



 **BASF**

We create chemistry

**BASF Schwarzheide GmbH
at a Glance 2022**



“Our location is focussed on growth and is actively driving the process of transformation into a location for the future. The integration of renewable energies is now more important than ever.

At the same time, the current crises and the huge uncertainty about energy prices and the market situation are posing enormous challenges for us, which require dynamic and flexible action, focus and discipline.

We can rely on our team for this, because by trusting in our own strength, our experience and our skills, we are already breaking new ground today.

This makes it all the more important to secure skilled workers for successful transformation.”



Jürgen Fuchs
Chairman of the Executive Board
of BASF Schwarzheide GmbH

Employees **2,087**

Investments 2021 **€297 million**

(as of 31.12.2021)

Even under the influence of the coronavirus pandemic, BASF Schwarzheide GmbH presented itself as an efficient and competitive company of the BASF Group in 2021. The agreed production orders were completed. 297 million euros were invested in the modernisation and expansion of the production facilities and infrastructure. BASF Schwarzheide GmbH employs some 2,087 people. They are supported by temporary staff and contractors. Together with the employees at other BASF Group companies, new additions and service providers, nearly 3,500 people work at the Schwarzheide site.

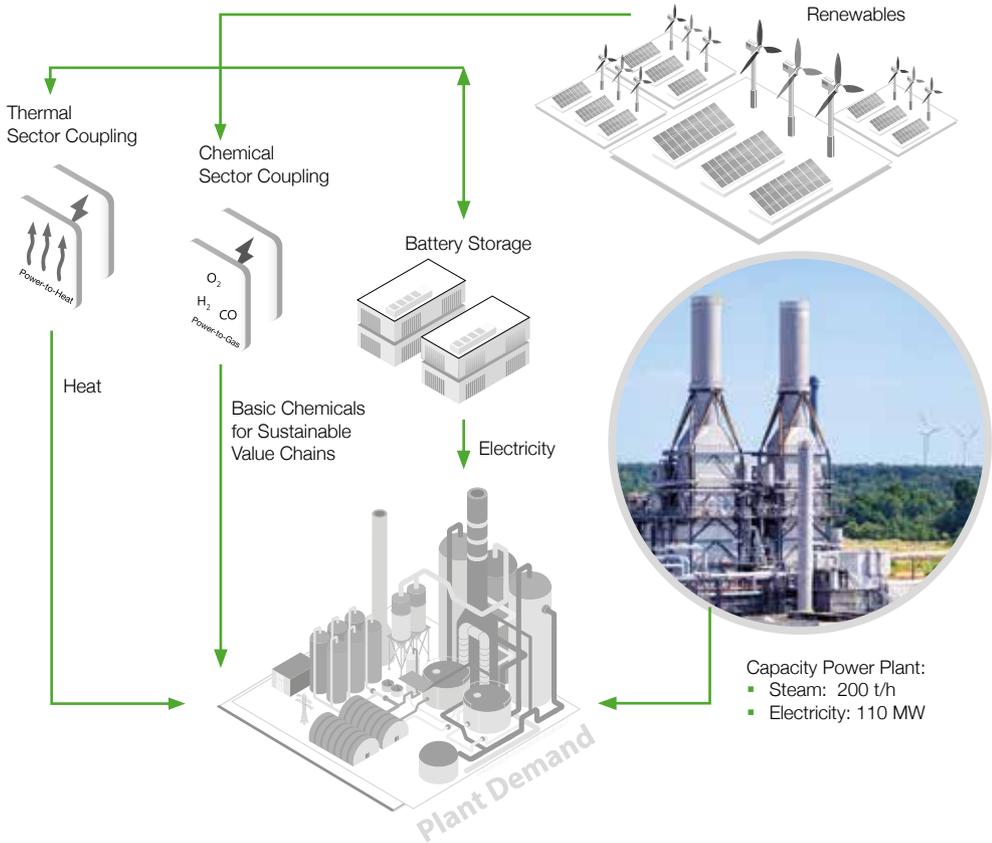


Sustainability Determines our Actions

BASF's corporate purpose sums up what also defines our work at the Schwarzheide site: "We create chemistry for a sustainable future." That's why we are working on CO₂-neutral growth, on inspiring our customers with future-proof products and on covering our need for skilled workers through practical training and further education.

Renewables

BASF Schwarzheide aims to become a beacon for the energy transition in the chemical industry. Together with envia Mitteldeutsche Energie AG (enviaM), a solar park is being constructed for 13 million euros in the immediate vicinity of the plant, which will supply 25 gigawatt hours of power for production annually.



On Course for CO₂ Neutrality

Supply

BASF Schwarzheide GmbH operates a gas and steam turbine power plant (GuD) which is highly efficient thanks to efficient co-generation. Modernisation work has taken place since mid-2019, and now provides increased electrical power with reduced fossil fuel consumption. A much more flexible operating regime is the key to efficient integration of renewables.

Power Plant Modernization

- Investment of €73 million
- New gas turbine including lithium-ion battery storage
- CO₂ emissions cut by 16 per cent with an increase in electrical power of 10 per cent

Disposal

Wastewater is cleaned and treated in the sewage plant. Non-recyclable waste is disposed of in an environmentally friendly manner in the waste incineration plant, which was modernized in 2018 at a cost of €33 million. Process optimizations and an improved flue gas cleaning process save 7 GWh of energy each year ensuring significantly reduced emission levels.

- Wastewater treatment plant, 3-stage process combines biological, physical and chemical cleaning processes
- Waste water evaporation facility about 800 m³ per day
- Waste incineration plant with 2 rotary furnaces, about 40,000 tons per year

Circular Economy

Circular economy is one of the concepts for decoupling economic growth from resource extraction, through waste avoidance, reuse and recycling.

Tradebe

Spanish company Tradebe, a leading specialist in the recycling of industrial waste, has been operating a production facility for the recovery of solvents from production cycles since April 2020, thus creating new jobs in Schwarzheide.



Driving forward Digital Transformation

Apps and applications tailored to the needs of the production plants are developed in Schwarzheide. Digital assistance systems help to make the right decisions. Data modeling and machine learning are used to optimize processes and thus save raw materials and energy. Thanks to mobile devices, information is also available in the field at all times. Using new technologies and new ways of working, the site is demonstrating its innovative strength and competitiveness.

Solutions developed in Schwarzheide can be used in BASF plants worldwide. The production site is pioneering digital transformation within the BASF Group.



Cloud Computing



Predictive Maintenance



Big Data



Augmented Reality



5G Campus Network

A Wide Range of Services



Schwarzheide is an excellent production site and offers ideal conditions for establishing companies that require an infrastructure typical of the chemical industry. Nine manufacturing and 50 service enterprises are currently located at the site. Investors can benefit from the extensive services and expertise of BASF.

General Services

- Occupational medicine and fire brigade
- Authority engineering
- Information management

Technical Services

- Project management
- Maintenance and assembly
- Specialist departments and workshops

Logistics Services

- Order controlling & transportation processing
- Rail logistics
- Raw materials supply and filling

Analytical Services

- On-site analysis
- Specialist analysis
- Process analytical measurement technology

Securing Skilled Workers and Young Talents



Our employees are the crucial factor for achieving the targets set. From the company, they not only receive support to enable them to hone their skills and to continue developing.

The occupational health management system, which received the “Corporate Health Award”, also helps them to maintain their individual performance.

In order to better reconcile family and career, flexible working arrangements are available tailored to different phases of life.

Scholarships in Germany Training Above Demand Starting your Career Summer School Trainee programmes

Dual Study Programs

Glass Laboratory at the
German Hygiene Museum



Recruiting New Talents

We want to recruit the best talents to our company and actively address demographic change. We offer young talents a wide range of offers.



Shaping the Future of E-Mobility

A modern manufacturing facility for the production of cathode active materials is being constructed at the Schwarzheide site. It is scheduled for completion by 2022. The investment in Schwarzheide is an important step in the development of the European value chain for electric vehicles.



Prototype Battery Recycling Facility

A prototype battery recycling facility being created at the Schwarzheide site. New operating procedures are to be developed there and technologies optimised to achieve a higher recovery of lithium, nickel, cobalt and manganese from spent lithium-ion batteries. Commissioning is planned for 2023.

Initially, the production capacity will enable around 400,000 fully electric vehicles per year to be equipped with BASF battery technology.

Electric Car

Most modern electric vehicles are powered by lithium-ion batteries.

Lithium-Ion Battery

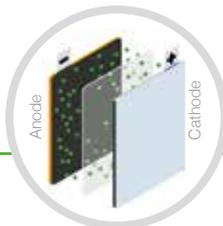
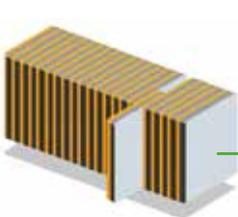
A lithium-ion battery contains hundreds of individual cells.

Battery Cell

While driving, the battery is discharged. The lithium ions carry the battery charge from the anode to the cathode, creating electrical energy.

Cathode Active Material

The different size of the individual spheres results in a particularly dense packing of the spheres in the cathode — the prerequisite for a longer driving range of electric cars.



The BASF Group

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. More than 111,000 employees worldwide contribute to the success of our 90,000 or so customers from almost all sectors – from global key accounts to small and medium-sized companies as well as end consumers.

Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €78.6 billion in 2021.

Several business units of the Group operate production facilities at the Schwarzheide site and manufacture products in almost all segments.

Sales BASF Group

€78.6 billion*

EBIT

€7.8 billion*

Employees worldwide

111,047

* based on 2021

Source: BASF Report 2021

Segments of BASF



Chemicals

Petrochemicals
Intermediates*



Materials*

Performance Materials
Monomers



Industrial Solutions

Dispersions & Pigments*
Performance Chemicals



Surface Technologies*

Catalysts
Coatings



Nutrition & Care

Care Chemicals
Nutrition & Health



Agricultural Solutions*

* Activities at the Schwarzheide production site

Performance Chemicals

Laromer® brand products make furniture and floors shine. They ensure high abrasion resistance and are used as coatings for wood and plastics. PU dispersions are used as bonding agents for paints, coatings or adhesives in the furniture, packaging and automotive industries, but are also used to produce cosmetics.



Dispersions & Pigments



Coatings

In the automotive industry, base coatings contribute significantly to the visual appearance of painted car bodies. Coatings solutions manufactured in Schwarzheide are produced using water-based technology and are therefore particularly environmentally friendly. Water-based coatings have become an indispensable product for car manufacturers worldwide.



Photo: BASF Coatings

Coatings



Foams

Basotect® and Neopolen® are foams for special applications in buildings, transport and everyday objects. They are characterized by their good insulating properties. Basotect® absorbs sound waves excellently and thus ensures pleasant room acoustics. Neopolen® is ideal for transport containers due to its low weight.



Performance Materials

Engineering Plastics

Engineering plastics such as Ultradur® and Ultramid® can be used for special applications in the automotive sector due to their outstanding properties, for example for vehicles with electric, hybrid or fuel cell drives. They are also indispensable in electrical and mechanical engineering. At BASF Schwarzheide GmbH, these high-performance materials are produced by compounding.



Performance Materials



Polyurethanes

Soft polyurethane foams are used in sports shoes, car seats and mattresses. They are used in refrigerators as rigid foams because of their insulating properties. In Schwarzheide, polyester and polyether are used to produce individual PU components as well as ready-made PU systems.



Performance Materials

Fungicides

The active ingredients F 500® and azole are used in highly effective fungicides to protect crops against fungal infection and increase yields. F 500® is produced exclusively in Schwarzheide. The contents of just one 125-gram yogurt pot are enough to protect an area of arable land the size of a soccer field.



Agricultural Solutions

We are investing in the Future and are looking for Reinforcements!

The professional profiles at the Schwarzheide site are as varied as our product range - from chemical technicians to engineers, from data scientists to laboratory assistants, from commercial clerks to logistics specialists.

BASF offers many opportunities and jobs – discover yours! Our job offers and entry options for employees can be found at:

www.basf-schwarzheide.de



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Photos: BASF

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