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BASF's new Verbund site in Zhanjiang

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Chairman of the Board of Executive Directors

BASF Investor Update, September 27, 2021

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The new Verbund site in Zhanjiang

1. **Market environment in China – a robust basis for growth**
2. BASF performance in Greater China – a proven track record
3. Zhanjiang – the location of our new Verbund site in South China
4. The new Verbund site – highly integrated and sustainable
5. Financials and key takeaways

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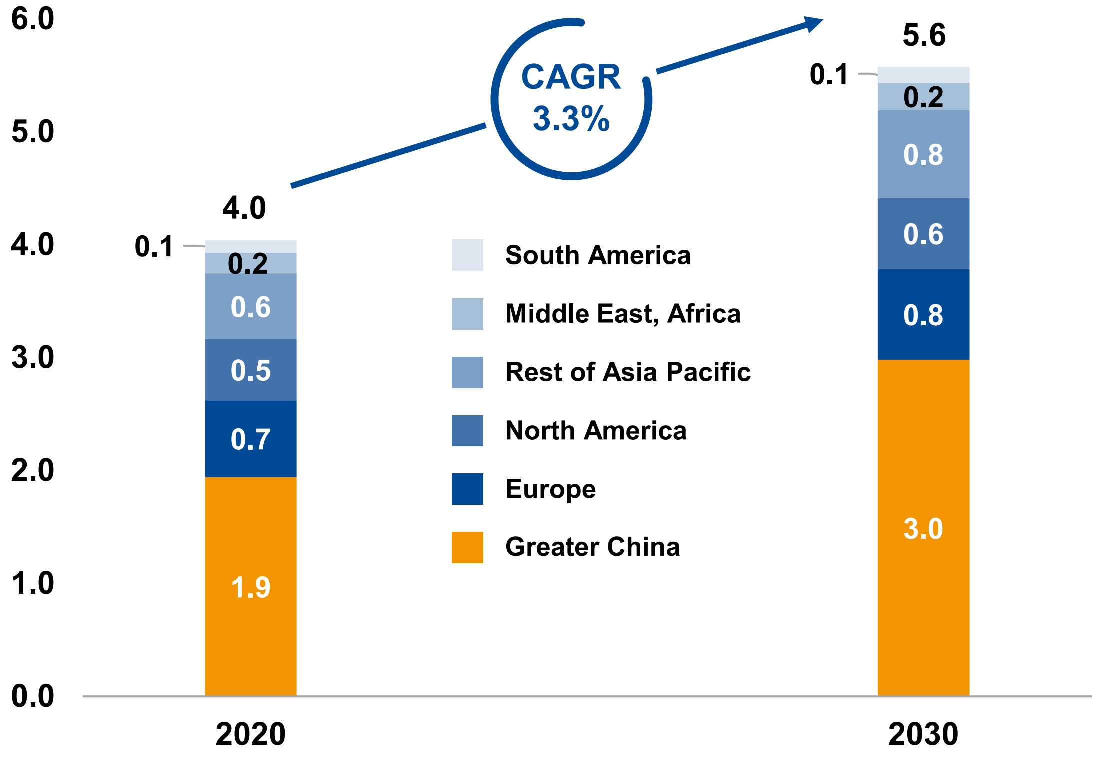
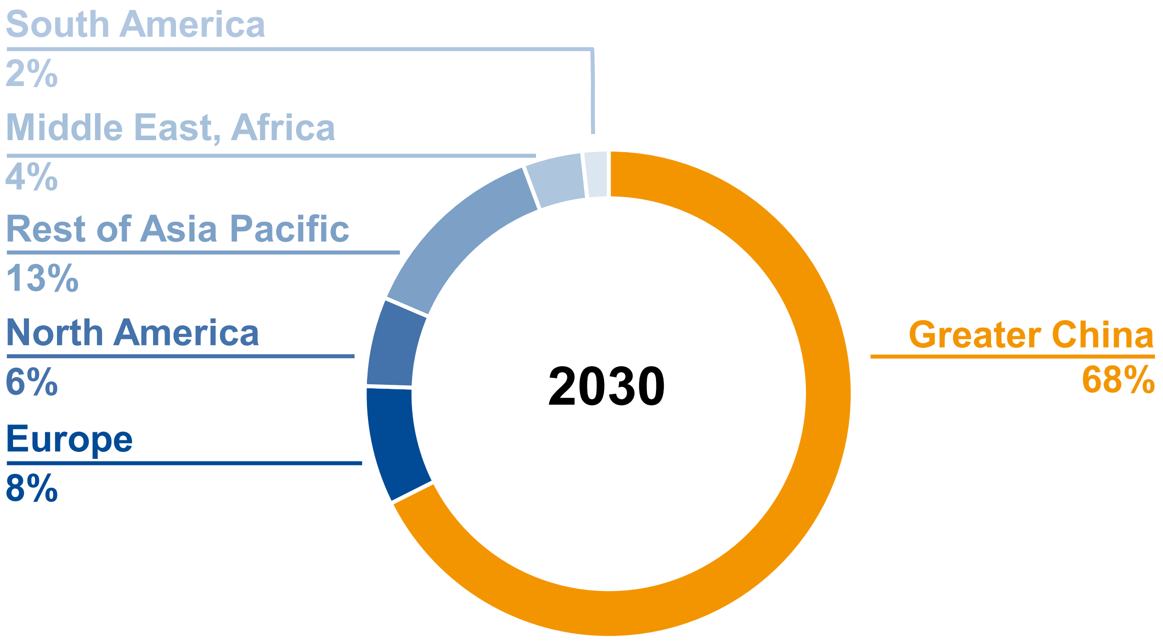
China is the major growth driver for global chemical production: Two thirds of growth will come from Greater China by 2030

Real chemical production[1]
trillion US$



Share of absolute chemical production growth by region
%



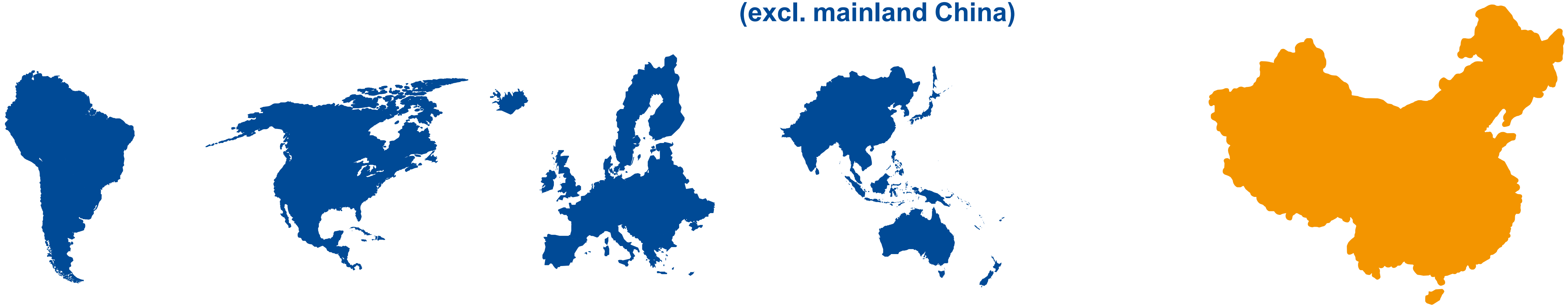
Source: BASF [1] Real chemical production excluding pharmaceuticals, US$ base year 2015
Figures may not add up due to rounding effects.

The absolute growth of the chemical market in China is expected to be twice as high as in the rest of the world

Absolute growth of chemical market 2020–2030[1]

billion US$

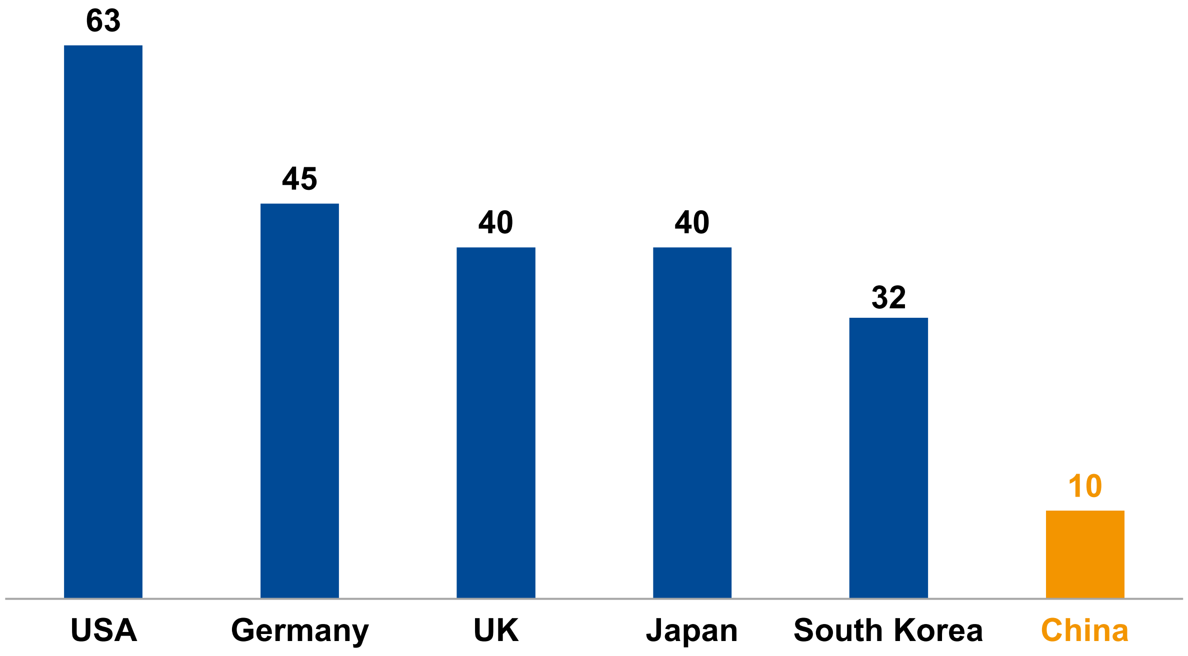
South America	North America	EMEA	Asia Pacific (excl. mainland China)	Mainland China
31	90	183	205	1,026



Source: BASF [1] Real chemical production excluding pharmaceuticals, US$ base year 2015
Maps for illustrative purposes only

Economic drivers for long-term growth in China remain unchanged despite the impact of the pandemic

GDP per capita
2020 estimates, thousand US$



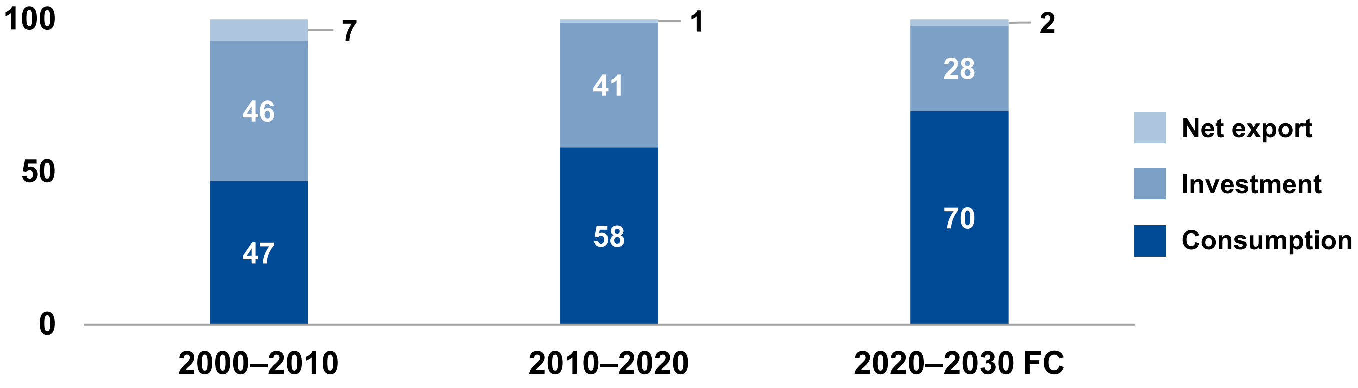
- China will continue to **strive to achieve a per capita GDP level similar to advanced economies**
- Continuing urbanization will drive **increasing demand for durable and consumable goods**
- **Productivity increases** will drive growth
- There will be **high investments in new technologies, sustainability and high value-add industries**

Source: BASF, nominal

China's 14th five-year plan and policy initiatives add momentum to BASF's strategy implementation in China

China's GDP growth: Consumption-driven

%



Innovation-driven development	Dual circulation policy	Opening up to foreign investors
Green agenda	Rural vitalization	Urban development

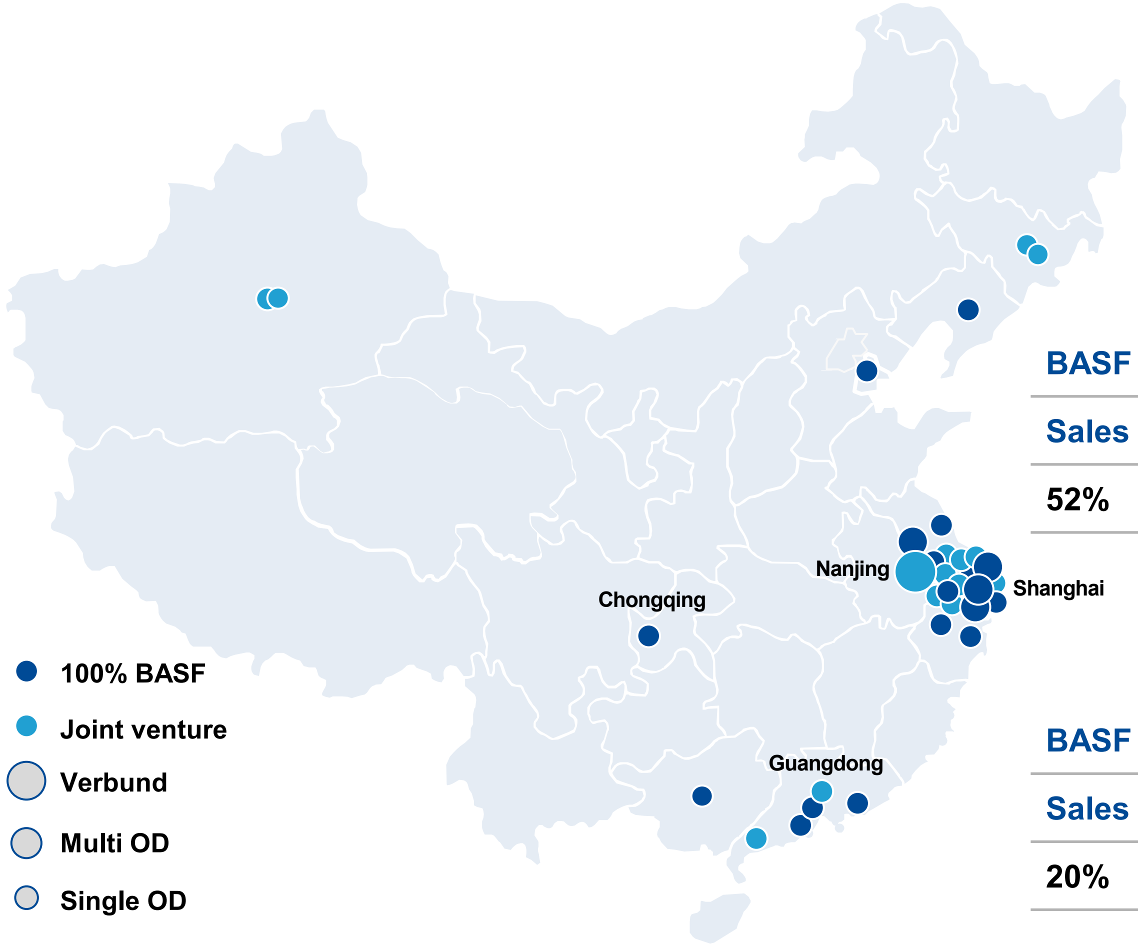
Five-year plan: Self sufficiency and sustainability

BASF is well positioned to benefit from business opportunities in China

- Customer-driven innovations
- Sustainability front-runner
- Local asset and R&D footprint
- Proven track record and strong relationships

Data source: Oxford Economics, calculation based on real 2015 values

Today, 90% of BASF's production assets are in East China, in South China the company is still under-represented



BASF East China

Sales	Assets
52%	90%

BASF South China

Sales	Assets
20%	2%

Key BASF figures in Greater China

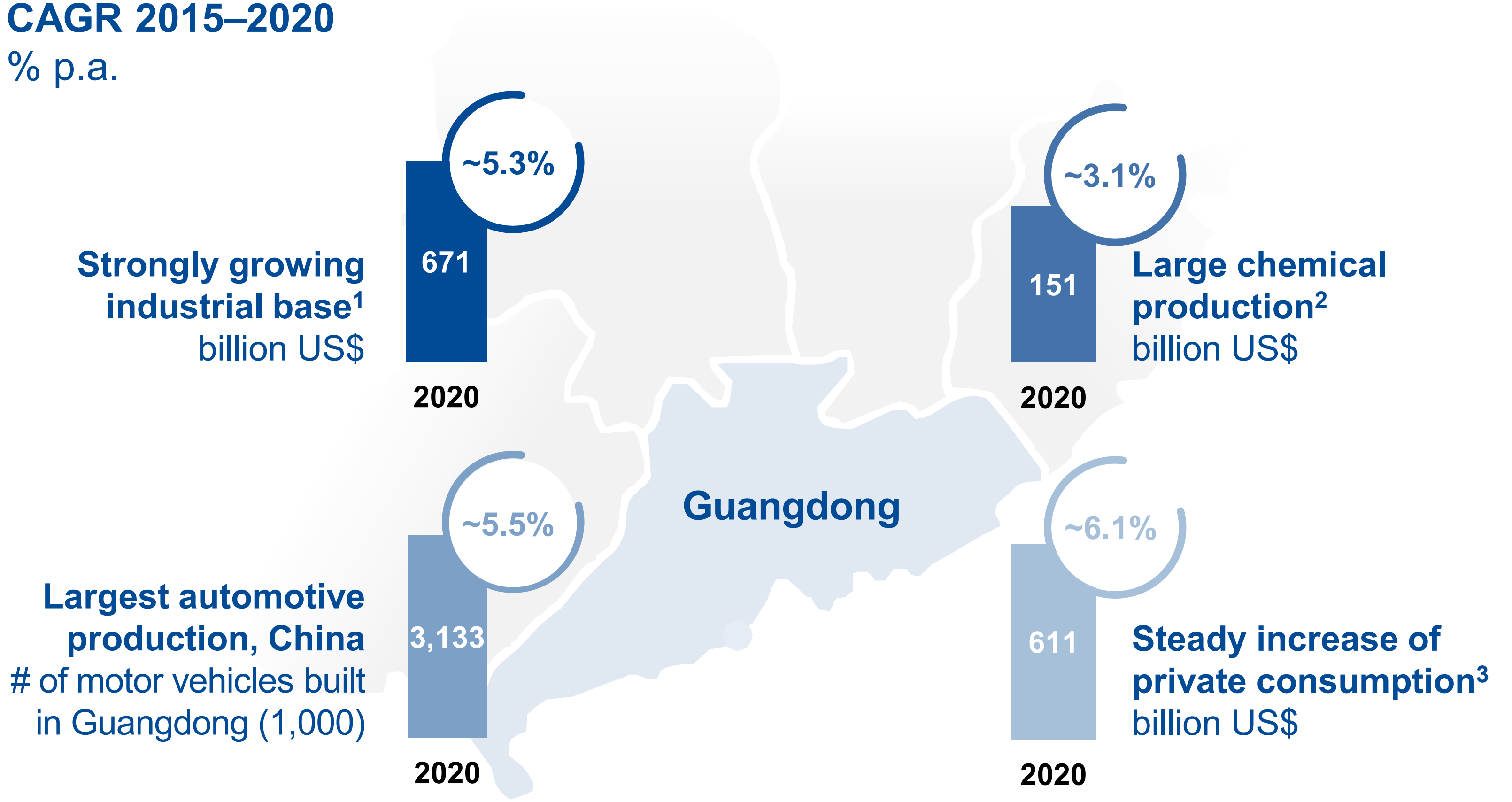
- BASF is active in China since 1885
- Over the past 20 years, BASF has invested more than €6 billion in Greater China (more than €9 billion with partners)
- Number of companies: 28 major wholly-owned, 7 major joint ventures
- Number of production sites: 27
- Number of sales offices: 24
- Number of employees: 8,948
- Sales of BASF Group companies to customers in Greater China in 2020: ~€8.5 billion

All data for Greater China is as of December 31, 2020. Sales of fully consolidated companies only; does not include sales of joint ventures consolidated at equity such as BASF-YPC Company Ltd. (BASF-YPC). EBIT before special items incl. equity contribution from BASF-YPC. Gross asset value and production capacity incl. BASF-YPC

Depicted view of mainland China

Guangdong is home of key customers from fast-growing industries

CAGR 2015–2020
% p.a.



Market characteristics

- Around 126 million residents in Guangdong province (2020)[4]
- GDP Guangdong (2020): ~US$1,608 billion (closely trailing South Korea)
- GDP growth from 2020–2035: 5–6% p.a.
- Key customer industries: transportation, consumer goods, home and personal care, electronics
- Chemical products are generally undersupplied from local production

[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

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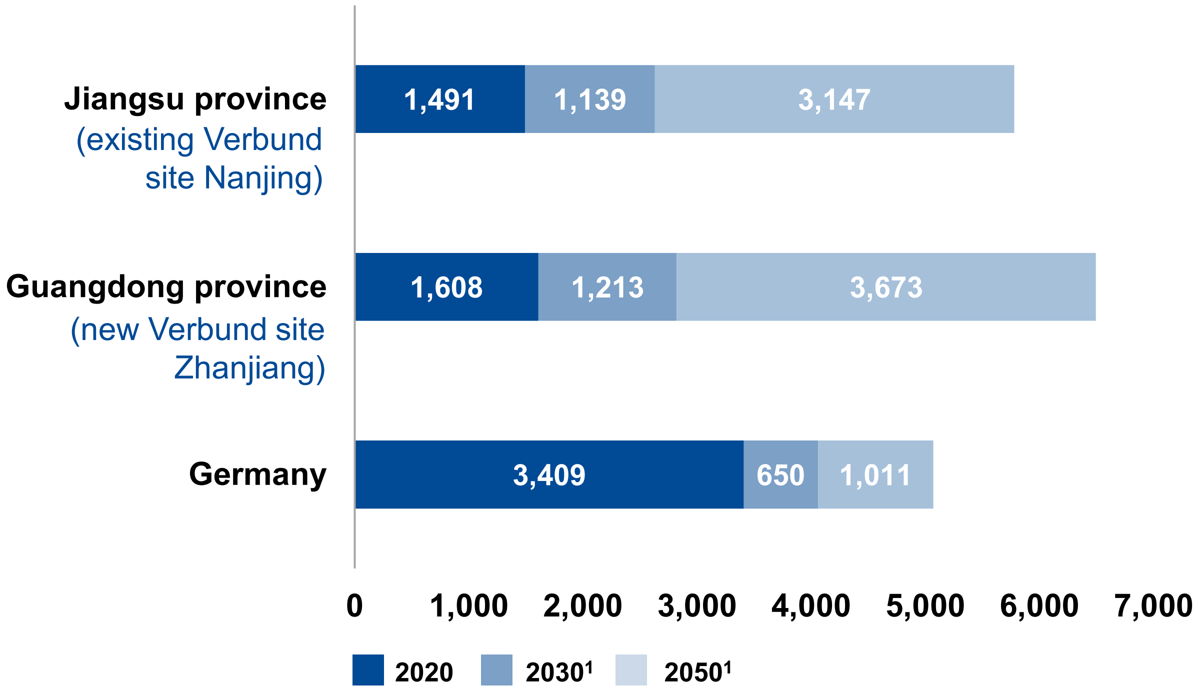
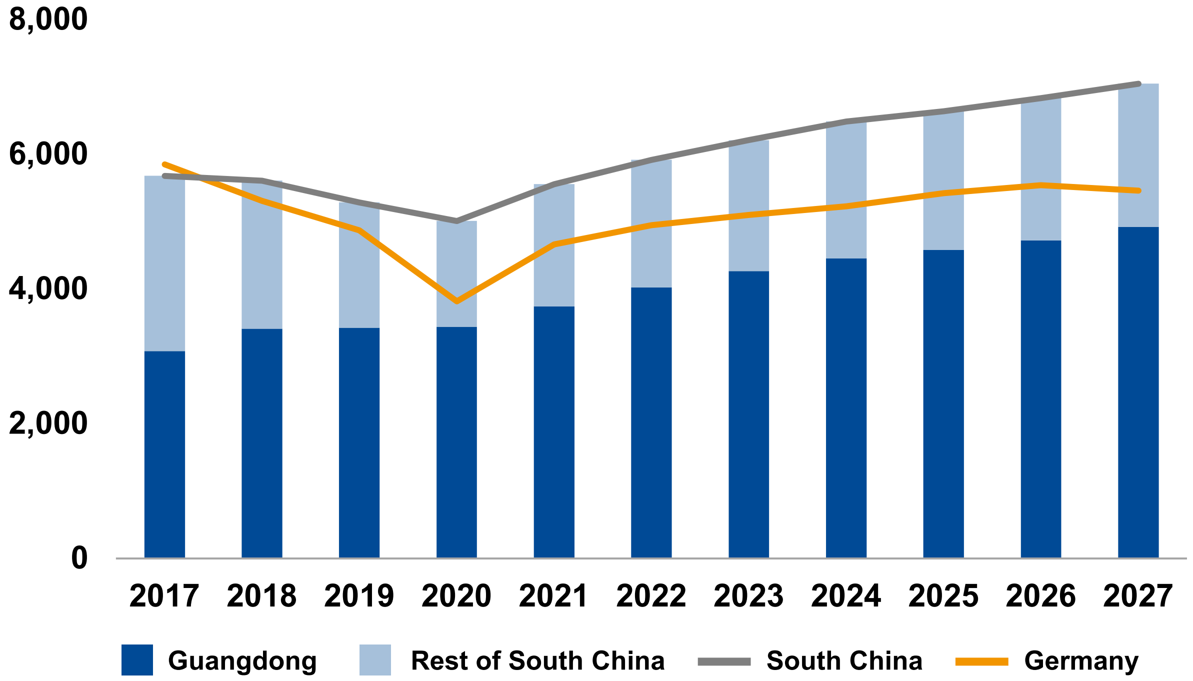
Guangdong province is the economic growth engine of China and a powerhouse of BASF's key customer industries

GDP 2020, growth until 2030 and 2050
billion US$



Light vehicle production in South China and Germany
1,000 units



By 2050, GDP of Guangdong is expected to add more than "one current Germany"

Already today, South China produces more light vehicles than Germany

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Source: IHS and LMC [1] Growth by 2030 and by 2050 respectively

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4 The new Verbund site – highly integrated and sustainable

5 Financials and key takeaways

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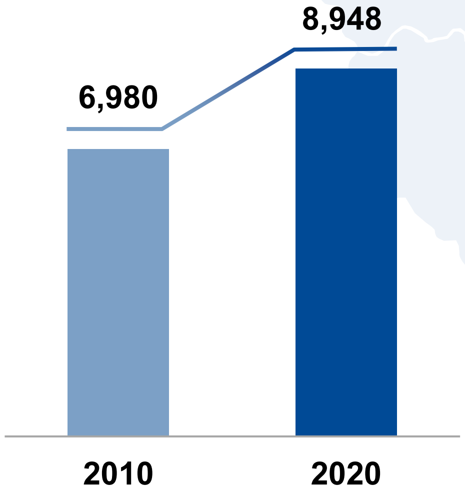
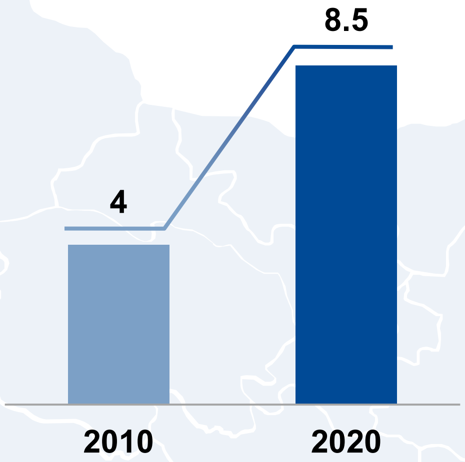
BASF has substantially increased its presence in Greater China

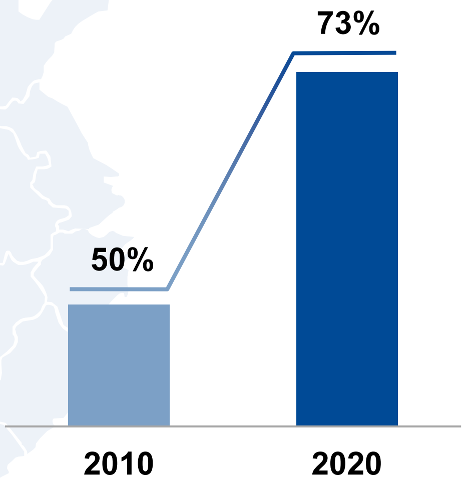
Employees



Sales
billion €



Proportion of sales from BASF's own production in Greater China



As of December 31, 2020. Sales by location of customer of globally consolidated companies (excl. BASF-YPC)
Depicted view of mainland China.

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

- **50:50 joint venture with Sinopec** founded in 2000, start-up in 2005, major expansions in 2011 and 2014
- Scope has **continuously expanded** over the years 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

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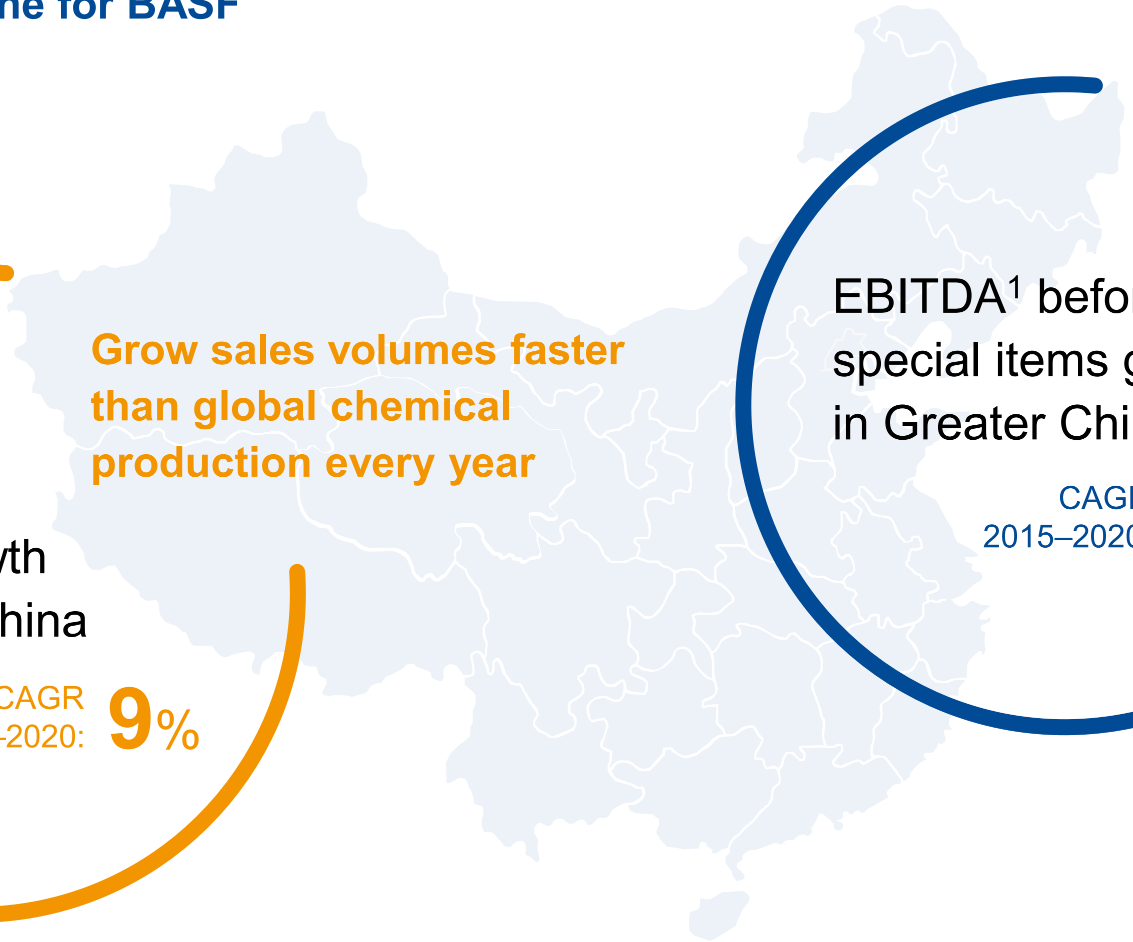
BASF's growth and profitability targets require a strong position in Greater China

Greater China is the growth engine for BASF



BASF's volume growth in Greater China

CAGR 2015–2020: **9%**

Grow sales volumes faster than global chemical production every year

EBITDA[1] before special items growth in Greater China

CAGR 2015–2020: **26%**

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

[1] Restated figures due to reporting of construction chemicals as discontinued operation.
Not included: BASF-YPC as BASF's share is accounted for at-equity
Depicted view of mainland China

The new Verbund site in Zhanjiang

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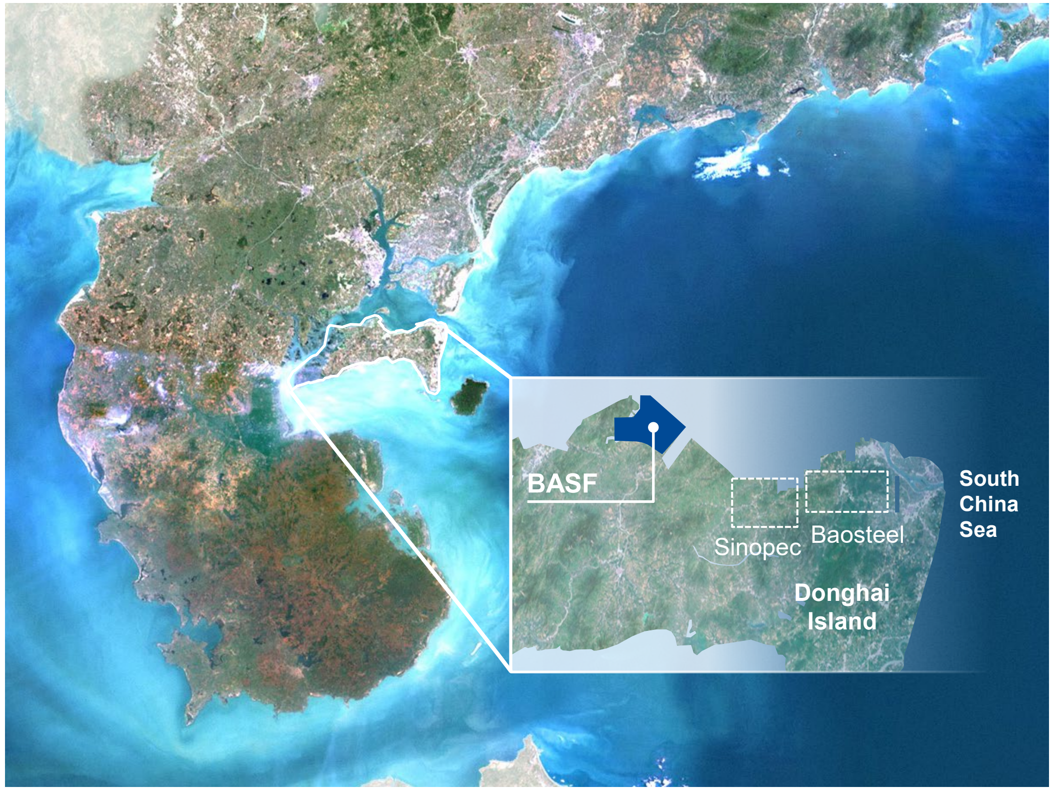
Location in Zhanjiang enables BASF to capture long-term profitable growth in the fastest growing chemical market worldwide



- **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

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Targets and framework conditions for the new BASF Verbund site in Zhanjiang

- **100% BASF ownership** of core Verbund assets
- **High profitability and competitiveness** through world-scale plants
- **World-scale steam cracker** with **flexibility** for major feedstocks
- Building **long, multi-step and diversified value chains** (C2, C3, C4)
- Deployment of **smart and innovative technologies** to set a new benchmark for **sustainability** and **digitalization**
- **Expansion space** for further investment phases

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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

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

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

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

First downstream plants are expected to be operational by 2022 and 2023

- The official start of construction began in less than two years from the signing of the Memorandum of Understanding
- The first plants will produce **engineering plastics** and **thermoplastic polyurethanes** such as
  - ► **Ultramid®**
  - ► **Ultradur®**
  - ► **Elastollan®**
- These products are in strong demand, particularly in the automotive and consumer goods industries

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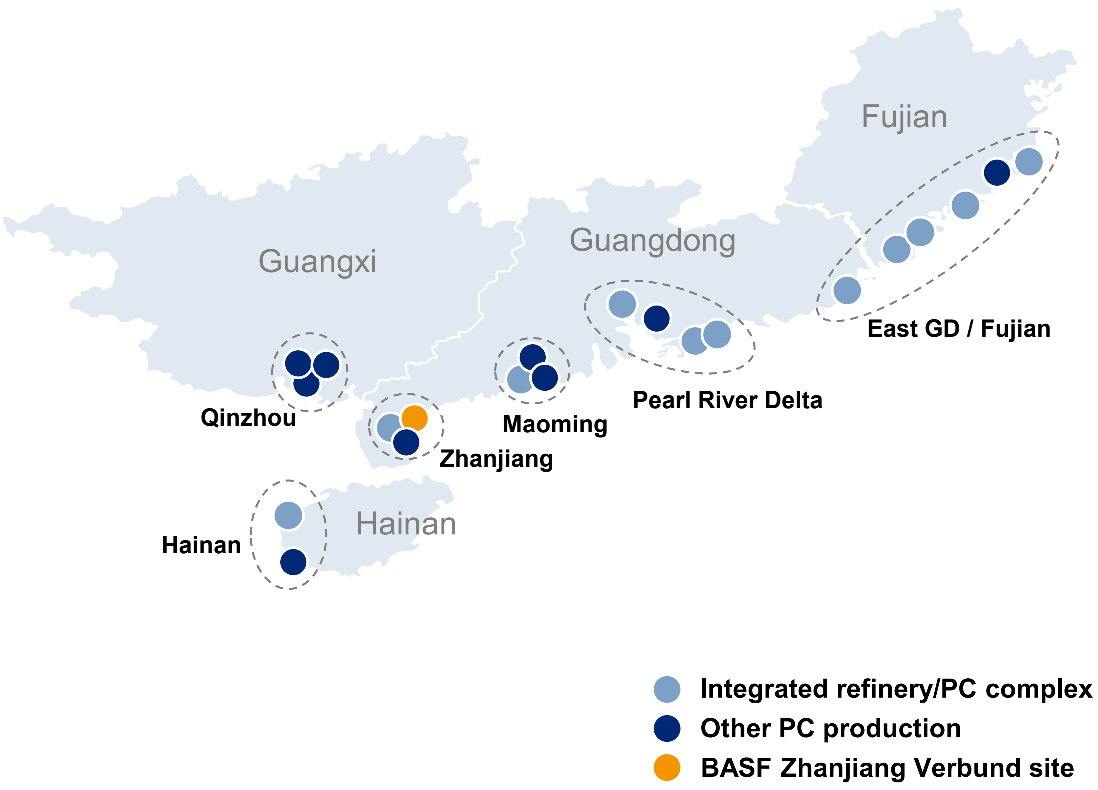
BASF's new Verbund site will offer a broader and more diversified downstream product portfolio than competition

	Product Group[1]	Company[1] A	B	C	D	E	BASF-YPC Nanjing	BASF Zhanjiang
C2	Polyethylene	●	●	●	●	●	●	●
C2	Ethylene oxide		●	●	●	●	●	●
C2	Ethylene glycol		●	●	●	●	●	●
C2	Nonionic surfactants						●	●
C2	Methyltriglycol							●
C2	Styrene monomer	●	●	●	●		●	
C2	Standard amines					●	●	●
C2	Propionic acid						●	●
C2	Specialty amines							●
C3	Polypropylene	●	●	●	●	●		
C3	Propylene oxide		●	●				
C3	Glacial acrylic acid			●			●	●
C3	Superabsorbents						●	
C3	Oxo-C4			●			●	●
C3	n-Butyl acrylate						●	●
C3	2-Ethylhexyl acrylate			●				●
C3	Neopentyl glycol						●	●
C3	Higher carboxylic acids							●
C4	Polyisobutylene						●	
C4	Isononanoic acid				●			●
C4	Tridecanol N							●
C4	C9-aldehyde							●
C4	2-Propylheptanol						●	
C4	Citral							●

South China



Source: BASF and externally published information; products at Zhanjiang subject to final approval

[1] Selected product lines of major refineries/petrochemical sites in Guangdong province

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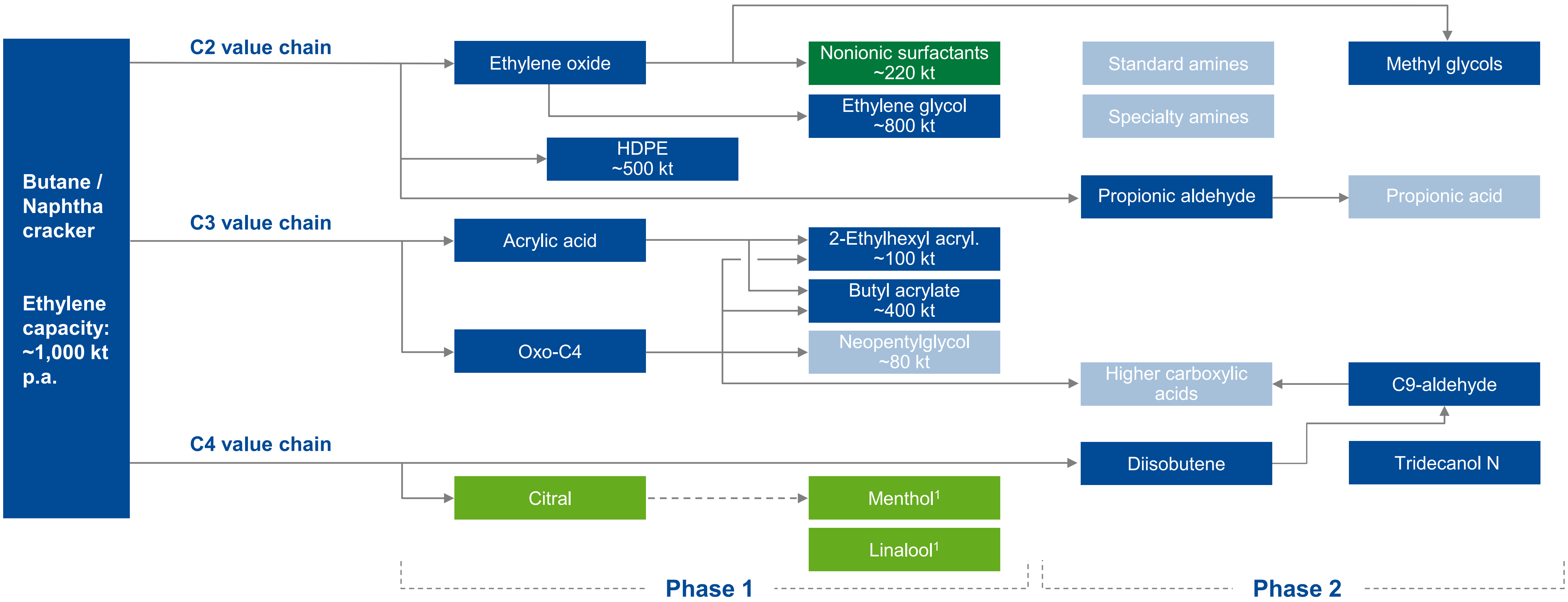
World-scale Verbund site with diversified value chains



Operating divisions

Petrochemicals | Intermediates | Care Chemicals | Nutrition & Health

[1] At Ludwigshafen site
Capacity figures are nameplate and indicative. Projected set-up is subject to final approval

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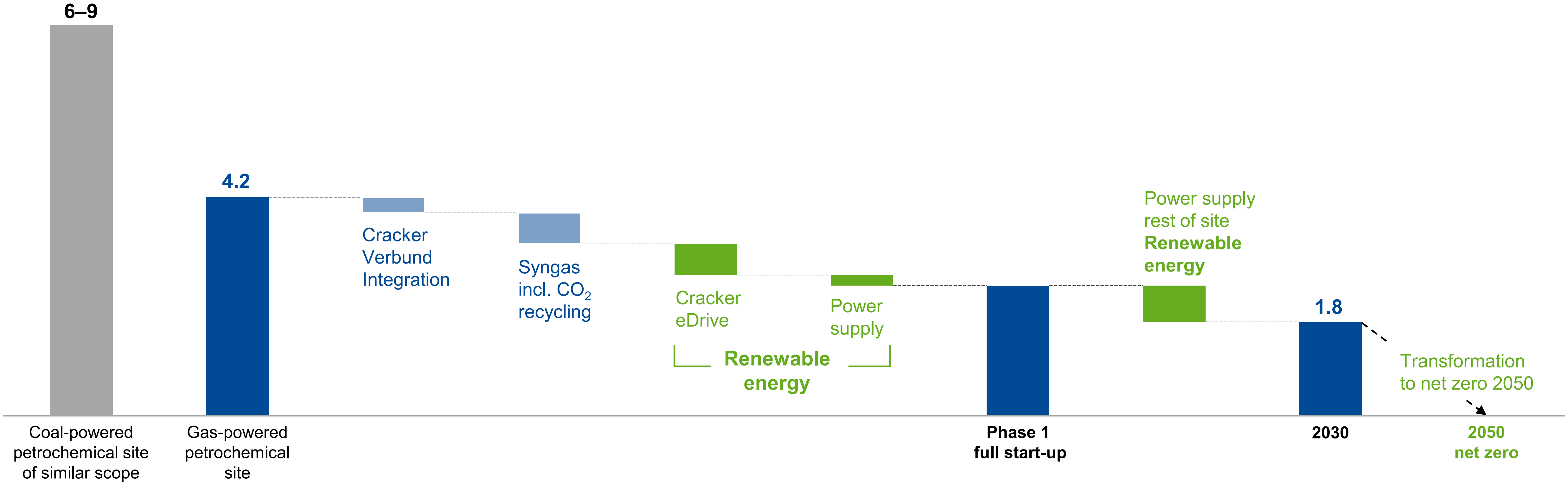
BASF's Zhanjiang Verbund site will have the lowest projected CO_2 footprint in the world

Projected BASF CO_2 emissions of Verbund site in South China
million metric tons



Our unique process concepts will significantly reduce carbon emissions compared to state-of-the-art technologies

BASF Group levers

Grey-to-green

Renewable power, instead of conventional power plant based on natural gas or coal

Power-to-steam

Electricity (eDrives), instead of steam-driven turbines for compressor machines in the cracker

- Avoids on-purpose steam production via boilers run by fossil-fuel energy
- Enables equilibrium in the steam balance for the entire Verbund

New technologies

Syngas produced from CO_2 off-gas from ethylene oxide process and excess hydrogen from production

Continuous opex

Excess steam to preheat air in the cracker furnaces increasing the overall system efficiency

Verbund advantage

- Fuel gas released by new air preheating process as second feedstock for syngas production
- Excess gas streams as raw materials for production instead of thermal usage

Specific measures at the new Verbund site to reduce CO_2 emissions by more than 50%

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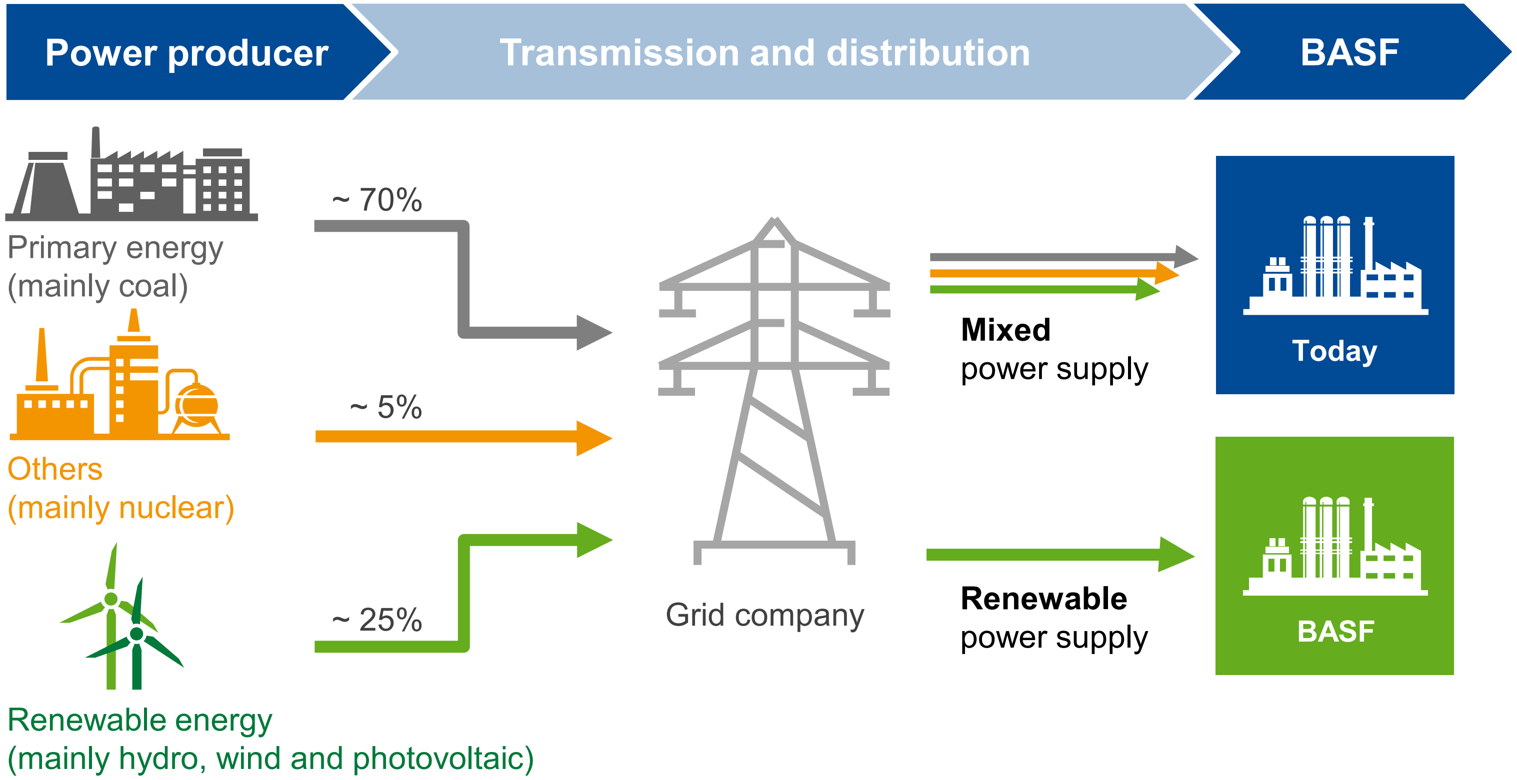
CO_2 reduction via renewable direct power-purchase mechanism – an unprecedented step in Guangdong province



- Until 2020, a renewable direct power-purchase (R-DPP) policy did not exist in Guangdong
- BASF successfully unlocked R-DPP policy change in 2021 with strong government support
- **Initial phase (10 MW):** 100% renewable energy contracted with CR-Power
- **Phase 1 and 2 (>400 MW)**: 100% renewable energy targeted by 2030

BASF is the first company to purchase renewable energy under the new pilot trading rules in Guangdong province

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Key financials of BASF's new Verbund site in Zhanjiang

Projected key financials by 2030

€4.0–5.0 billion	€1.0–1.2 billion	€8.0–10.0 billion
sales	EBITDA	total capital expenditures (peak: 2023–2025)

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

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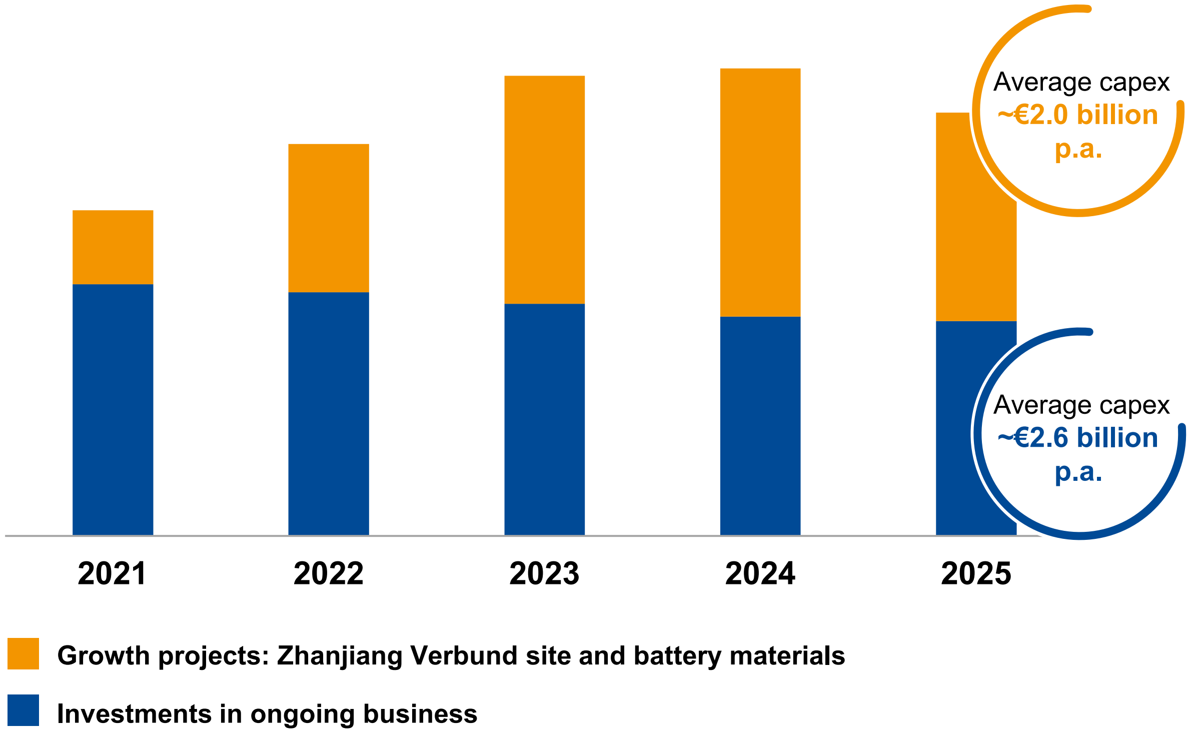
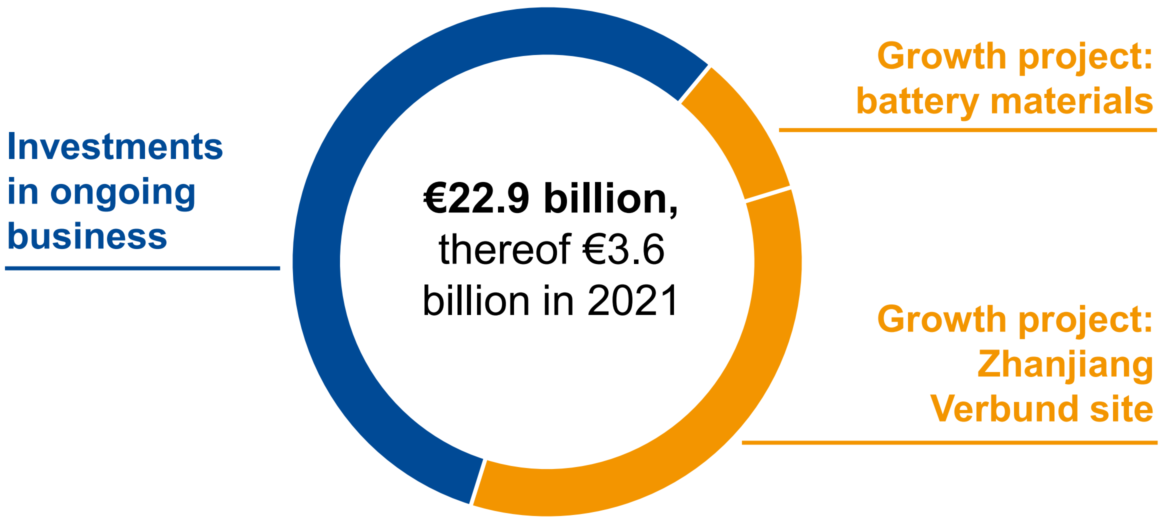
BASF Group: High capex discipline in ongoing business to support investments in growth projects

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



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



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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

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