

Energywith, together with energy
for 100 years and beyond.
Aiming to be a proposal-based energy
storage solutions company.



Energywith Co., Ltd.

Commencement of operations : December 1, 2021
Head office location : AKS Building, 3 Kanda Neribeicho, Chiyoda-ku, Tokyo, Japan
Paid-in capital : 1 billion yen
Number of employees on a non-consolidated basis : 1,028 (as of March 31, 2025)
Number of employees on a consolidated basis : 4,256 (as of March 31, 2025)
Principal lines of business : Manufacture and sale of energy storage devices and the provision of related systems and services.
Address : 〒AKS Building, 3 Kanda Neribeicho, Chiyoda-ku, Tokyo, 101-0022, Japan
<https://www.energy-with.com/en/>



A company of
100 years
and beyond !

Create a sustainable society with storage and empowerment together

Energywith Co., Ltd. manufactures and markets energy storage devices while providing related systems and services.

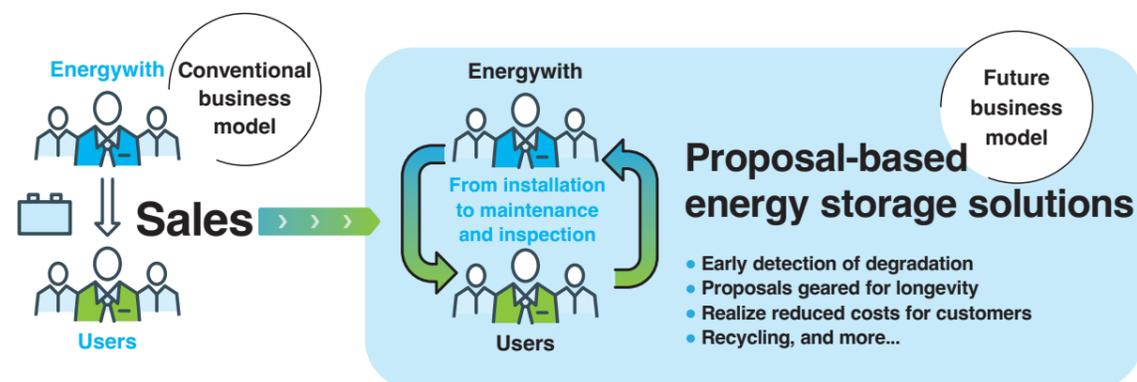
It has now been 105 years since we first began manufacturing lead-acid batteries. In 2021, we made a new start as a company built on the concept of “with energy.”

As we work to enhance our ability to “fully leverage energy,” we will also shift our business model from selling “**things**” (our main business has conventionally been the manufacturing and sales of lead-acid batteries) to selling “**systems**,” providing total solutions, from installation to maintenance and inspection.

By pursuing a “commitment to quality” and proactively proposing optimal solutions for the problems that customers face, we aim to evolve from a specialized manufacturer of storage batteries to a “**proposal-based energy storage solutions company**.”

Through our evolution, we will contribute to the creation of a sustainable society.

The assembled battery is filled with electrolytes and charged to finalize the product. The cover photo shows part of the assembly process for automotive batteries. Electrodes, which are the source of electricity, are created by alternately stacking positive plates (brown) and negative plates (light blue) to form an electrode group.



Battery monitoring service for electric forklifts



- Continuous battery monitoring enables immediate detection of abnormalities and forecasting when a battery will reach end-of-life.
- Maximizes battery performance by providing battery diagnostics and proper operation advice to support effective forklift operations.

Renewable energy storage batteries and renewable energy storage battery systems



- Energy storage solutions from Energywith to realize a sustainable future.
- Realize optimal personal consumption and power operations, whether installed together with renewable energy generation facilities or set up as standalone installations.

[Company Profile]

A company of 100 years takes to the frontier

TOP interview

Closely supporting society with energy

Aiming to reach new heights with the lead-acid storage battery technologies cultivated for more than a century in the storage battery industry, the energy storage device business of Showa Denko Materials Co., Ltd. (now known as Resonac Corporation) split off in 2021 to become Energywith Co., Ltd. That means that while we are indeed a “company of 100 years,” we are simultaneously a company in its very infancy.

Just what are the things that we can do to generate energy capable of contributing to the creation of a sustainable society? We will evolve into a company that considers such matters together with stakeholders as we take on such challenges.

Lead-acid batteries are nearly 100% recyclable. We also collect our own products and reuse the resources in new batteries, contributing to CO₂ reduction.

Moving forward, we are looking to possibly expand our lead-acid battery recycling to each of our sites located globally.

In fact, our group company in Thailand has already begun building a cyclical system to collect products and reuse the resources.

Our aspirations also extend beyond lead-acid batteries as we are at full speed ahead in efforts to be the top runner that paves the way to the future for the battery industry through our development of nickel-zinc batteries, which are gaining attention as next-gen batteries.

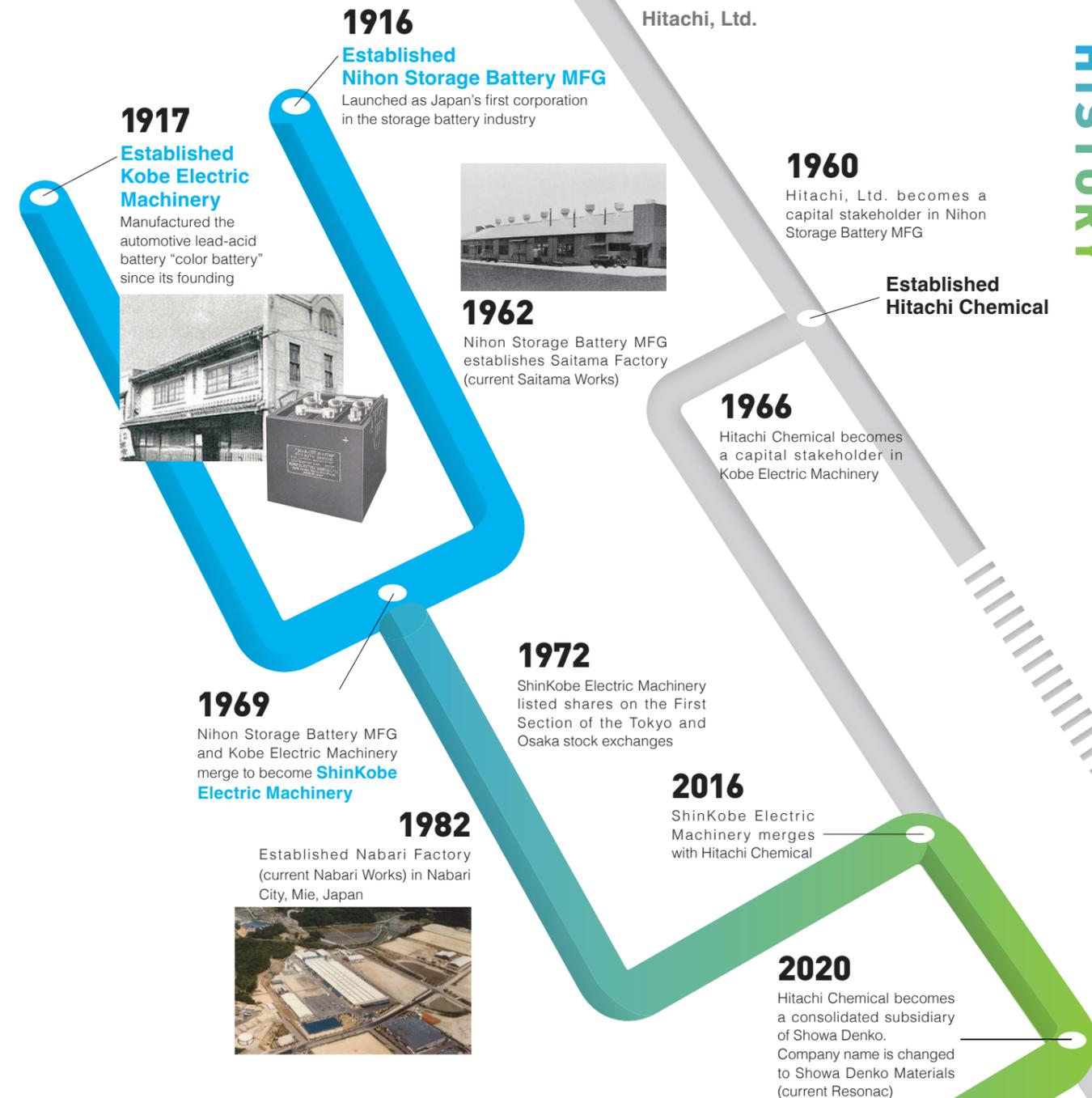
As a manufacturer selling “things,” we have long manufactured and marketed automotive batteries and industrial lead-acid batteries, among other products. We will continue to make further efforts to achieve ongoing enhancements to the quality of our products. At the same time, we will also move forward in our transition into a one-stop “proposal-based energy storage solutions company” that provides “systems” to better meet customer needs and solve such issues as matters of cost reduction.

Our company name, Energywith, is borne of our philosophy to closely support society “with energy” and reflects our commitment to being a well-trusted company. The next 100 years is our new frontier, and we shall never cease marching forward as we continue to transform.

President & Representative Director:

Masato Yoshida

Masato Yoshida



Corporate Philosophy

Energywith adds new wisdom to energy storage and focuses on quality to provide people with reliability and safety as a trusted proposal-based energy storage solutions company.

2021

The energy storage device business of Showa Denko Materials splits off, establishing **Energywith**



A glance at the numbers of Energywith

Energywith aims to evolve into a proposal-based energy storage solutions company. Various numbers offer a cross-section view of our company.

Under **50%**

The use of recycled lead reduces CO₂ emissions to under half per battery manufactured

According to estimates, using recycled materials cuts CO₂ emissions* to under half compared to when only non-recycled mineral-based materials are used.

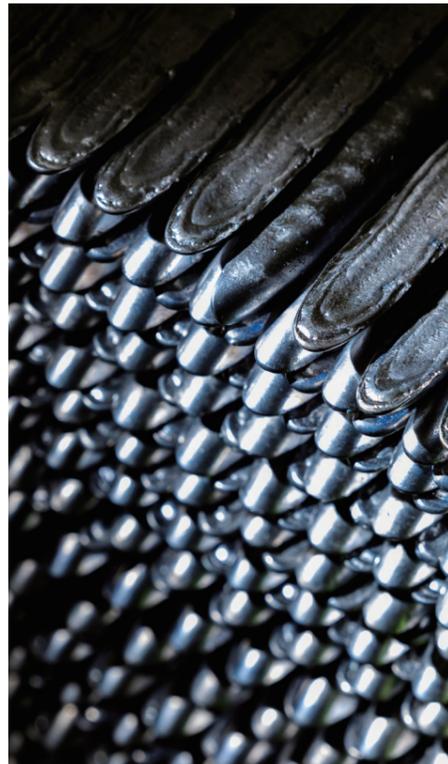
*Reference : Report issued by Boliden AB, a Swedish refinery company Boliden Carbon footprint of Boliden Main Metals / Copper, Nickel matte, Zinc, Lead / September 2021carbon-footprint-of-boliden-main-metals_2021_executive-summary.pdf

70% or more
Target usage rate of recycled lead

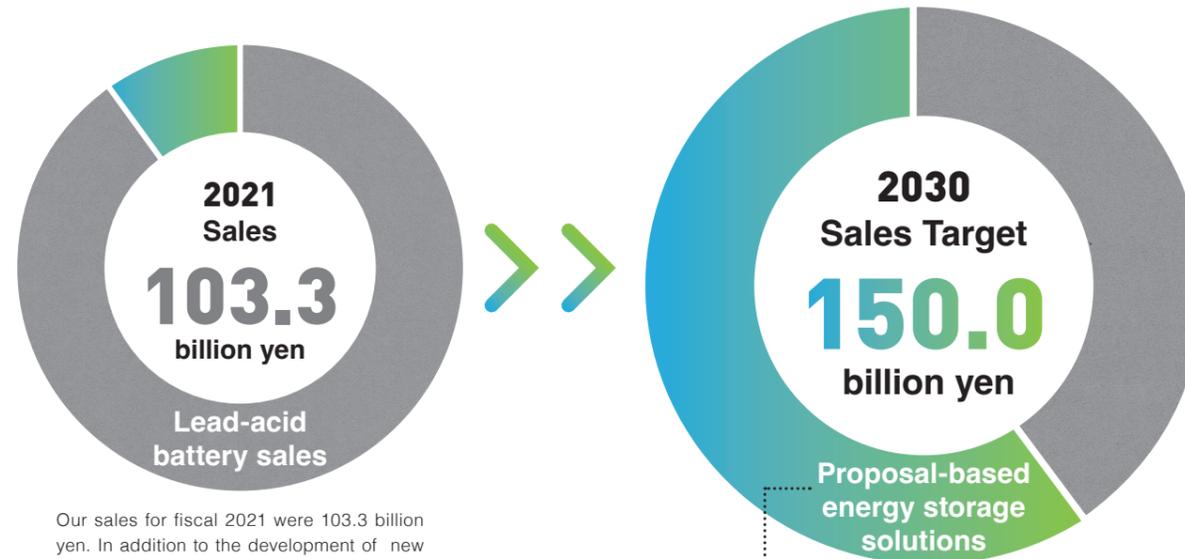
We collect and recycle used lead-acid batteries sold by us. Our collection spans a wide area, and we will work with partner refinery companies to establish a cyclical lead recycling framework.

Over **99%**
Recycling rate of lead-acid battery materials

Lead is a nearly 100% recyclable resource. The disposal of used lead-acid batteries does not present an issue as they can be effectively utilized as resources. We actively endeavor to recycle lead-acid batteries in order to reduce environmental impacts and contribute to a sustainable society.



Lead rods as raw material



Our sales for fiscal 2021 were 103.3 billion yen. In addition to the development of new batteries for the automotive aftermarket, we will also establish our presence as a next-gen storage battery company through a focus on proposal-based battery solutions that include renewable energy storage battery services.

Power supply systems, maintenance/inspection services, golf cart sales, renewable energy storage battery system services, nickel-zinc batteries for automotive aftermarket components and more



Lead-acid batteries on charge prior to shipment

60%
Target sales ratio of proposal-based battery solutions business

(2030)

We aim to provide a one-stop solution, from system introduction support to maintenance and recycling, raising our sales ratio in this area to 60% by 2030.



Fiscal **2024**
Amount of lead used

63,642 t

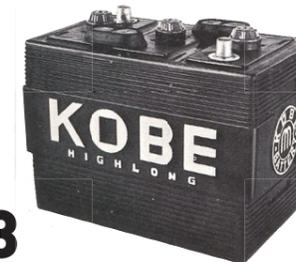
This figure represents the total amount of lead that we used domestically in Japan in fiscal 2024. Much of this amount is recycled lead.



Year established **1916**

Established Nihon Storage Battery MFG Co., Ltd. Launched the manufacturing and sales of storage batteries. In 1962, the Saitama Factory was established in Okabe-machi (current Fukaya City), Saitama.

1953
HIGHLONG Battery



Kobe Electric Machinery launched its automotive battery HIGHLONG.

1859
Invention of the lead-acid battery!

Lead-acid batteries were invented in 1859 by Gaston Planté, a French physicist. The battery was a lead battery comprising two tapes wrapped cylindrically between two lead plates. It was charged and discharged repeatedly in dilute sulfuric acid, with lead dioxide acting as the positive electrode and lead active material as the negative electrode.

comment



Senior Corporate Officer
Shoichi Hirota

Currently, 90% of our sales come from the sale of lead-acid batteries. Moving forward, we have our sights set on expanding our proposal-based solutions business domain to 60% of our total sales. We are driving the digital transformation (DX) of internal information so that our engineers who manufacture "things" can unite and work together with our sales representatives who propose "systems."

Lead is simply amazing!

Lead is robust

When handled appropriately, lead is hard to beat as a useful material. Although its weight hinders portability, lead-acid batteries offer an exceedingly stable power.

Compared to lithium-ion batteries, lead-acid batteries can fully operate even in environments with low or high temperatures.

Lead contributes to decarbonization

Lead-acid batteries account for most secondary batteries.

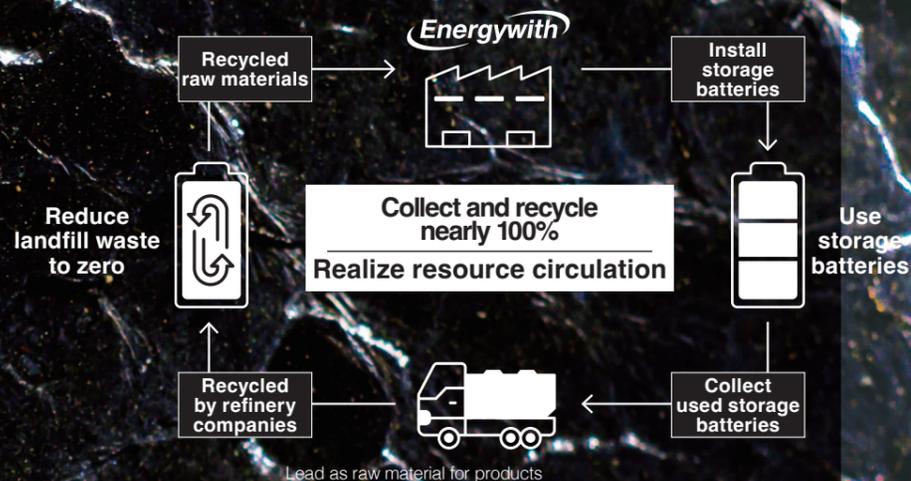
One of the best features of lead is its high recyclability. Seventy percent of the lead-acid batteries manufactured in Japan use recycled lead.

Lead really is an environmentally friendly material as it results in lower CO₂ emissions during manufacturing. It is also an abundant resource and a highly recyclable material.

Superior safety

Lead-acid batteries use aqueous solution-based electrolytes, making them markedly resistant to combustion.

Lead-acid batteries are not classified as hazardous materials provided by Japan's Fire Service Act.



Our products and services



Automotive batteries

Our starter batteries and aftermarket batteries include the Tuflong series, which was first launched in 2000. We have battery lineups that cover passenger vehicles, utility vehicles such as buses, trucks, agricultural machinery, construction equipment, ships, snowplows, and commercial vehicles such as taxis.



Industrial lead-acid batteries

Industrial lead-acid batteries are used in preparation for power outages caused by earthquakes, storms, floods, and other natural disasters. They support the continuous functioning of social infrastructure as backup power sources for public facilities ranging from communications facilities, substations, water and sewage systems, and transportation, as well as critical facilities used for data centers, buildings, factories, and hospitals.



Traction Batteries

The LIFTTOP electric vehicle lead-acid batteries are used as a power source for various types of electric vehicles, including electric forklifts, motorized flatbed trolleys, and aerial work platforms.



Power supply systems

Power supply systems guard against unexpected power failures, such as power outages and instantaneous voltage drops, by providing a continuous supply of power for a certain amount of time during such events, thereby protecting critical equipment and machinery from damage or data loss. In addition to emergency power installations used as backup power supply systems for critical facilities, there are also renewable-energy-based storage battery systems.



Storage battery monitoring systems

Our storage battery monitoring systems take regular measurements of storage battery conditions and visualize the recorded data to provide early detection of battery deterioration, contributing to the preventative maintenance of power systems. Pairing these systems with a telecommunications network allows for remote monitoring and eases the burden of maintenance work.



withBMS™
ウィズビーエムエス

Battery monitoring service for electric forklifts

Continuous battery monitoring enables immediate detection of abnormalities and forecasting when the battery will reach its end-of-life. Battery performance can be maximized by providing battery diagnostics and proper operation advice to support effective forklift operations.



Tuflong

Renewable energy storage batteries Renewable energy storage battery systems

Energy storage solutions from Energywith to realize a sustainable future. Optimal personal consumption and power supply operations can be realized, whether installed together with renewable energy generation facilities or set up as standalone installations.



Golf carts

We developed Japan's first electric golf cart. This pioneering technology is leveraged in the latest electromagnetic induction-type golf carts.

Research and development framework

Toward developing new batteries for the automotive aftermarket, providing proposal-based storage battery system services, and in anticipation of the realization of a sound material-cycle society, we are advancing our development of products and services as a next-generation storage battery company using recycling-related solutions that leverage digital transformation (DX).

New Business Development Dept.

Nickel-zinc battery development

Battery Technology Research Dept.

Development of next-generation batteries

Industrial Battery R&D Dept.

Development of industrial lead-acid batteries

System R&D Group

Development of power systems

Automotive Battery R&D Dept.

Development of automotive lead-acid batteries

interview



Nickel-zinc batteries Younger employees pioneering the future On-site with younger employees operating on a “zero-knowledge basis”

Researcher Kunihiro Kushibe is a central figure of the roughly 10 members of the research and development team. He is part of the New Business Development Dept./ New Business and Battery Solutions Center Technology Development Headquarters. Mr.Kushibe has been in charge of research and development for nickel-zinc batteries since 2015, his third year since joining the company.

Nickel-zinc batteries differ drastically in terms of manufacturing methods compared to lead-acid batteries, therefore necessitating development on a “zero-knowledge basis” to consider mass production processes and battery specifications starting from square one.

Mr.Kushibe emphasizes the strong appeal of nickel-zinc batteries as “unique batteries that can solve the issues customers have been facing.” So, what sort of characteristics define nickel-zinc batteries?

For starters, nickel-zinc batteries use a potassium hydroxide aqueous solution-based electrolyte, making them incredibly safe with a strong resistance to combustion similar to lead-acid batteries. They also offer an advantage over lead-acid batteries with a higher input and output. Further, the electrodes can be reduced down to a thickness of 0.4 mm, allowing for lower costs over even lithium-ion batteries.

Nickel-zinc batteries enjoy a triad of

safety, high performance, and low cost. Despite such appeal, the crux of practical implementation was the battery's short lifespan. The development team has worked to develop technologies to overcome this issue and has already succeeded in extending the life span of nickel-zinc batteries to roughly four times that of lead-acid batteries.

“Energywith's research and development divisions are also actively pursuing the education of younger employees. We are given the ability to think creatively in our work, and while it is a huge responsibility, it is certainly very rewarding,” explains Mr.Kushibe.



Researcher Kunihiro Kushibe

Quality assurance supporting Japan and the world

Our Quality Assurance Division strives to prevent defects by monitoring even the smallest changes that occur during our manufacturing processes. Moreover, the division accumulates data from production processes to enable traceability and speedy resolutions in the unlikely event of product issues.

In addition to accumulating data and promoting digital transformation (DX), we also seek customer feedback in order to advise on the correct usage of our products and provide maintenance services. Our quality management system is the foundation that enables us to respond quickly to challenges and provide solutions to meet customer needs.

The Head office supports the quality assurance of overseas group companies.

Four types of automotive batteries and DC power supply equipment:
Conventional vehicles, start-stop vehicles, European standards, and utility vehicles (trucks, buses, taxis, delivery cars, agricultural machinery, and construction equipment)

Saitama



Toward being the top runner for new technologies
Automotive battery production site
Developing next-gen batteries and more

Energywith's Saitama Works is a central manufacturing hub of automotive batteries and DC power supply equipment.

It is also where efforts to develop "next-gen batteries" are actively taking place.

These "next-gen batteries" are none other than nickel-zinc batteries.

Here, younger engineers are taking the lead in breaking through barriers to practical implementation and paving the way to a new future for storage batteries.

Automotive batteries that meet specific needs

Saitama Works is a factory with a long history, first built in 1962 in Okabe-machi (currently known as Fukaya City), Saitama Prefecture. Here, you'll find over 60 years of technology and knowledge gained through its production framework centered on automotive batteries. The factory has earned customers' trust not only through existing products but also through flexibly meeting customers' various requests, such as changing the battery shape while maintaining the same output and performance.

Our company has also pioneered the development of start-stop technology ahead of other companies. Our Tuflong G3 battery for start-stop vehicles has been highly regarded as a chemical engineering innovation that contributes to solving environmental issues. In 2017, the battery received the Nippon Brand Award in the "CHO" MONOZUKURI Innovative Parts and Components Awards, as well as the METI Minister's Award in the Green Sustainable Chemistry (GSC) Awards.



Factory production line



Office Manager for Saitama Works
Kuniaki Tabata

The manufacturing process of lead-acid batteries can be pretty dangerous. That's why we make sure we communicate well with each other and work to ensure that our workplace is so safe and secure that we would feel comfortable allowing our own family members to work there.

Our production sites

Valve-regulated stationary lead-acid batteries, train valve-regulated stationary lead-acid batteries, small valve-regulated lead-acid batteries, vented lead-acid batteries, and Traction batteries



Office Manager for Nabari Works
Takeshi Oikawa

Industrial lead-acid batteries play a vital role in sustaining social infrastructure. With no margin for error, quality must come first. We believe that comfortable workplace leads to high-quality product manufacturing; therefore, we continually work to optimize our working environment. Our motto is "Challenge and Improvement." Nabari City is known for the warmth of its people, and that spirit is deeply reflected throughout our factory.

The industrial lead-acid batteries that provide continuous support to social infrastructure



Nabari

Nabari Works is located in the northern part of Nabari City, Mie Prefecture, in a section of the large 880,000m² Yabata Industrial Park.

Products from Nabari Works are used in various applications. From public facilities such as power plants, substations, railroads, data centers and hospitals to facilities such as cell phone base stations, Nabari Works supports infrastructure with its products throughout every corner of society.

[Global Locations]

Expanding globally

Energywith is growing across the globe.

Our two group companies, with their head offices

in Taiwan and Thailand, handle overseas manufacturing and sales.



CSB Energy Technology (EMEA) B.V.



CSB Energy Technology (Shanghai) Co., Ltd.



CSB Energy Technology (ShaoGuan) Co., Ltd.



Japan



Energy System Service Japan Co., Ltd.



CSB Energy Technology Co., Ltd.



CSB Energy Technology (Vietnam) Co., Ltd.



Thai Energy Storage Technology PLC.



Thai Nonferrous Metal Co., Ltd.

● **Taiwan: CSB Energy Technology Co., Ltd.**

Manufacturing and sales of industrial lead-acid batteries
11F, No. 150, Section 4, Chengde Road, Shilin District, Taipei, 111052, Taiwan

● **Thailand: Thai Energy Storage Technology Public Company Limited**

Manufacturing and sales of automotive and industrial lead-acid batteries
387 Moo 4, Sukhumvit Rd., Phraek Sa Sub-district, Mueang Sumut Prakan District, Samut Prakan Province 10280, Thailand



Japan Offices

- ① **Head Office and East Japan Operations Office**
AKS Building, 3 Kanda Neribeicho, Chiyoda-ku, Tokyo, 101-0022, Japan
- ② **Sapporo Sales Office**
Miyamura Building 3-1-1, Higashi, Kita 8-jo, Higashi-ku, Sapporo-shi, Hokkaido, 060-0908, Japan
- ③ **Sendai Sales Office**
1-19-7, Hagino-machi, Miyagino-ku, Sendai-shi, Miyagi, 983-0043, Japan
- ④ **Chubu Operations Office**
JRE Nagoya Hirokoji Place 10F, 4-2-29, Sakae, Naka-ku, Nagoya-shi, Aichi, 460-0008, Japan
- ⑤ **West Japan Operations Office**
JRWD Dojima Tower 6F, 2-4-27, Dojima, Kita-ku, Osaka-shi, Osaka, 530-0003, Japan
- ⑥ **Hiroshima Sales Office**
1-31-10, Nakasu, Asaminami-ku, Hiroshima-shi, Hiroshima, 731-0121, Japan
- ⑦ **Fukuoka Sales Office**
2-45, Hinodemachi, Kasuga-shi, Fukuoka, 816-0873, Japan
- ⑧ **Saitama Works**
2200, Oka, Fukaya-shi, Saitama, 369-0297, Japan
- ⑨ **Nabari Works**
1300-15, Yabata, Nabari-shi, Mie, 518-0493, Japan

Group Companies

- **Energy System Service Japan Co., Ltd.**
Installation, sales, maintenance/inspection services of storage batteries and battery equipment, and manufacturing, sales, maintenance/inspection services for golf carts
6-1-1, Heiwajima, Ota-ku, Tokyo, 143-0006, Japan