

CATALOGUE

Li-ion Energy Storage Solutions



GAZ ENERGY



Dear business partners,

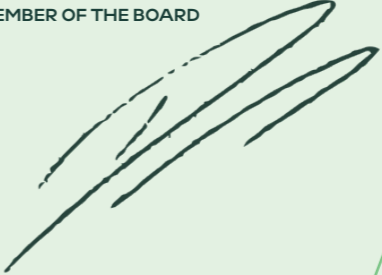
The energy sector is undergoing a transformation – and we are proud to be part of it. Building on more than a century of experience in battery technology, GAZ ENERGY combines proven expertise with continuous innovation to deliver smart, next-generation lithium-ion storage systems.

Our portfolio focuses on large-scale Battery Energy Storage Systems (BESS) designed for modern energy infrastructure. These solutions are built on our long-standing expertise and close teamwork – from development with a strong emphasis on quality and safety to manufacturing, service, and customer support.

Our goal is to provide reliable solutions that truly make sense – both for our customers and for the energy future of Europe. Thank you for being part of this journey with us.



David Vodička
MEMBER OF THE BOARD



Your European partner for energy storage solutions

GAZ ENERGY is a leading European manufacturer of energy storage systems, building on more than a century of expertise in electrochemistry, proprietary research, and a team of top-class specialists. Our mission is to deliver solutions that combine safety, reliability, and sustainability with cutting-edge technology to support the transition to renewable energy and a more stable power grid.

The GAZ ENERGY portfolio consists of modern lithium-ion storage systems that meet strict European quality and cybersecurity standards. They provide reliable solutions for integration

with renewable energy production, ensuring grid stability, and connecting to modern energy trading platforms. The company is also among the world's leading manufacturers of highly reliable and durable nickel-cadmium batteries for demanding sectors – from energy to transportation, including critical infrastructure.

We are proud to be part of Bochemie Group, a well-established electrochemical group with operations in over 120 markets worldwide. With two key production sites – in Bohumín, Czech Republic, and Zwickau, Germany, and a third site is under construction in Saudi Arabia.

Why GAZ ENERGY?

Selecting an energy storage partner is a long-term decision. At GAZ ENERGY, we offer more than just a product – we provide confidence, stability, and proven expertise. Here is why you can trust us:



Over 100 Years of Experience



Part of the Bochemie Group, GAZ ENERGY builds on a century of electrochemical experience. This heritage, combined with continuous innovation, gives us a unique position among European energy storage manufacturers.

EU Based Production & Service



Our modern semi-automated production facility in Europe guarantees full control of quality and traceability. Unlike many competitors relying on overseas supply chains, we manufacture locally, ensuring security, stability, and fast delivery – backed by the support of the local team that builds your battery.

Advanced Testing Capabilities



We provide extensive testing of cells and components in our own laboratories, verify supplier data to eliminate false reports, and perform integration and live battery testing to ensure system reliability and safety.

Proven and Certified Technology



Our LFP-based solutions offer the safest and most stable lithium-ion chemistry for stationary storage. Each key component undergoes rigorous testing in our own laboratories, including UL9540A and IEC standards, ensuring unmatched safety and reliability.

Partnership with Second Foundation



We have joined forces with Second Foundation, a European leader in energy trading and digital solutions, to deliver advanced software, secure platforms, and data-driven optimization. This ensures not only safe operation but also economic benefits through predictive control and energy trading integration.

Comprehensive Service and Support



From design, commissioning, and predictive maintenance to repairs and lifetime service, we provide complete care for every system. Our European-based teams guarantee fast response and reliable technical support throughout the system lifecycle.

Li-ion Energy Storage Solutions

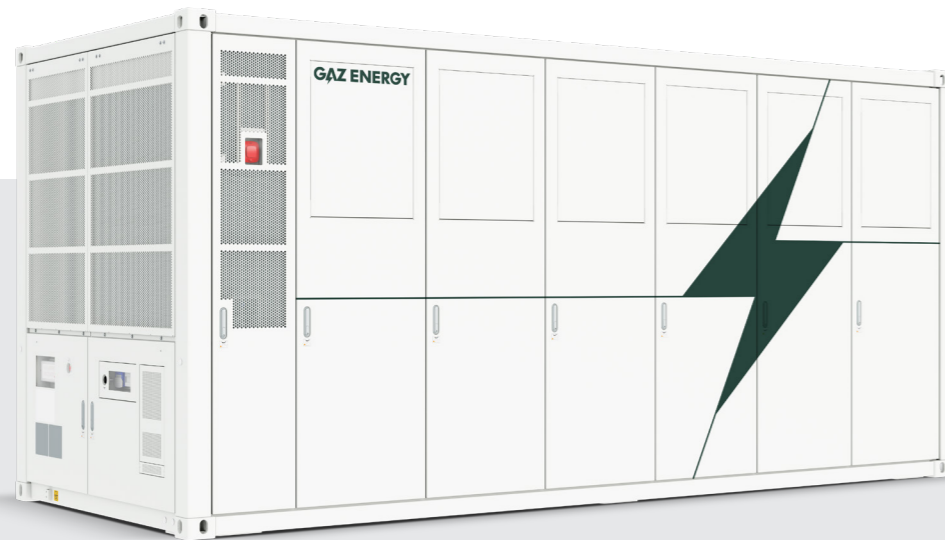
Description

Our battery storage systems allow you to fully exploit the benefits of renewable energy generation at medium and large scales. They are delivered in containerized form, with LFP cells at their core – safer and longer-lasting than most other Li-ion technologies.

All our storage systems feature advanced safety components and are built to exceptional quality standards. Manufactured and assembled in the EU, we offer full control over quality as well as flexibility in project implementation. The battery management system (BMS) is fully controlled by our proprietary software, enabling precise management, maximum safety, and optimal overall system performance.

Benefits

- ✓ Higher ROI through increased profit per kW
- ✓ High-Quality LFP Cells
- ✓ Exceptional system safety
- ✓ EU-based Cybersecurity
- ✓ Comprehensive solutions



GAZ ENERGY BATTERY CONTAINER



**Best
in Quality**



**Excellent
in Economy**



**First
in Safety**

GAZ ENERGY Advanced Safety

Multiple layers of protection for ultimate system reliability

Safe Chemistry and Robust Design



We use cells with LFP chemistry, considered the most stable type of lithium-ion battery. LFP cells are less prone to fire, do not release oxygen to support combustion, and require significantly more energy to initiate thermal runaway.

Advanced Battery Management Systems (BMS)



Our Battery Management System (BMS) delivers comprehensive safety, performance, and data management across three levels, combining certified functional safety with advanced monitoring and control processes.

EU-based Cybersecurity



Our systems are developed in partnership with European leaders in algorithmic trading and renewable energy management, and operate on cloud infrastructure located in Europe, ensuring data protection, system integrity, and safe operation.

Active Thermal Management



BESS design based on liquid cooling technology ensures effective heat dissipation, verified through standardized tests at cell, pack, string, and container levels. These tests also provided crucial data guiding the robust design of the fire suppression system.

Fire-suppression Features



Our BESS container features a coordinated warning and suppression system. In case of smoke or fire, the system activates automatically to ensure effective extinguishing. Condensed aerosol technology provides a rapid and reliable response, while integrated blast panels offer controlled gas relief if pressure builds up.

Humidity Protection



By humidity control units inside the container create the perfect environment for the battery system. This ensures greater safety, reliability, and longer life for the cells, electronics, and all other critical components.

GAZ ENERGY Battery Container

MODEL
GEN-BAT-5015kWh



Key Features

- EU-based production ensuring top quality
- Smart BMS powered by our proprietary EU software
- Cutting-edge safety systems
- Liquid cooling for high performance and excellent temperature control

Typical Applications

- Grid stabilization & ancillary services
- Smart electricity trading
- Storing surplus energy
- Peak shaving
- Load shifting
- Instant power supply

Basic Parameters

Model	GEN-BAT-5015kWh
Battery cell	LFP-314Ah
Rated energy (kWh)	5 015
Rated voltage (V DC)	1 331,2
Voltage range (V DC)	1 331,2 ~ 1 500
Rated power (kW)	2 507,5
Charge & discharge rate	≤ 0,5 C
Storage temperature (°C)	-35 ~ 60
Operating temperature (°C)	-30 ~ 55
Protection degree	IP55
Anti-corrosion degree	C5-Medium
Dimensions (W × D × H)	6 058 × 2 438 × 2 896 mm
Weight (kg)	≤ 43 000
Battery standards and regulations	EN IEC 62477-1 EN IEC 61000-6-2/4 EN IEC 62933-5-1/2 EN IEC 62619 (EU) 2023/1542 UL 9540A

 **5 MWh**

EXCEPTIONALLY SAFE AND RELIABLE

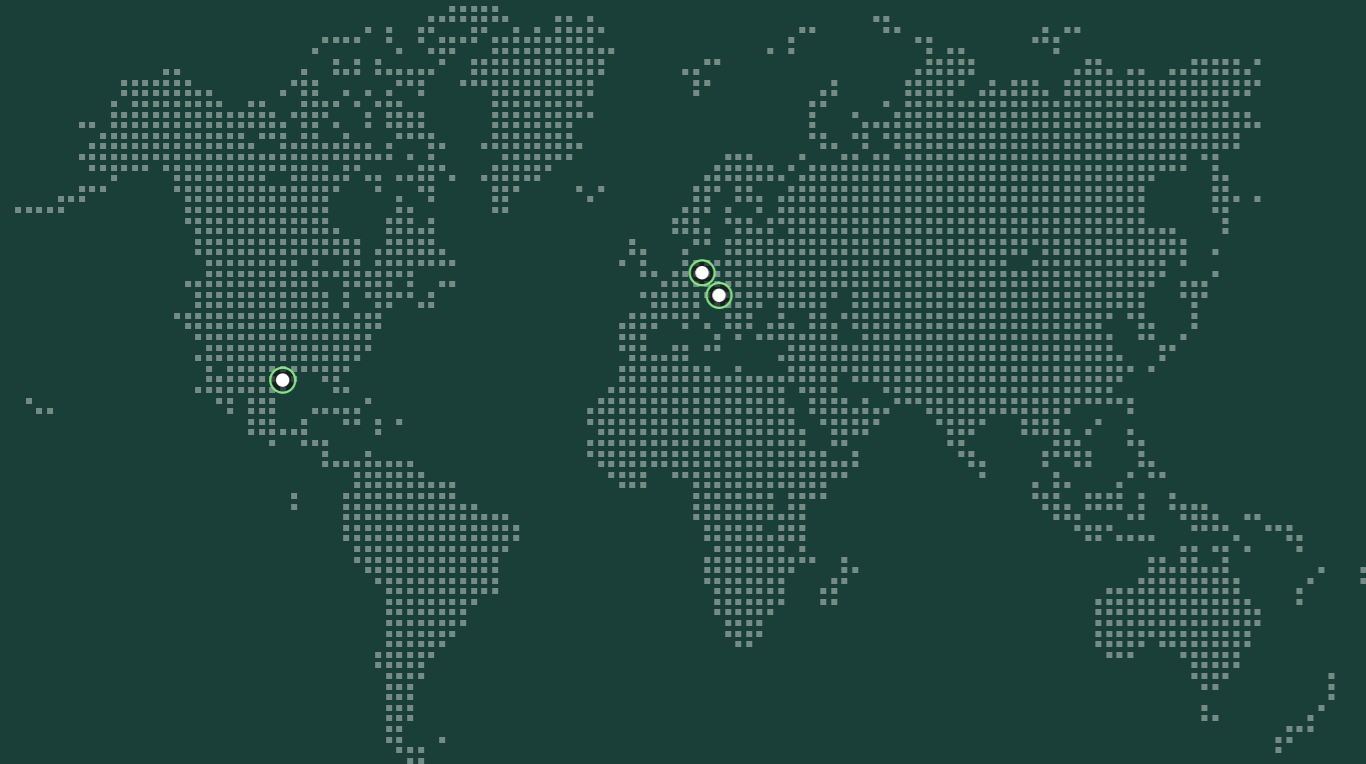
The Bochemie Group at a Glance







The Bochemie Group is an electrochemical company specializing in advanced specialty chemicals and innovative technologies. Its products embody decades of expertise in developing unique solutions that play an essential role across diverse industries and processes. Applications range from energy storage and wood protection to surface treatment of steel and special alloys, as well as smart textiles.

An integral part of the Group is its subsidiary GAZ ENERGY, dedicated to energy storage and complex energy solutions.

This business unit also includes the German company GAZ Geräte- und Akkumulatorenwerk Zwickau, which develops, manufactures, and supplies nickel-cadmium battery systems used across a wide range of sectors, including oil and gas, energy, transportation, and telecommunications.

With operations in over 120 markets worldwide, Bochemie Group follows a responsible approach to sustainable growth.



 <p>2200+ customers</p>	 <p>9 % investment into technology</p>	 <p>120+ countries to export</p>
 <p>2 manufacturing sites</p>	 <p>500+ employees</p>	 <p>30 % reduction of CO₂ emissions</p>

Cooperation of Strong Partners

Our systems are designed with advanced cybersecurity at every level. Developed in partnership with European leaders, the software operates on secure European servers and cloud infrastructure, ensuring data protection, system integrity, and safe operation. Certified practices and multi-layer safeguards guarantee maximum security against cyber threats.

Second Foundation is a technology company focused on the energy sector that has developed its own software and algorithms for managing and trading electricity on a global scale. The group also includes Nano Energies, which specializes in flexibility aggregation and energy trading on European markets. Thanks to this structure, Second Foundation combines cutting-edge technological development with hands-on experience in the energy business.

II Second Foundation

A key element of the collaboration is the joint software for BESS management. This system integrates two areas of expertise:


- **GAZ ENERGY:** Know-how in battery production and in-depth technological knowledge down to the level of individual cells.
- **Second Foundation and Nano Energies:** Expertise in energy markets, trading strategies, and flexibility aggregation on a European scale.

The result is an integrated system where the software is precisely tailored to the specific battery. This ensures highly accurate control, utilizing detailed data from the entire battery lifecycle as well as from global operations. This approach delivers:

- Maximum operational efficiency and predictability
- Optimization of economic returns
- Long-term technology protection through precise management.

Key Benefits of the Partnership

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Maximizing customer value
Stable, secure, and efficiently managed BESS with strong economic benefits.
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Turnkey solutions
Combining hardware, software, and commercial monetization.
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European manufacturing
Independence from non-European suppliers and services. Data under EU control. Enhanced protection against cyberattacks.



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