment billion €, 2021–2025

Investments in ongoing business

- **Zhanjiang Verbund site**
  - €22.9 billion, thereof €3.6 billion in 2021
- **Battery materials**
  - Average capex ~€2.0 billion p.a.
  - Average capex ~€2.6 billion p.a.

Growth project: Zhanjiang Verbund site

Growth project: Battery materials
BASF’s industry-leading innovation platform ensures long-term organic growth

R&D expenses 2020

Key facts 2020

- R&D expenses to sales ratio ~3.5%
- Commitment to R&D with annual spending of ~€2.0 billion
- ~10,000 employees in R&D
- ~950 new patents filed in 2020
- Research Verbund: 8 Academic Research Alliances are complemented by cooperations with ~250 universities and research institutes
- ~€10 billion sales generated from R&D activities with products launched during last 5 years
- Accelerator sales of €16.7 billion in 2020; €22 billion in Accelerator sales targeted by 2025
- Peak sales potential of BASF’s Agricultural Solutions innovation pipeline of >€7.5 billion between 2020 and 2030
Attractive shareholder return – also in challenging times

Key facts 2020
- Stable dividend of €3.30 per share
- Total dividend payment of €3.0 billion
- Dividend yield of 5.1% based on the share price of €64.72 at year end 2020
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2. Strategy implementation in full swing

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Excellence Program 2019–2021: On track to achieve the targeted annual EBITDA contribution

Key measures:

- Operational excellence with focus on production, logistics and planning
- Organizational development targeting leaner structures in the areas of services, headquarters and R&D
  - Personnel cost savings: reduction of ~5,600 positions globally achieved by the end of 2020; around 7% of the personnel reduction delayed into 2021
  - Increased process efficiency, e.g., in procurement
  - R&D cost reduction via focusing budgets

- Run rate; 2 One-time costs in the respective year
We have consistently refocused our portfolio towards innovative growth businesses\(^1\)

**Acquisitions**
- Functional crop care
- Personal care and food ingredients
- Omega-3 fatty acids
- Enzymes
- Battery materials
- Specialty plastics
- Refinish coatings
- Surface treatment
- Seeds and crop protection
- Polyamide business

~€9.5 billion sales in emerging and innovation-driven businesses

**BASF core business**

**Selected transactions 2010–today**

**Divestitures**
- Styrenics
- Fertilizers
- Natural gas trading and storage
- Custom synthesis business
- Textile chemicals
- Polyolefin catalysts
- Industrial coatings
- Leather chemicals
- Water and paper chemicals
- Oil & gas
- Construction chemicals
- Pigments business

~€29.7 billion sales in businesses with decreased differentiation potential

\(^1\) Selected, closed transactions 2010–today
Recent portfolio measures: Acquisitions

**BASF and Shanshan formed a joint venture for battery materials production in China**

- BASF holds 51% and Shanshan 49% in BASF Shanshan Battery Materials Co., Ltd.
- BASF investment in a mid-triple-digit million-euro range
- BASF Shanshan Battery Materials operates four production sites for CAM and PCAM in China, with an annual capacity of 90 kt by 2022
- By forming the JV, BASF further strengthened its position in Asia and is increasing its global annual capacity to 160 kt by 2022 with further expansions underway
- Closing took place on August 31, 2021

**BASF acquired 49.5% of the offshore wind farm Hollandse Kust Zuid (HKZ) from Vattenfall**

- Once fully commissioned HKZ will be the largest offshore wind farm in the world with a total installed capacity of 1.5 gigawatts
- BASF will use the zero-emission electricity for its sites in Europe, mainly in Antwerp, Belgium
- Purchase price of €0.3 billion, BASF’s initial total commitment is ~€1.6 billion; closing took place on September 1, 2021
- BASF to sell 25.2% of the offshore wind farm HKZ to Allianz; closing of the transaction with Allianz expected in Q1 2022
Recent portfolio measures: Divestitures

DIC acquired BASF’s pigments business

- Sales 2018: ~€1 billion
- BASF and DIC reached an agreement on the acquisition of BASF’s pigments business in August 2019
- Purchase price of €1.15 billion\(^1\)
- Closing took place on June 30, 2021

BASF and Clayton, Dubilier & Rice to sell Solenis to Platinum Equity

- Sales 2020\(^2\): $2.8 billion
- Enterprise value: $5.25 billion for Solenis, which includes net debt of around $2.5 billion
- BASF holds 49% of the shares in Solenis; 51% of the shares are held by Clayton, Dubilier & Rice and the Solenis management
- Closing took place on November 9, 2021

Initial public offering of Wintershall Dea

- Sales 2020: ~€3.6 billion
- Merger took place on May 1, 2019
- Realization of synergies on track, integration completed
- Initial Public Offering planned beyond 2021, subject to market conditions

\(^1\) On a cash and debt-free basis
\(^2\) Fiscal year ending September 30, 2020
Clear acquisition criteria

**Strategic acquisition criteria**

We want to acquire businesses which …

- create more value as part of BASF’s Verbund
- help achieve relevant market positions
- drive innovation or technological differentiation
- enable new and sustainable business models

**Financial acquisition criteria**

We want to acquire businesses which …

- provide a return on capital employed above the WACC after full integration into BASF Group
- are EPS accretive by year three at the latest
- contribute to growth of EBITDA before special items
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China is the major growth driver for global chemical production: Two thirds of growth will come from Greater China by 2030

Real chemical production\(^1\)

<table>
<thead>
<tr>
<th>Region</th>
<th>2020</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>South America</td>
<td>0.7</td>
<td>0.2</td>
</tr>
<tr>
<td>Middle East, Africa</td>
<td>0.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Rest of Asia Pacific</td>
<td>0.5</td>
<td>1.9</td>
</tr>
<tr>
<td>North America</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Europe</td>
<td>4.0</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Share of absolute chemical production growth by region %

- Greater China: 68%
- South America: 2%
- Middle East, Africa: 4%
- Rest of Asia Pacific: 13%
- North America: 6%
- Europe: 8%

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 towards 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 margin**1 BASF-YPC is one of the most profitable BASF sites

1 Average 2015–2020
Guangdong is home of key customers from fast-growing industries

CAGR 2015–2020
% p.a.

Strongly growing industrial base\(^1\) billion US$

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

Large chemical production\(^2\) billion US$

Steady increase of private consumption\(^3\) billion US$

Market characteristics

- Around 126 million residents in Guangdong province (2020)\(^4\)
- GDP Guangdong (2020): ~US$1,608 billion (closely trailing South Korea)
- Key customer industries: transportation, consumer goods, home and personal care, electronics
- Chemical products are generally undersupplied from local production

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\(^1\) Real value added, manufacturing Guangdong
\(^2\) Real chemical production Guangdong; inferred by gross output/value added ratio for China
\(^3\) Real private consumption Guangdong; IHS forecast
\(^4\) General Office of Shenzhen Municipal People’s Government
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
Main construction phases of the new Verbund site – 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

Engineering plastics and thermoplastic polyurethanes
Steam cracker
- C2 value chain
- C3 value chain
- C4 value chain
Additional downstream plants

Key customer industries
- Transportation
- Electronics
- Consumer goods
- Health and nutrition

Production plants of the initial phase can operate without integration, while phase 1 and 2 will form the foundation for the development of the BASF Verbund site.
BASF’s Zhanjiang Verbund site will have the lowest projected CO₂ footprint in the world

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

- Coal-powered petrochemical site of similar scope
- Gas-powered petrochemical site
- Syngas incl. CO₂ recycling
- Cracker Verbund Integration
- Power supply
- eDrive
- 6–9
- 4.2
- 1.8
- Power supply rest of site Renewable energy
- Transformation to net zero 2050
- 2030
- 2050 net zero
### Key financials of BASF’s new Verbund site in Zhanjiang

**Projected key financials by 2030**

<table>
<thead>
<tr>
<th>Sales</th>
<th>€4.0–5.0 billion</th>
<th>€1.0–1.2 billion</th>
<th>€8.0–10.0 billion (peak: 2023–2025)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- 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 towards 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.
**Agenda**

1. At a glance
2. Strategy implementation in full swing
3. Unique position to capture growth in Asia
4. Battery materials driving electromobility and future growth
5. Pushing the transition to a sustainable economy
6. Reporting
The automotive industry is in the middle of a major transformation towards electromobility

By 2030, we expect that >30% 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.

Main contributors\(^1\)

\(^1\) Only representative for relative change in projected sales

\(^2\) Emission catalyst vs. cathode active material (both incl. metals)
The market for CAM will grow by ~21% per year and reach a total size of 4,200 kt by 2030

Global CAM market forecast\(^1\)

<table>
<thead>
<tr>
<th>Year</th>
<th>CAM Market Size (kt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>750</td>
</tr>
<tr>
<td>2025</td>
<td>2,000</td>
</tr>
<tr>
<td>2030</td>
<td>4,200</td>
</tr>
</tbody>
</table>

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 size expected to reach €100 billion by 2030, driven by battery performance, safety and cost aspects – which are all key parameters for BEVs

\(^1\) All applications (e-mobility, energy storage systems, consumer electronics) and all cathode chemistries
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.
- **2020**: Production sites in China.
- **2021**: BASF Shanshan Battery Materials, serving the largest battery materials market, China.
- **2022**: CAM precursor production in Harjavalta, Finland planned.
- **2022**: CAM production and recycling prototype plant (2023) planned in Schwarzheide, Germany.
- **2022**: R&D center in Shanghai, China.
- **2022**: Europe greenfield production under construction.
- **2015**: Foundation of BASF TODA Battery Materials, Japan, with R&D center.
- **2017**: Tripled capacity at BASF TODA Battery Materials in Onoda, Japan.
- **2020**: BASF and Eramet to assess nickel-cobalt refining complex in a feasibility study in Weda Bay, Indonesia.

Production sites:
- First CAM production facility in Elyria, Ohio.
- Second CAM production facility in Battle Creek, Michigan.
- R&D centers in Beachwood, Ohio, Ludwigshafen, Germany, Shanghai, China.
- Production sites in Schwarzheide, Germany, Harjavalta, Finland, etc.

Research & development hubs:
- R&D center in Ludwigshafen, Germany.
- R&D center in Shanghai, China.
- R&D centers in Beachwood, Ohio, and Ludwigshafen, Germany.
As a result of our holistic approach, we can offer CAM products with best-in-class CO₂ footprint with further reductions planned.

By 2022, BASF’s CAM related CO₂ burden will be 40% below benchmark players and >70% lower than worst-in-class CAM producers once targeted set-up is in place.

---

1 Assumption: 100 kWh = 125kg CAM material per car and a lifetime of 200,000 km
2 Conventional and state-of-the-art NCM 811 numbers are calculated based on bill-of-material data from Argonne, 2018 (GREET-model) with German and Chinese electricity grid mix datasets from Sphera
3 Combined heat and power plant, based on natural gas
The Battery Materials business will become a significant earnings contributor to the BASF Group

- >€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

- 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
Battery Materials business is set to become one of the key growth engines in BASF’s portfolio, establishing a leading and profitable position.

BASF Battery Materials: Key takeaways

- Best-in-class CO₂ footprint
- Closing the loop
- Domestic sourcing and production
- Secure and sustainable supply
- Recycling capabilities
- Most CO₂ competitive source for metals
- 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
- Recycling capabilities
- Most CO₂ competitive source for metals

Formula for success
1  At a glance

2  Strategy implementation in full swing

3  Unique position to capture growth in Asia

4  Battery materials driving electromobility and future growth

5  Pushing the transition to a sustainable economy

6  Reporting
Our commitments to reaching the Paris Climate Agreement

2030
25% CO₂ emissions reduction (compared with 2018)

2050
net zero CO₂ emissions

1 Scope 1 and Scope 2; 2030 target compared with 1990: 60% CO₂ reduction
Our path to reduce BASF emissions from 2018 to 2030

BASF greenhouse gas emissions (Scope 1 and Scope 2) 2018–2030

CO₂ reduction in business as is 2018

- Grey-to-green
- Power-to-steam
- New technologies
- Bio-based feedstocks
- Opex
- Temporary measures

CO₂ increase from growth

- Growth (organic, inorganic)
- Verbund site South China

2018

21.9

2030

25%

50%

Business as is 2018

Verbund site
South China

January 2022 | BASF Capital Market Story
Our path to reduce BASF emissions from 1990 to 2050

BASF greenhouse gas emissions (Scope 1 and Scope 2) 1990–2050

- **CO₂ reduction in business as is 2018**
  - Grey-to-green
  - Power-to-steam
  - New technologies
  - Bio-based feedstocks
  - Opex
  - Temporary measures

- **CO₂ increase from growth**
  - ~75%
  - Business as is 2018
  - ~60%
  - 2030
  - 100%
  - 2050

- Growth (organic, inorganic)
- Verbund site South China
- Temporary measures
- New technologies
- Bio-based feedstocks
- Power-to-steam
- Grey-to-green
No downstream decarbonization without upstream decarbonization

BASF greenhouse gas emissions 2018
million metric tons per year

Global GHG emissions
Scope 1+2

22

Energy production

11

Electric power
Grey-to-green

Steam
Power-to-steam

Chemical production

11

Energy production

5

Chemical production

9

Upstream
New technologies

Downstream
Bio-based feedstocks

Continuous opex

1 Includes emissions from process energy
2 Operational excellence measures
BASF, SABIC and Linde join forces to realize the world’s first electrically heated steam cracker furnace

- Goal is to drive concepts and faster implementation through combined strengths
  - BASF and SABIC: extensive know-how and intellectual property in developing chemical processes; long-standing experience and knowledge in operating steam crackers
  - Linde: expertise and intellectual property in developing and building steam cracking furnace technologies and driving future industry commercialization
- Construction of a demonstration plant depending on funding granted – application for grants from German funding program “Decarbonization in Industry”
- If funding is granted, startup could happen as fast as 2023
Methane pyrolysis combines low emissions with low energy demand

- **Methane pyrolysis** requires around 80% less electricity than water electrolysis
- **Funding** for pilot reactor was granted by German Federal Ministry of Education and Research
- **Pilot reactor** at the Ludwigshafen site
- Start-up of **first commercial plant** projected for 2030

We have achieved a milestone in scaling up our groundbreaking methane pyrolysis process for hydrogen production
Turning Carbon Management into business opportunities

Cradle-to-gate Product Carbon Footprints for BASF’s portfolio available by end of 2021 based on process emissions, energy demand and upstream emissions.

- 20,000 Raw materials Scope 3
- 700 Production plants Scope 1
- 10 TWh/a Energy Scope 2
- ~45,000 CO₂ Product Carbon Footprints of sales products
What we expect from our suppliers:
Transparency on and reduction of CO₂ emissions

- BASF is establishing certified, full CO₂ tracing (Product Carbon Footprint) and needs transparency from its suppliers for this.
- To support its suppliers and the industry, BASF will share its knowledge to create an international standard for CO₂ transparency tools.
- BASF will work together with its suppliers and expects them to reduce the CO₂ footprint of their products.

BASF will work all levers to reduce CO₂ emissions.
BASF’s Circular Economy Program: Targets

- 250,000 metric tons of circular feedstock by 2025
- Double circular sales to €17 billion by 2030
- Prioritize related capex, M&A, R&D
From a linear to a more circular economy – BASF contribution: ChemCycling™

• Investments into Quantafuel (pyrolysis of mixed plastic waste) and Pyrum (pyrolysis of end-of-life tires) and uptake supply agreements with both companies
• Agreement with New Energy for uptake of pyrolysis oil derived from end-of-life tires and for a joint feasibility study for adaption of technology to other plastic waste streams

ChemCycling™
+ can handle mixed plastic waste
+ produces virgin grade raw materials
+ replaces virgin fossil resources
+ CO₂ emissions prevented¹

Plastic waste and end-of-life tires are converted into liquid feedstock and fed into BASF’s value chains

¹ Compared to conventional plastic production and incineration of plastic waste
Transformation requires a broad technology portfolio

Carbon Management >> Low-CO₂ Bio-based Cycled >> Circular Economy

CO₂ avoidance potential per megawatt hour of electrical energy used (metric tons of CO₂/MWh)
- Methane pyrolysis ~0.9
- Heat pumps ~0.6-1.0
- eDrive NH₃ ~0.7
- eFurnace ~0.2
- Water electrolysis ~0.2

Target: We aim at doubling our circular sales to reach €17 billion by 2030

Focus on closing the loops
- Renewable-based feedstocks
- Recycled-based feedstocks
- Enable recyclability and/or biodegradability
€16.7 billion of BASF Group sales from sustainable solutions – leveraging our innovation power

- Portfolio segmentation: >57,000 specific product applications analyzed by 2020 (€54.1 billion in sales, 98.4% of relevant portfolio\(^1\))
- Accelerator margins on average ~6 percentage points above the rest of assessed portfolio
- Goal: €22 billion of sales with Accelerator products by 2025 (2020: €16.7 billion)
- Stronger integration in R&D pipeline, business strategies and M&A projects
- We will stop selling Challenged products within maximum five years after classification

1 The product portfolio acquired from Bayer has been partially assessed
Innovations for a sustainable future – Accelerator examples

Lipofructyl® Argan LS 9779 – Oil for skin and hair care

Mattex® PRO – Additive in coatings with lower emissions

Serifel® – Biological fungicide against crop diseases

Elastopir® – PIR system with good insulation properties

Tinuvin® NOR® 356 – Light stabilizer to reduce plastic waste

Baxxodur® EC 301 – Epoxy system for cost-competitive wind blades
BASF in sustainability ratings and rankings

**CDP**
In 2021, BASF achieved a score of “A-” in the climate, the forests, and the water categories, thus attaining leadership status in all three categories.

**Sustainalytics**
BASF ranks among the top 10% of performers in diversified chemicals. The raters positively highlighted that sustainability targets are reflected in board compensation, underlining an overall strong management of ESG issues.

**MSCI ESG Research**
In 2021, BASF was rated “A.” The analysts highlighted that BASF is present in clean tech markets and has a robust carbon mitigation strategy.

**FTSE4Good Global Index**
BASF was included again in the FTSE4Good Global Index 2021, ranked best in class in Basic Materials as well as in the sub-sector Commodity Chemicals.

**2021 UN Global Compact**
BASF was recognized as a Global Compact LEAD company for demonstrating ongoing commitment to the UN Global Compact and its Ten Principles for responsible business and the Sustainable Development Goals.
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BASF Group Q3 2021: Sales increased considerably, mainly due to higher prices and volumes

Sales bridge Q3 2021 vs. Q3 2020

Sales development

Q3 2021 vs. Q3 2020

- Volumes: +6%
- Prices: +36%
- Portfolio: -1%
- Currencies: +1%
- Q3 2021: +42%
BASF Group Q3 2021: Strong earnings in upstream business, while price increases in downstream business were not yet sufficient

EBIT before special items growth by segment Q3 2021 vs. Q3 2020

EBIT before special items by segment

<table>
<thead>
<tr>
<th>Segment</th>
<th>Q3 2021, million €</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemicals</td>
<td>850</td>
</tr>
<tr>
<td>Materials</td>
<td>631</td>
</tr>
<tr>
<td>Industrial Solutions</td>
<td>262</td>
</tr>
<tr>
<td>Surface Technologies</td>
<td>119</td>
</tr>
<tr>
<td>Nutrition &amp; Care</td>
<td>104</td>
</tr>
<tr>
<td>Agricultural Solutions</td>
<td>-90</td>
</tr>
<tr>
<td>Other</td>
<td>-11</td>
</tr>
<tr>
<td>Total</td>
<td>1,865</td>
</tr>
</tbody>
</table>
BASF’s natural gas supply and demand balance in Europe

- **Natural gas demand:**
  - In Europe ~47 TWh, thereof Ludwigshafen ~37 TWh
  - ~60% is used for electricity/steam and ~40% as feedstock

- **Natural gas supply:**
  - Supply secured through long-term supply contracts
  - Pricing predominantly based on spot market prices

- **Natural gas price hedging:**
  - BASF’s natural gas price exposure in Europe is partly compensated by shareholding in Wintershall Dea
  - Remaining exposure is partly hedged through financial instruments

- **Natural gas price burden for European sites:**
  - Additional costs of ~€600 million for our European sites in the first nine months of 2021
  - At BASF Group level, this amount is partly mitigated by the above-mentioned measures
# Cash flow development in Q3 2021 and Q1–Q3 2021

<table>
<thead>
<tr>
<th></th>
<th>Q3 2021 million €</th>
<th>Q3 2020 million €</th>
<th>Q1–Q3 2021 million €</th>
<th>Q1–Q3 2020 million €</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash flows from operating activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash flows from operating activities</td>
<td>1,896</td>
<td>2,100</td>
<td>3,908</td>
<td>3,312</td>
</tr>
<tr>
<td>Thereof Changes in net working capital</td>
<td>-44</td>
<td>767</td>
<td>-2,808</td>
<td>-1,043</td>
</tr>
<tr>
<td>Miscellaneous items</td>
<td>-220</td>
<td>-227</td>
<td>-564</td>
<td>739</td>
</tr>
<tr>
<td><strong>Cash flows from investing activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash flows from investing activities</td>
<td>-1,818</td>
<td>1,851</td>
<td>-1,930</td>
<td>-674</td>
</tr>
<tr>
<td>Thereof Payments made for property, plant and equipment and intangible assets</td>
<td>-819</td>
<td>-736</td>
<td>-2,042</td>
<td>-2,031</td>
</tr>
<tr>
<td>Acquisitions / divestitures</td>
<td>-627</td>
<td>2,697</td>
<td>491</td>
<td>1,452</td>
</tr>
<tr>
<td><strong>Cash flows from financing activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash flows from financing activities</td>
<td>-56</td>
<td>-3,889</td>
<td>-3,490</td>
<td>778</td>
</tr>
<tr>
<td>Thereof Changes in financial and similar liabilities</td>
<td>53</td>
<td>-3,886</td>
<td>-229</td>
<td>3,913</td>
</tr>
<tr>
<td>Dividends</td>
<td>-109</td>
<td>-3</td>
<td>-3,261</td>
<td>-3,139</td>
</tr>
<tr>
<td><strong>Free cash flow</strong></td>
<td>1,077</td>
<td>1,364</td>
<td>1,866</td>
<td>1,281</td>
</tr>
</tbody>
</table>
Chemicals

Sales Q3 2021 vs. Q3 2020
million €

<table>
<thead>
<tr>
<th></th>
<th>Intermediates</th>
<th>Petrochemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>€3,693</td>
<td>1,045</td>
<td></td>
</tr>
<tr>
<td>107%</td>
<td>70%</td>
<td></td>
</tr>
</tbody>
</table>

EBIT before special items
million €

<table>
<thead>
<tr>
<th></th>
<th>Q3 2020</th>
<th>Q4 2020</th>
<th>Q1 2021</th>
<th>Q2 2021</th>
<th>Q3 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIT</td>
<td>46</td>
<td>227</td>
<td>558</td>
<td>990</td>
<td>850</td>
</tr>
<tr>
<td>Volume</td>
<td>2020</td>
<td>2021</td>
<td>2021</td>
<td>2021</td>
<td>2021</td>
</tr>
</tbody>
</table>

Sales development

<table>
<thead>
<tr>
<th></th>
<th>Sales development</th>
<th>Volumes</th>
<th>Prices</th>
<th>Portfolio</th>
<th>Currencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2021 vs. Q3 2020</td>
<td></td>
<td>↑ 12%</td>
<td>↑ 95%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Materials

Sales Q3 2021 vs. Q3 2020
million €

Monomers
2,100
68%

Performance Materials
1,873
50%

EBIT before special items
million €

Sales development
Volumes
Prices
Portfolio
Currencies

Sales Q3 2021 vs. Q3 2020

↑ 7%

↑ 41%

0%

↑ 2%
Industrial Solutions

Sales Q3 2021 vs. Q3 2020

<table>
<thead>
<tr>
<th>Performance</th>
<th>Chemicals</th>
<th>Dispersions &amp; Resins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Q3 2021 vs. Q3 2020</td>
<td>806</td>
<td>1,399</td>
</tr>
<tr>
<td></td>
<td>25%</td>
<td>17%</td>
</tr>
</tbody>
</table>

EBIT before special items

<table>
<thead>
<tr>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>186</td>
<td>200</td>
<td>266</td>
<td>307</td>
<td>262</td>
</tr>
</tbody>
</table>

Sales development

<table>
<thead>
<tr>
<th></th>
<th>Volumes</th>
<th>Prices</th>
<th>Portfolio</th>
<th>Currencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2021 vs. Q3 2020</td>
<td>↑ 11%</td>
<td>↑ 18%</td>
<td>↓ -10%</td>
<td>↑ 1%</td>
</tr>
</tbody>
</table>
Surface Technologies

Sales Q3 2021 vs. Q3 2020

<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 2021 vs. Q3 2020</td>
<td>-3%</td>
<td>37%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

EBIT before special items

<table>
<thead>
<tr>
<th>Q3 2021 vs. Q3 2020</th>
<th>Catalysts</th>
<th>€5,631</th>
<th>36%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coatings</td>
<td></td>
<td>838</td>
<td>1%</td>
</tr>
<tr>
<td>Catalysts</td>
<td></td>
<td>4,793</td>
<td>45%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q3 2021</th>
<th>Q4 2021</th>
<th>Q1 2021</th>
<th>Q2 2021</th>
<th>Q3 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>215</td>
<td>360</td>
<td>289</td>
<td>119</td>
</tr>
</tbody>
</table>

2020 2021
Nutrition & Care

Sales Q3 2021 vs. Q3 2020

Nutrition & Health
- Sales: €490 million (0%)

Care Chemicals
- Sales: €1,108 million (12%)

€1,598

EBIT before special items

Q3 Q4 Q1 Q2 Q3

Q3 2021 vs. Q3 2020

<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 2021 vs. Q3 2020</td>
<td>↑ 7%</td>
<td>↑ 7%</td>
<td>↓ -2%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Agricultural Solutions

Sales Q3 2021 vs. Q3 2020
million €

<table>
<thead>
<tr>
<th>Q3 2020</th>
<th>Q3 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,474</td>
<td>1,593</td>
</tr>
</tbody>
</table>

Sales development
Q3 2021 vs. Q3 2020
Volumes
↑ 7%

EBIT before special items
million €

<table>
<thead>
<tr>
<th>Q3 2020</th>
<th>Q3 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>-90</td>
</tr>
</tbody>
</table>

EBIT Q3 2020 vs. Q3 2021
-€116 million

Prices
↑ 1%

Portfolio
0%

Currencies
0%