

Press Release

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Battery energy storage system supports BASF in Schwarzheide of using green power

- Long-duration battery energy storage system on a sodium-sulphur basis (NAS® battery) optimises energy use and stabilises power supply from renewable energy sources.
- As the first BASF production site worldwide, Schwarzheide is piloting green power supply for individual production parts through the combination of its own solar park and a stationary energy storage system.

A stationary energy storage system was erected on the site of BASF Schwarzheide GmbH. Schwarzheide is the first BASF production site worldwide to test a green power supply for individual production parts through the combination of the site's own solar park and a stationary energy storage system.

"The next milestone in the energy transition at the Schwarzheide site has been reached. Thanks to the stationary NAS® battery energy storage system, our energy management will become more intelligent and production increasingly emission-free. We can also react more flexibly to grid capacity utilisation and power requirements," says Jürgen Fuchs, Managing Director of BASF Schwarzheide GmbH. "We are thereby proving that renewable energies can be used on an industrial scale and can meet very high requirements in terms of supply reliability."

Stationary battery energy storage systems can be charged when more electricity is being generated than is required and can be discharged during periods of higher Page 2 P13/23

demand. That means that power supply and demand are de-coupled. The system installed in Schwarzheide consists of four NAS battery containers and has an energy capacity of around six megawatt hours and an output power of one megawatt. NAS batteries are long-duration storage systems. They can cost-effectively provide large quantities of electrical energy over a period of six to eight hours and are thus ideally suited for the integration of renewable energies, particularly solar energy.

"The stationary battery energy storage system is another important step towards increased sustainability in battery production for electric vehicles," says Daniel Schönfelder, Senior Vice President Battery Base Metals & Recycling. "It means that we can use renewable energies almost around the clock, for instance for our manufacturing of cathode materials or for the production of black mass in the recycling of old batteries for electric vehicles in Schwarzheide. The NAS battery energy storage system thus makes an important contribution to the reduction of the carbon footprint of the battery value creation chain."

NAS batteries are sold by BASF Stationary Energy Storage GmbH, a fully owned subsidiary of BASF SE. "Stationary battery energy storage systems are an indispensable component of the energy transition as they ensure the required stability in energy supply. Our NAS batteries help major industrial customers to ensure the availability of renewable energies and to optimise their use. We are looking forward to supporting BASF in Schwarzheide on its path to a Net Zero site," says Frank Prechtl, Managing Director of BASF Stationary Energy Storage GmbH.

The final installation tasks are expected to be carried out by the end of this year and the storage system will then become operational. Project Manager Robert Preusche, Head of Energy Transformation at BASF in Schwarzheide, is satisfied: "Building substantial capacity for the storage of electricity is the choke point of the energy transition. Particularly for us as a battery materials site, therefore, it is exciting to test out opportunities for the use of battery energy storage systems in the future energy landscape."

An overview about NAS batteries

NAS batteries are high-energy, long-duration sodium-sulphur batteries designed for

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stationary energy storage. With their optimal discharge duration of six to eight hours, NAS batteries are ideally suited for the stabilisation and integration of power from renewable energy sources into the grid or industrial locations. NAS batteries have been deployed at more than 250 project sites worldwide with a total capacity exceeding 720MW / 4.900MWh over 20 years.

About BASF Schwarzheide GmbH

BASF Schwarzheide GmbH has been part of the BASF group since 1990. More than 2,100 employees produce specialized chemicals at the production site in Lusatia. The product portfolio ranges from polyurethane based products and systems, crop-protection agents and water-based coatings to engineering plastics, foams, dispersions, Laromer brands and from 2023 also battery materials. With these high-quality products that contribute to a more sustainable future, BASF Schwarzheide GmbH helps its customers to be successful.

BASF Schwarzheide GmbH assumes social responsibilities in the region, contributing to various areas from vocational training to co-siting activities. A dozen companies have already become co-siting partners with BASF, thereby benefiting from the multifaceted synergies of working together with an innovative chemical company and the experience and expertise BASF has to offer. For more information, please visit www.basf-schwarzheide.de.

About BASF Stationary Energy Storage GmbH

BASF Stationary Energy Storage GmbH is a wholly-owned subsidiary of BASF SE. It is an exclusive distributor of NAS batteries and co-develops NAS technology together with its partner NGK Insulators, Ltd., Japan.