




GS Yuasa Corporation

# GS Yuasa Report 2024

For the fiscal year ended March 31, 2024



Creating  
the Future  
of Energy



# Creating the Future of Energy





# Continuing to Create the Future of Energy

In a world where the forms and usages of energy change with each generation, GS Yuasa has worked to support society through its dedication to storage battery technology for the past 100 years and counting.

Under the slogan "Creating the Future of Energy," we at GS Yuasa promise to uphold our founder's commitment to look for new ways of supplying energy to better serve society. Moving forward, we will continue to search for new forms of energy and applications for storage battery technologies, while addressing social concerns and demands and changing generational needs.

Today, we reaffirm our commitment to continue creating new value for the future.



# At a Glance

Net sales (FY2023)

¥562,897million

Operating profit growth  
(compared to FY2004)

+47.5times

Number of employees  
(As of March 31, 2024)

12,892

Start of overseas expansion

1963

Number of overseas countries  
where sites are located  
(As of March 31, 2024)

19

Overseas sales ratio (FY2023)

50%



Where our  
► products are  
used

## 01 Automobiles

With our technological expertise built up over many years, we develop batteries suitable for automotive technological innovations such as vehicles with start-stop systems (ISS vehicles), thereby supporting the evolution of automobiles.

## 02 Motorcycles

Our products meet the expanding demands of lead-acid batteries in emerging markets through technologies supporting motorcycle-specific use environments, such as vibration durability and engine start-up performance.

## 03 Electric vehicles

High-energy-density lithium-ion batteries for electric vehicles (EVs) and plug-in hybrid electric vehicles (PHEVs) and high-input/output-performance lithium-ion batteries for hybrid electric vehicles (HEVs) contribute to the spread of eco-friendly vehicles.

## 08 Solar power generation

Our electricity storage systems contribute to the effective utilization of solar power generation, which is affected by the weather, and the enhancement of disaster protection functions.

## 09 Next-generation aircrafts

We participate in the advanced aircraft system commercialization project of the New Energy and Industrial Technology Development Organization (NEDO) and proceed with the development of high-energy-density and lightweight batteries to realize next-generation aircraft.

## 10 Buildings

Battery and power systems to be used as backup for power interruption in the event of a disaster contribute to the security and safety of social life; for example, emergency lighting systems.



GS Yuasa is an energy and device company that provides comfort, security, and safety through batteries. Its products are supporting people's lives in every industry in the world, mainly in the Mobility and Public Infrastructure fields.

### Market Share of Lead-acid batteries

(FY2023 / Global)

Note: Based on the Company research

Automotive batteries

**No.2** (7%)

Motorcycle batteries

**No.1** (15%)

### Delivery record of lithium-ion batteries for HEVs

(As of the end of March 31, 2024)

**Approx. 300 million units**

### Sales ratio of environmentally considered products

(FY2023)

**38.7%**

### Ratio of reduction of CO<sub>2</sub> emissions

(FY2023, compared with FY2018)

**13.7%**

### Growth rate of sales in the regular field

(FY2023, compared to FY2022)

**267.3%**



#### 04 Railways

Our industrial lithium-ion batteries contribute to the improvement of the Earth-friendliness of railways and the realization of effective energy utilization and stable transportation.

#### 05 Port facilities

Our industrial lithium-ion batteries contribute to the electrification of port AGVs (Automatic Guided Vehicles) and gantry cranes for transporting containers.

#### 06 Power plants

Our battery and power systems for backup contribute to the stable operation of power plants.

#### 07 Fully battery-powered ships

Our industrial lithium-ion batteries are used as a power source of Japan's first fully battery-powered ships.

#### 11 Wind power generation

Combining a lithium-ion battery system with a wind power generation system contributes to the mitigation of output variations in wind power generation and the stabilization of systems.

#### 12 Space (ISS, satellites, etc.)

High-capacity and high-performance lithium-ion batteries for space that can be used for a long time in harsh environments are adopted in the International Space Station (ISS) and satellites.

#### 13 Forklifts

High-capacity and long-lasting batteries are adopted in forklifts which are indispensable in materials handling in a factory and logistics sites.

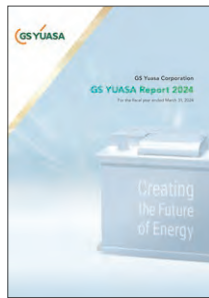
# Scope of This Report

## Key Points of the GS Yuasa Report 2024

The GS Yuasa Report 2024, an integrated report, has been issued to familiarize our stakeholders including shareholders and investors with the management policies and business strategies of the GS Yuasa Group. This Report was prepared so that readers can gain an understanding of the value creation strategy that we envision for the next 100 years for the Group, which has continuously innovated and grown since the corporate merger in 2004.

This report consists of four chapters: GS Yuasa's "Value Creation," "Ability" for Value Creation, "Foundations" of Value Creation, and Corporate Data. Amidst increasingly active initiatives to solve social issues globally, this report presents an easy-to-understand path for the GS Yuasa Group to work on Mobility and Public Infrastructure by taking advantage of its energy technologies to contribute to the creation of a sustainable society while also pursuing sustainable growth and increased corporate value by the Group itself. We also report on ESG initiatives and key issues (materiality), which are essential for corporate management.

Comprehensive information on the detailed ESG initiatives and data not presented in this report are disclosed on the Company website (Sustainability).



## Period and content covered

Results for FY2023 (April 1, 2023–March 31, 2024)

## Companies covered

This report covers the GS Yuasa Group, comprised of GS Yuasa Corporation, the holding company; GS Yuasa International Ltd., the Group's core operating company; and consolidated subsidiaries.

Notes are included for data that fall outside the scope of the companies covered.

## Date of issue

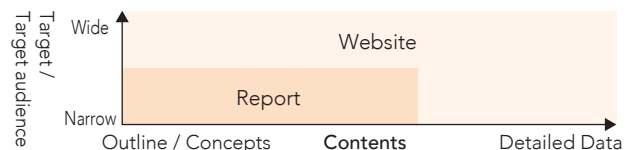
October 2024

## Referenced guidelines, etc.

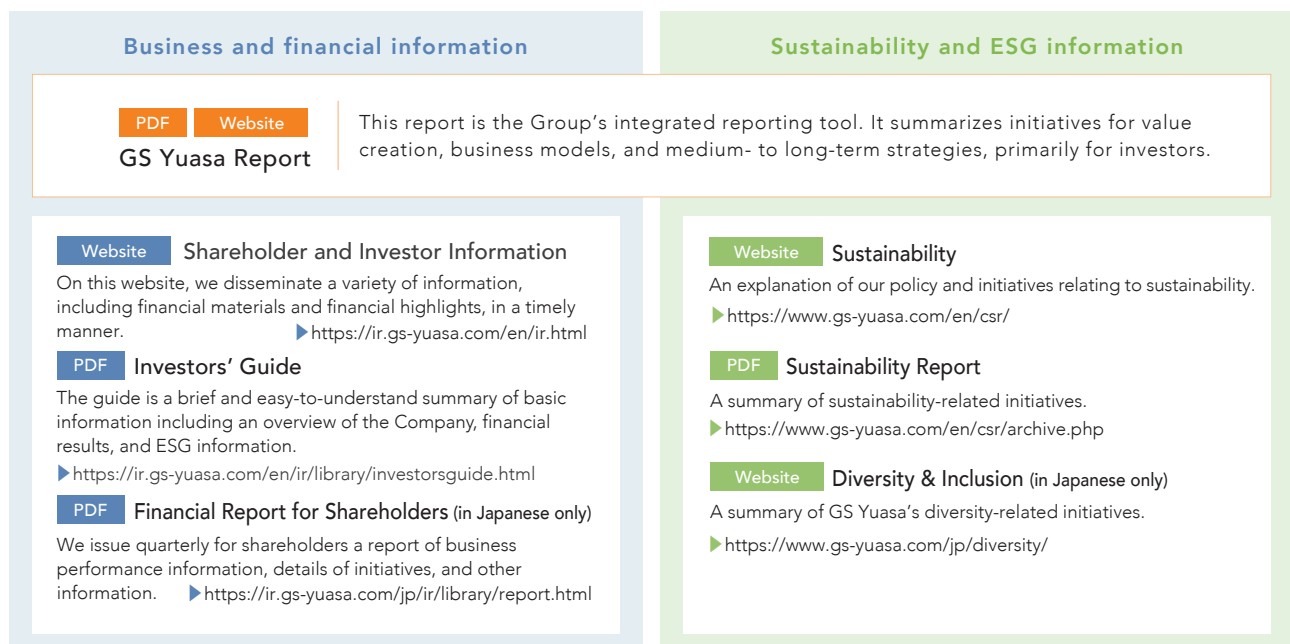
- IFRS Foundation, International Integrated Reporting Framework
- Ministry of Economy, Trade and Industry, Guidance for Integrated Corporate Disclosure and Company-Investor Dialogue for Collaborative Value Creation
- Global Reporting Initiative (GRI), GRI Sustainability Reporting Standards

## About importance and comprehensiveness

This report focuses on particularly important information, presented in such a way as to be easy to read and understand. The website discloses comprehensive information in order to meet public demands.



## Overall Picture of Information Disclosure



## Disclaimer

This report contains earnings forecasts and other financial information pertaining to future business performance. These contents are based on information available at the time of issue and include an element of latent risk and uncertainty related to economic trends, demand, the forex rate, the tax system, and other factors. Please understand that actual earnings could diverge greatly from those presented here.



# Contents

## Introduction

### Section 01

#### GS Yuasa's "Value Creation"

This section provides a message from the president, our past history, our strength that has been built up, and our goals Vision 2035, showing our growth potential. Our DNA and our value creation based on our strength are also explained. Features focus on our efforts toward DX and new business creation.

### Section 02

#### "Ability" for Value Creation

The Group's financial condition and strategies are explained in a message from the director in charge of finance. This section also explains actions to implement management that is conscious of cost of capital and stock price, the progress of the Sixth Mid-Term Management Plan, activities of each business, research and development, and intellectual property.

### Section 03

#### "Foundations" of Value Creation

This section includes a detailed description of sustainability initiatives, which are the foundation of management. A summary of ESG measures and disclosure data, messages from directors in charge of Environment and Human Resources, and messages from outside directors are also presented.

### Section 04

#### Corporate Data

This section presents basic information for understanding GS Yuasa.

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## Message from the President

# Top Message

We will promote business structural reforms  
with a strong determination to protect trust



Takashi Abe

A stylized, handwritten signature of Takashi Abe in black ink.

President and Representative Director,  
GS Yuasa Corporation



## To protect trust

My name is Takashi Abe, and I have been appointed as President and Representative Director. I will try my best to fulfill the expectations of everyone who supports the Company.

I joined Japan Storage Battery Co., Ltd. (currently GS Yuasa International Ltd.) in 1989 and have accumulated experiences in serving as the president of a U.S.-based subsidiary, developing management strategies, and working in the fields of industrial batteries and power supplies, automotive batteries, etc. During this period, I have always tried to see actual sites and communicate at actual sites.

Our main products—lead-acid batteries, lithium-ion batteries, and power supplies—require us, because of their product characteristics, to produce products that deliver necessary performance when necessary as stated in the specification requirements. We have satisfied such requests through highly-reliable products and technical services, so that we have been able to accumulate trust of customers, who feel GS Yuasa products are reliable. Its foundations are employees' steady efforts at their work sites such as for technology, manufacturing, and sales. To continue to protect trust, it is necessary to find small problems inherent in work sites and translate them into effective solutions. We can never identify such problems if we stay in an office. Communication on site is indispensable.

While ensuring on-site perspectives as the president, I will continue to protect trust, which is the foundation of sustainable development that has been built up by our predecessors. For this, we regard the corporate philosophy of "Innovation and Growth" as what our all employees should inherit and practice properly.

## Now is the time for innovation and growth

Our Group originates from Japan Storage Battery Co., Ltd., which was established by Genzo Shimadzu, who is counted as one of the ten greatest inventors in Japan and succeeded for the first time in manufacturing lead-acid batteries domestically; and Yuasa Storage Battery Co., Ltd., which was founded by Shichizaemon Yuasa, a gifted entrepreneur who opened new business fields one after another with farsighted vision.

For about a century since their foundation, the two companies have met changing social demands as manufacturers specializing in storage batteries while inheriting their original spirit: the inventor spirit of Genzo Shimadzu and the entrepreneur spirit of Shichizaemon Yuasa, respectively. Such spirits of foundation are inscribed in the corporate philosophy "Innovation and Growth," which was declared when the two companies merged their operations in 2004.

Let us turn our eyes to the future society. Carbon neutrality will progress steadily on a global scale to solve global warming, a common problem of mankind. Renewable energy, which is regarded as an effective means to achieve it, has difficulty in stable supply because of its dependency on nature, therefore storage batteries are greatly expected to help solve such difficulty. The electrification of automobiles is expected to advance steadily, and technological innovation of storage batteries, which is the key to extending the range of automobiles, is expected. We have continued to polish our storage battery technology for over 100 years and have the power to contribute to the realization of a carbon-free society through various applications based on the themes of energy saving, energy creation, energy storage, and renewable energy.

Meanwhile, the world is changing with unprecedented speed against the backdrop of rapid technological evolution. Tough times lie ahead, and it is clear, even without reading Darwin's theory of evolution, that only companies that are sensitive to various changes in market conditions and can respond quickly can survive. We are not allowed to have irrational confidence, like "Our Company will continue to be OK," because of the fact that the Company has a long history. From now on, we are required to have an unyielding spirit similar to that of our predecessors who began with a clean slate to think about non-existing technologies and businesses and leave tangible results. Such a sense of crisis is a reason why I am strongly aware of the importance of the corporate philosophy of "Innovation and Growth." We will steadily implement "Innovation and Growth" based on the long-term vision "Vision 2035" while sharing the sense of crisis among the entire Group.

## Long-term vision "Vision 2035"

Global demand for storage batteries is expected to grow by more than 40 times from 2019 to 2050. Vision

# Message from the President

2035 was formulated by backcasting from such a super-long-term forecast. It is a guideline for us to create social and economic value and increase corporate value continuously by contributing to global trends of carbon neutrality through storage batteries. Currently, we are promoting the Sixth Mid-Term Management Plan (FY2023-2025), which was formulated by reinterpreting Vision 2035 on a medium-term time scale.

In the field of lead-acid batteries, we provide engine starting batteries for automobiles, auxiliary machinery batteries for hybrid electric vehicles, large emergency batteries for infrastructure, small batteries for general-purpose power supplies, etc. In the field of lithium-ion batteries, we manufacture and sell products supporting a variety of applications, such as for hybrid electric vehicles (HEVs), for plug-in hybrid electric vehicles (PHEVs), for battery electric vehicles (BEVs), 12 V lithium-ion batteries (for starting-up, for auxiliary machinery), and for ESS for infrastructure. In Vision 2035, we will take advantage of such a broad product lineup and capture demands in all directions in the two priority areas Mobility and Public Infrastructure. The diversity of our product lineup is an advantage specific to a manufacturer specializing in batteries that can flexibly respond to rapid changes in market conditions.

To capture demands in all directions, we will be committed to not only manufacturing devices but also providing added value in intangible aspects. Storage batteries and power supply systems that we have provided since our foundation have contributed to the development of society as important devices in

various energy societies. We will shift from an "energy and device company" to an "energy management company" by providing not only devices but also technologies and services that are more closely related to various energy societies.

Although I said "in all directions," we have no plans to extend our range unnecessarily. The important point in "Innovation and Growth" of Vision 2035 is to promote portfolio reforms appropriate to long-term changes in market structure while focusing on winning areas with winning approaches.

It is considered almost certain that the storage battery market will expand over the long term. We expect that inside the market, there will be significant structural changes. As for Mobility, lead-acid batteries, which are our traditional business and account for more than half of earnings, have maintained brand recognition and a large share at home and abroad for many years as batteries for starting automobiles and motorcycles and created stable profits. However, their demand is expected to be on a gradually declining trend in the future as vehicle electrification will progress. Lithium-ion batteries for HEVs are expected to expand until the mid-2030s, after which their demand is expected to decline. In contrast, lithium-ion batteries for BEVs are expected to expand from the late 2020s.

As for Public Infrastructure, the government has a policy of increasing the ratio of renewable energy, mainly solar power, in the energy mix to 30 to 40 percent in the period through 2030 partly because of energy security. Against this backdrop, the demand of

## Key points of "Innovation and Growth" for achieving Vision 2035

Vision 2035 P.20-25

### Mobility Field

- Leverage achievements of joint venture company with Honda to provide society with high-capacity, high-output lithium-ion batteries for BEVs and achieve growth
- Regarding lithium-ion batteries for HEVs, continue the development of high-quality products and the improvement of production capacity
- Secure funds for growth through optimization of regional strategies for lead-acid batteries



### Public Infrastructure Field

- Differentiate industrial batteries and power supplies, primarily backup batteries and power supplies, from our competitors' products by increasing added value
- Leverage expertise in lithium-ion batteries for BEVs to strengthen competitiveness in lithium-ion batteries for ESS of renewable energy



### New Initiatives

- Use accumulated, diverse technology and expertise as seeds to create new businesses that contribute to society







energy storage systems (ESS) to be connected to a power system is expected to expand.

To respond to such changes in market conditions, we will produce stable profits in the existing business, which is the current revenue bases, such as lead-acid batteries, industrial batteries and power supplies, and lithium-ion batteries for HEVs, and use the profits as a source of funds for focused investment in the development of lithium-ion batteries for BEVs and ESS in order to build a highly profitable and sustainable business portfolio centering on the two business fields.

### Lithium-ion batteries for BEVs, serving as a pillar for future growth

When I was stationed in the United States, I had an opportunity to know the phrase "Be Prepared" as I accompanied a child of local staff on his Boy Scout activity. This is a famous motto in scout activities, meaning that you should prepare calmly assuming possible risks and situations. In doing work, while being aware of this word and always seeing things objectively, I have prepared various choices and strived not to miss future business chances and risk aversion opportunities. In the challenge to lithium-ion batteries for BEVs that involve large-scale investment, we will maintain high risk sensitivity while always seeing ourselves objectively, and make choices that increase the likelihood of success.

In the global market of lithium-ion batteries for BEVs, there are strong players who are overwhelmingly superior in development strength, cost competitiveness, supplies, etc. As is the case with Blue Energy Co., Ltd. and former Lithium Energy Japan (LEJ) in the automotive lithium-ion battery business, the core of our strategy will be to cooperate with partners, mainly automobile manufacturers with rich resources such as know-how and technology.

At the heart of the strategy is Honda · GS Yuasa EV Battery R&D Co., Ltd. (HGYB), a joint venture

company established with Honda Motor Co., Ltd. in July 2023. HGYB promotes the research and development of high-capacity and high-power lithium-ion batteries that are highly competitive at the global level. We also plan to start the production of the batteries in a factory of a manufacturing company in FY2027 and expand production capacity for the GS Yuasa Group as a whole to over 20 GWh/year by FY2035. Immediately after the start of production, products will be sold mainly to customers who are mostly partners. First, the highest priority should be given to thoroughly polishing Quality, Cost, and Delivery to meet requests of domestic car manufacturers centering on Honda. After that, we will expand sales to other domestic new-car manufacturers. As for sales to overseas, we will focus on cooperation and promote sales carefully while seeing actual demand.

### Batteries for ESS whose demand is expected to expand steadily

ESS uses three types of storage batteries: storage batteries to be incorporated on the generator side of renewable energy such as solar and wind power; system storage batteries to be directly connected to a system; and a storage battery system to be incorporated on the end-user side for self-consumption, such as a factory.

If the balance between the generator and consumer sides on an electrical power grid breaks down greatly, a massive blackout is caused. Unlike thermal power generation which allows demand and supply to be adjusted finely, renewable energy, which has large variations in power generation, requires variations in a system to be absorbed by storage batteries. Storage batteries are indispensable for Japan, poor in energy resources, to shift to renewable energy and use electricity efficiently with less waste. Against the backdrop of the experience of supply chains being disrupted due to the COVID-19 pandemic and growing geopolitical risks, the demand of domestically produced batteries is especially growing. In the medium- to long-term as well, stable demand expansion is expected, and the annual demand for storage batteries for ESS in 2030 is expected to be 4.5 to 5 GWh.

Regarding lithium-ion batteries for ESS related to renewable energy, we are currently receiving inquiries that amount to more than three times our production capacity and are responding to the demand by increasing the production capacity of former LEJ. However, our response to the demand will continue to be tough for the time being. For this reason, we will also manufacture lithium-ion batteries for ESS from late 2027 by making use of the production lines and

# Message from the President

know-how for lithium-ion batteries for BEVs under joint development with Honda. In addition, we are currently developing and aiming to introduce a space-saving and highly efficient power conditioner-integrated system where storage batteries and a power conditioner are combined. The production of lithium-ion batteries for ESS is mainly based on orders received, unlike products for car manufacturers, which are based on planned production. We intend to win orders steadily by achieving cost competitiveness that cannot be realized by ourselves alone through the benefits of mass production based on the repurposing of lithium-ion batteries for BEVs.

## Strengthening existing business, the foundation for growth

To make investments steadily with an eye toward the future, we need to continuously improve added value and efficiency and generate profits sufficiently in the existing business.

For automotive lead-acid batteries, preparing a business continuity plan (BCP) is an important effort toward improving added value. We have manufacturing bases in East Japan, Central Japan, and West Japan, and in our previous system, products were supplied only from production bases approved by customers. Therefore, there was a risk that a customer's production line may be stopped should a relevant factory be affected by a natural disaster, etc. Therefore, we will promote the sharing of production models and technologies and the optimization and streamlining of production facilities and build a production system, with the understanding and cooperation of customers, that allows us to manufacture products with the same specifications and quality in any factory and supply products stably in any situations.

The theme of automotive lead-acid batteries in overseas markets is "Selection and Concentration." A large increase in automobile sales is not expected in Japan facing a shrinking population, whereas there is great growth potential in overseas markets. We will allocate more management resources to ASEAN, Europe, and Australia. In particular, ASEAN, which is experiencing rapid economic growth, is a market in which we have advantages as we have built a brand in our long history. We want to ensure growth in the market by strengthening collaboration with partners with which we have deepened cooperative relationships for over 50 years and by implementing product and sales strategies suitable for the needs of each country.

Industrial batteries and power supplies in the existing business are led by emergency power supplies. For this business, we will increase added

value by the *Koto-zukuri* (service creation) business. Emergency power supplies are useless if they cannot be used in emergency. Therefore, we will strengthen the provision of STARELINK services, which allows you to check battery and power supply conditions in real time 24 hours a day, 365 days a year and receive a notification if the power supply is found to be faulty or approaching the end of its life. In addition, we will create product differentiation by taking advantage of "network" and "footwork" in addition to field services where a service person from agencies and work service companies all over Japan arrives at the site and responds to the situation.

For lithium-ion batteries for HEVs, we plan to increase production capacity from a current capacity of 50 million cells a year to 70 million cells a year in FY2025. Our lithium-ion batteries for HEVs have received high acclaim from customers for their performance and quality. We intend to polish technology without settling for the current recognition and develop and provide products with higher performance and higher quality, while at the same time carefully promoting streamlining such as reduction of costs.

We also need to address risks associated with procurement of raw materials whose prices have risen in recent years. Lead, a raw material of lead-acid batteries, has very high recyclability, and therefore we will achieve risk reduction and resource saving at the same time by improving the ratio of recycled lead. Meanwhile, raw materials such as lithium and rare metals depend on imports from overseas and are significantly affected by geopolitical risks. We also plan to pursue the research and development of alternative raw materials over the long term, sometimes in cooperation with outside organizations.

## Human capital strategy for promoting the growth strategies

In order to promote business structure reforms steadily, we plan to reinforce personnel who are involved in lithium-ion batteries as we aim to expand their business scale. We intend to strengthen the development and recruitment of a wide variety of human resources who are engaged in not only engineering but also marketing and sales serving as a point of contact with customers. We think it is also important to strengthen IT personnel for promoting digital transformation, such as improving production efficiency using digital technology and developing new business, but digital transformation itself should not be a goal, and it is necessary to implement optimum IT tailored to our on-site problems. We plan to internally increase personnel who have the ability to make such plans. For some years, motivated



employees have actively learned under a program for training personnel for digital transformation. To increase personnel who have the ability to make plans for introducing IT, we intend to consider the choice of hiring external resources. Consequently, we will also consider changing the overall framework of the Company; for example, personnel reward structures and evaluation systems.

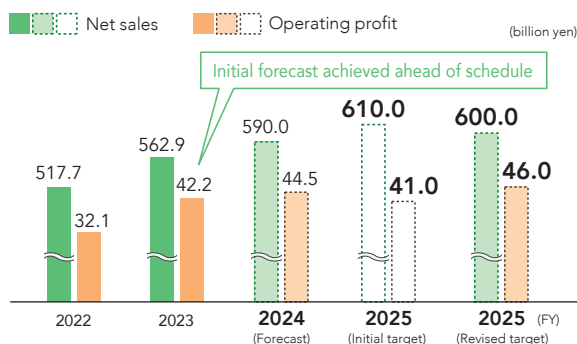
In addition, we will invest aggressively in autonomous-minded human resources personnel who have a high willingness for growth and exemplify the corporate philosophy of "Innovation and Growth" and make efforts to develop them. We are working on the project "Biz Challenge," which recruits ideas for new business with our accumulated technology and know-how serving as seeds, and highly motivated employees have submitted a variety of ideas. This project is intended to blossom in the long term, or after 2035. We regard it as an important effort for inheriting the spirit of "Innovation and Growth" and plan to continue it.

We also plan to prepare an education system that allows everyone to learn independently and introduce a personnel system that allows personnel to be assigned to important roles and work regardless of age and years of experience and evaluated according to performance. We intend to increase engagement by increasing the mobility of personnel between businesses and providing paths in which employees themselves select their carriers.

## Promoting reforms with a sense of speed

In FY2023, which is the first year of the Sixth Mid-Term Management Plan, we achieved the FY2025 target of operating profit before amortization of goodwill ahead of schedule. For FY2024 as well, we plan to continue increasing sales and profit. In July 2024, we announced

Changes in net sales and operating profit before amortization of goodwill



① Sixth Mid-Term Management Plan (FY2023-2025) P.36-39



the revision of the FY2025 target.

Operating profit before amortization of goodwill until FY2021 had been hovering at the 20 billion yen level, which reached the 30 billion yen level in FY2022 and the 40 billion yen level in FY2023. I consider our success of stepping up steadily while reporting record high profits as the result of hard work of all members of business divisions and indirect departments supporting them, and truly appreciate their efforts. In FY2023, favorable winds blew for market conditions, and efforts to correct selling prices were effective. For continuous expansion of profits, it is necessary to further strengthen earning power. We will work to strengthen profitability by analyzing not only superficial figures but also the details of business results; for example, what level of competitiveness we are at in business, and whether we really have earning power.

Turning to the stock price, which is the overall evaluation of management in the stock market, our stock's PBR (Price Book-value Ratio) remains at a low level. I would like to take it seriously that this proves that our future growth is doubted. We will further pursue management based on capital efficiency, capital cost, and stock prices and explain our growth story carefully in an easy-to-understand way to shareholders and investors. I think that the most important thing to win the trust of the stock market is to properly implement the policy of Vision 2035 and show solid accomplishments.

We are moving toward the next 100 years. In the coming age, a company whose scale is similar to ours may be left behind from the market if it is tied to mentalities, rules, and decision-making speed rooted in an organization through the history. As for our corporate culture itself, we will promote "Innovation and Growth" with the resolve to change the corporate culture if it does not work in a new market. We are determined to fulfill our duties without evasion if we face difficult problems. I hope you will continue to look forward to the future of the Group, and support us in our efforts.

## GS Yuasa's DNA



“

# Innovation

Philosophy

We are committed to people, society, and the environment, and to achieving the “Innovation and Growth” of our business.

“We want to create innovative products that contribute to society and the environment. This founding spirit began with the former founder, Genzo Shimadzu and Shichizaemon Yuasa, and continues to this day.”

## Continuing “Innovation and Growth” in the battery business

# GS

Japan Storage Battery (1917-2004)

An inventor's spirit contributing to society through high-quality product development

[Making practical use of science]  
**Inventor spirit**



Founder of Japan Storage Battery Co., Ltd.

## Genzo Shimadzu

(1869-1951)

Produced Japan's first lead-acid battery (Planté-type lead-acid battery plates).

A founder chosen as one of Japan's top ten inventors.

GS YUASA  
DNA



## DNA

sophy

## and Growth ”

, and the global environment through  
our employees and business entities.

for the world and contribute to society.”  
s of Japan Storage Battery and Yuasa Corporation,  
l is still passed down to every employee today.



every field and contributing to social development

## YUASA

Yuasa Corporation (1918-2004)

Entrepreneurship in pioneering  
new businesses ahead of its time

Founder of Yuasa Storage Battery Co., Ltd.

**Shichizaemon Yuasa**

(1877-1943)

Reformed the management of Yuasa Shichizaemon Shoten  
(now Yuasa Trading Co., Ltd.),  
which had been preserving feudal traditions.  
Created new developments through quick decision-making  
and actions, seizing business opportunities.



Entrepreneurship  
[Business is people]

# History of GS Yuasa

## Supporting a secure, safe, and comfortable society of "Innovation and Growth" from t

Since the establishment of the former Japan Storage Battery Co., Ltd. in 1917, the Company has supported the times with storage battery technology while contributing to development. Leveraging the strengths cultivated over 200 years of history of both companies, GS Yuasa embodies the corporate philosophy of "Innovation and Growth" from the past to the future.

### History of Japan Storage Battery (GS)



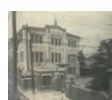
1895

Genzo Shimadzu manufactured Japan's first lead-acid battery



1917

Established Japan Storage Battery Co., Ltd.



1919

Start of automotive lead-acid batteries production



1966

Establishment of Siam GS Battery Co., Ltd. (Thailand), as the first overseas site

1993

Development of prismatic lithium-ion batteries



### History of Yuasa Corporation



1913

Shichizaemon Yuasa began research on metal electrolytic science

1920

Start of automotive lead-acid batteries production



1963

Establishment of Yuasa Battery (Thailand) Pub. Co., Ltd., as the first overseas site

1918

Established Yuasa Storage Battery Co., Ltd.



1941

Start of alkaline batteries production

1998

Development of ultra-thin lithium-ion polymer secondary batteries



1900 . . . 1950 . . . 1990

### Social Contribution

1900s

Developed large-capacity storage batteries for backup, contributing to Japan's public infrastructure development and stable power supply



1910-50s

Released automotive lead-acid batteries and small and lightweight lead-acid batteries for motorcycles, contributing to Japan's motorization



1970s

Developed high-performance, long-life lead-acid batteries, contributing to the EV boom



1990s

Developed small prismatic lithium-ion batteries, contributing to the development of information and communication technology such as mobile phones



# HISTORY

through the energy of its accumulated 100 years  
the two companies GS and YUASA.

ery and Yuasa Corporation in 1917 and 1918, respectively,

veloping a secure, safe, and comfortable society by providing cutting-edge products and solutions.

porate philosophy of "Innovation and Growth" and contributes to people, society, and the global environment.

## History of GS Yuasa



### 2004 Corporate Merger

Establishment of GS Yuasa Corporation



### 2009

Established a joint venture company for lithium-ion batteries for hybrid vehicles, Blue Energy Co., Ltd. with Honda Motor Co., Ltd.



### 2021

Transfer of infrastructure business from Sanken Electric Co., Ltd.



### 2007

Establishment of a joint venture company for large lithium-ion batteries, Lithium Energy Japan with Mitsubishi Corporation and Mitsubishi Motors Corporation.



### 2016

Transfer of lead-acid batteries business from Panasonic Corporation (currently GS Yuasa Energy Co., Ltd.)



### 2022

Start of operation of second plant for Blue Energy Co., Ltd.



### 2019

Start of operation of the plant for 12V lithium-ion batteries in Hungary

### 2023

Established Honda・GS Yuasa EV Battery R&D Co., Ltd. for research and development of lithium-ion batteries focused on EVs in collaboration with Honda Motor Co., Ltd.

2000

2010

2020

#### 2000s

Supplied lithium-ion batteries for the world's first mass-produced EV, contributing to the development of the new EV era



#### 2010s

Supplied lithium-ion batteries to the International Space Station, contributing to space development projects



#### 2010s

Supplied lithium-ion batteries for hybrid electric vehicles (HEVs) to Honda, contributing to the spread of electric vehicles



HONDA [FIT HYBRID]

#### 2020s

Contributed to realizing a decarbonized society by delivering and starting operation of the world's largest energy storage system for wind power output fluctuation mitigation





## GS Yuasa's Strengths

# Developing sure strength through

Strengths  
01

### Storage Battery Technology Serving Various Fields

The Company has supplied batteries across various fields, from deep sea to space. It pioneered the development and supply of lead-acid batteries for ISS vehicles or EN batteries. The Company is also a leading manufacturer of automotive lithium-ion batteries, which are adopted by many Japanese car manufacturers. Additionally, GS Yuasa supplies backup battery power supplies for public infrastructure and special batteries for space, contributing to a safe and secure society.

GS Yuasa's

### Providing Co Battery Te

Throughout its 100-year history,  
focused on battery technology.  
The relentless passion and spirit  
continue to pave the way for the future.

Strengths  
02

### Trust and Customer Quality and S

Even before integration, the Company pursued close collaboration with customers in the automotive and other businesses. The quality fostered through our manufacturing capabilities have together strengthened mutual trust and a solid customer base as a battery manufacturer.

# STRENGTHS

built up "Innovation and Growth"

## Strengths 02

### Production, Sales, and Maintenance Network

We establish a global network of business sites and offer proposals tailored to needs in each region. In the industrial battery and power supply business, we have extensive service network with over 100 locations nationwide in Japan, a workforce of 1,000 people, and offer 24/7 maintenance and inspection service. The Company is one of the few battery-focused manufacturers globally and will continue to supply storage batteries and power supplies for the next 20 years.

## Strengths

### Comprehensive Technology

By, GS Yuasa has consistently  
ry manufacturing.  
strength ingrained in its DNA  
for the future of batteries.

## Strengths 03

### Base Built Through Stable Supply

ursued technological innovation through  
ive and industrial battery and power supply  
product development and our stable supply  
relationships with customers, establishing  
-focused manufacturer.



# Value Creation Process

Recognized Business Environment and Key Objectives

Honed Competitive Advanta

## Mega Trends



Economic and social transformation to resource and environmental constraints



Transition to a digital economy through the Fourth Industrial Revolution



Increased importance of resilience



Slowed global population growth



Rising geopolitical risks

## Materiality

E

### Environment

Contribute to sustainability of the global environment

S

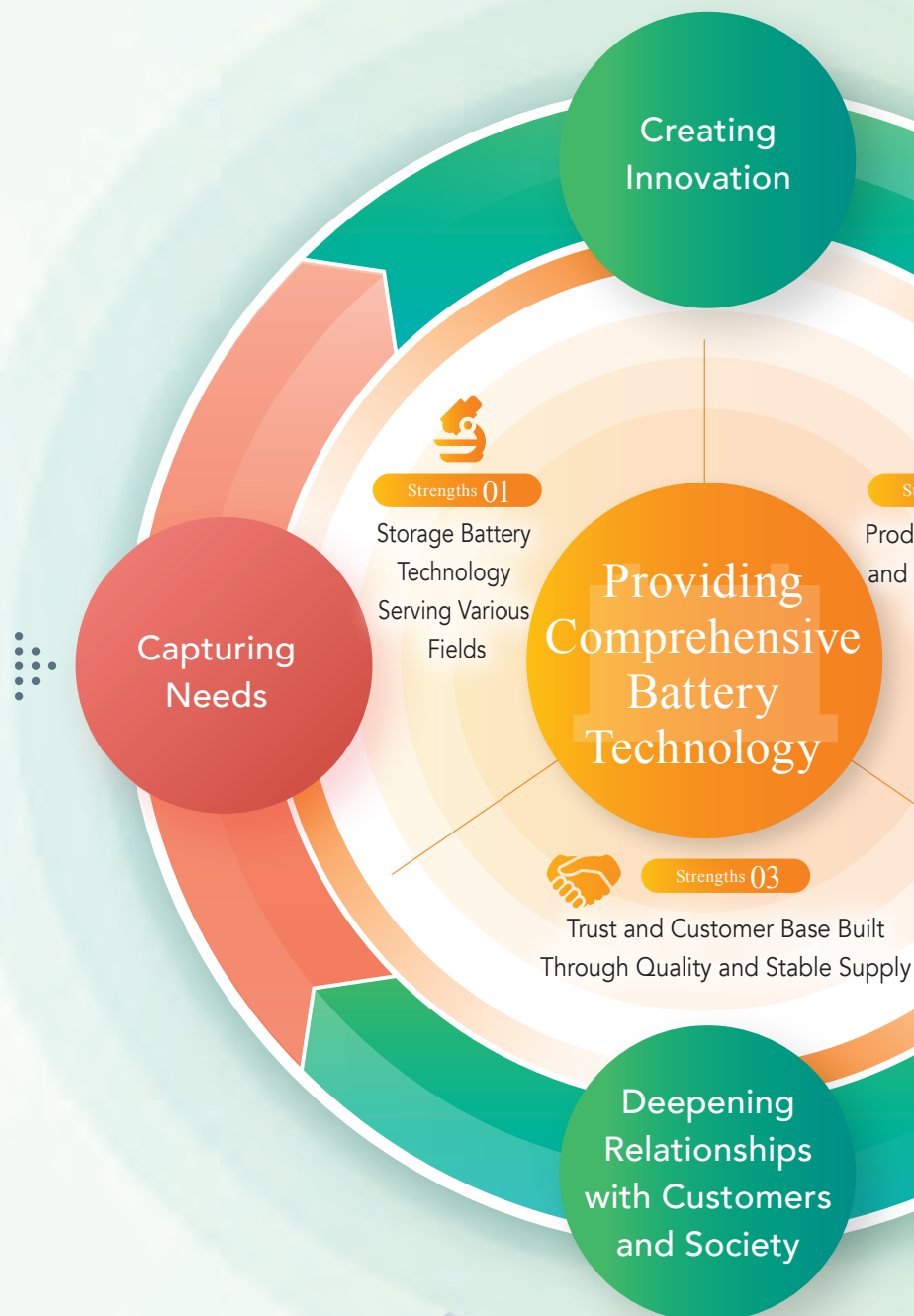
### Social

Respect for human rights and contribution to society

G

### Governance

Promotion of fair, transparent, and swift group-wide governance



## Philosophy

“Innovation and Growth”

We are committed to people, society, and the global environment, and to achieving the “Innovation and Growth” of our employees and the company.



ges

Value Provided

Desired Vision

## Mobility



To realize a society where people can move securely, safely, and comfortably, we provide lithium-ion batteries for BEVs and HEVs

## Mission

# Energy Management Company

Realizing a sustainable society and comfortable living for people through energy technologies, including storage battery technology

## Providing Solutions & Services

Through our business activities, we create various values for stakeholders and society, contributing to solving social issues

## Public infrastructure



We provide optimal batteries for a wide range of public infrastructure, such as power and communications, and deliver swift and accurate services leveraging our nationwide network

rowth

l environment through  
and business entities.

# Vision 2035

## Vision of GS Yuasa in 2035

The medium- to long-term business environment surrounding the Company is expected to see a further expansion in demand for storage batteries, including those for electric vehicles (EVs) and renewable energy, driven by the trend toward carbon neutrality and the active movement toward realizing a sustainable society. To adapt to these changes in the business environment and contribute to solving social issues, we have formulated our long-term vision, Vision 2035. In Vision 2035, to achieve "Innovation and Growth" for the next 100 years, we have set four key "Re" themes, illustrating the vision of GS Yuasa in 2035.

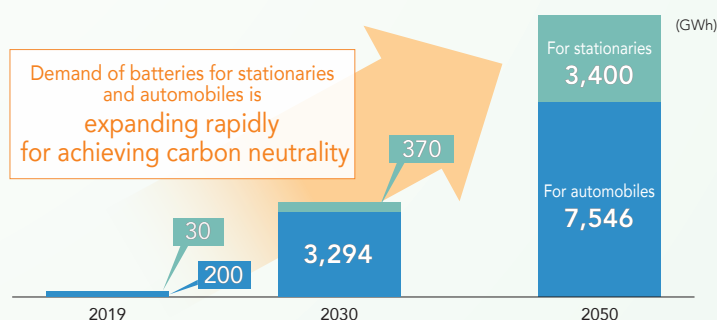
### Vision of GS Yuasa in 2035

Based on the "Four Re's" formula, we strive for innovation in energy technology, endeavor to address the challenges facing society through the development of mobility and other public infrastructures, and seek to create comfortable living environments and play our part in the global effort toward sustainability.



## Business environment surrounding GS Yuasa

### Global Storage Battery Installation Forecast by 2050



Source: Compiled by the Company from the International Renewable Energy Agency (IRENA), Global Renewables Outlook: Energy Transformation 2050 (2020).

As the market undergoes significant changes towards achieving carbon neutrality by 2050, global demand for stationary\* and automotive storage batteries is expected to surge from 230 GWh in 2019 to approximately 10,000 GWh by 2050, about a 43-fold increase. We recognize this market expansion as a significant opportunity, as we have expertise in manufacturing stationary and automotive storage batteries. In addition to steadily capturing this expanding market demand, we believe it is also important to further innovate and implement existing technologies.

\* Stationary batteries are those installed on the demand side, such as in homes, buildings, commercial facilities, and factories, or connected to the power grid to mitigate fluctuations in renewable energy output.

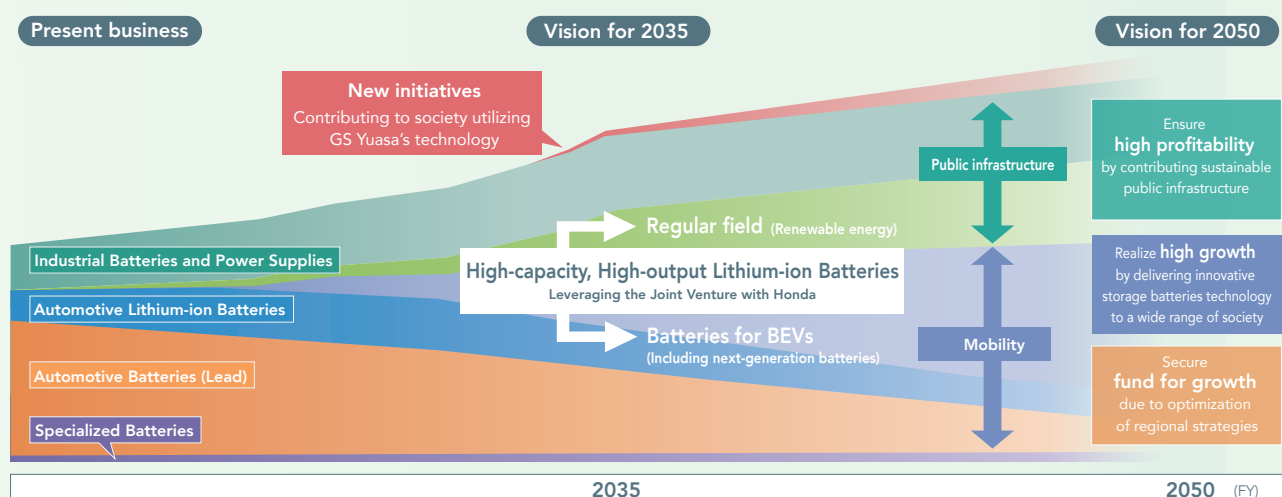


## Direction Towards 2050

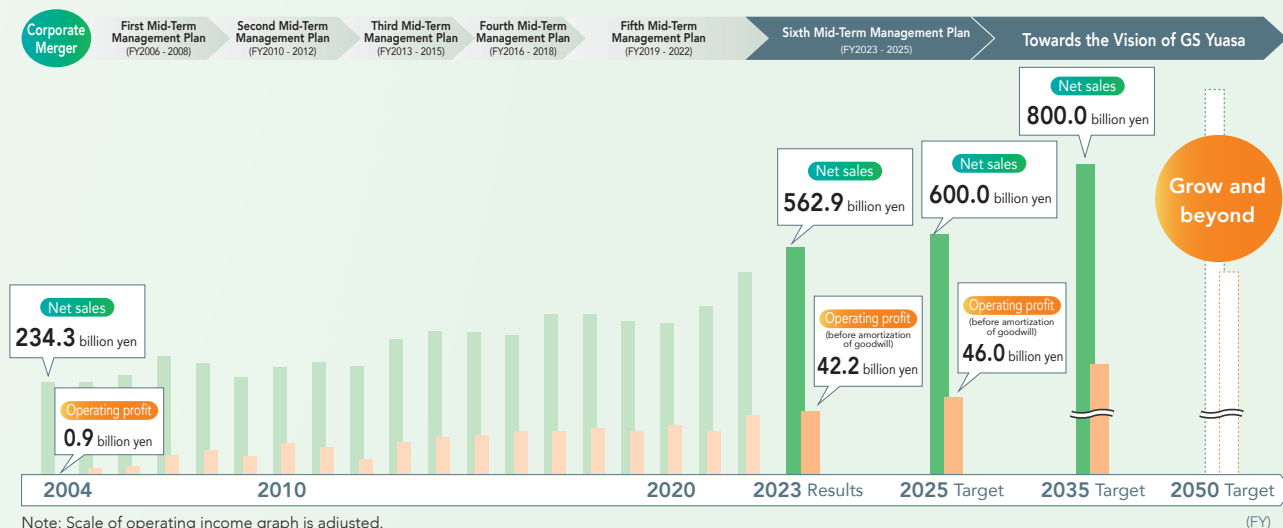
▶ Sixth Mid-Term Management Plan (FY2023-2025) P.36-39

To achieve Vision 2035 and realize carbon neutrality, we recognize the need for significant transformation in our business structure and have decided to focus on two areas: Mobility and Public Infrastructure. We aim to steadily expand our business and achieve sales of 800 billion yen in FY2035. While automotive batteries (lead) are expected to decline gradually in the long term, we aim to enhance profitability through regional and temporal strategies and secure investment funds for growth areas. For automotive lithium-ion batteries, we will steadily respond to the demand for HEV lithium-ion batteries until the mid-2030s. Industrial batteries and power supplies play a role in the maintenance of public infrastructure, and demand is expected to remain stable. Additionally, we will focus on high-capacity, high-output lithium-ion batteries centered on BEVs and ESSs as a growth area, delivering innovative storage battery technology. Around 2035, we will also foster new businesses that contribute to society as a new initiative.

### Image of Business Structure Reforms



### Image of Business Growth





# Vision 2035

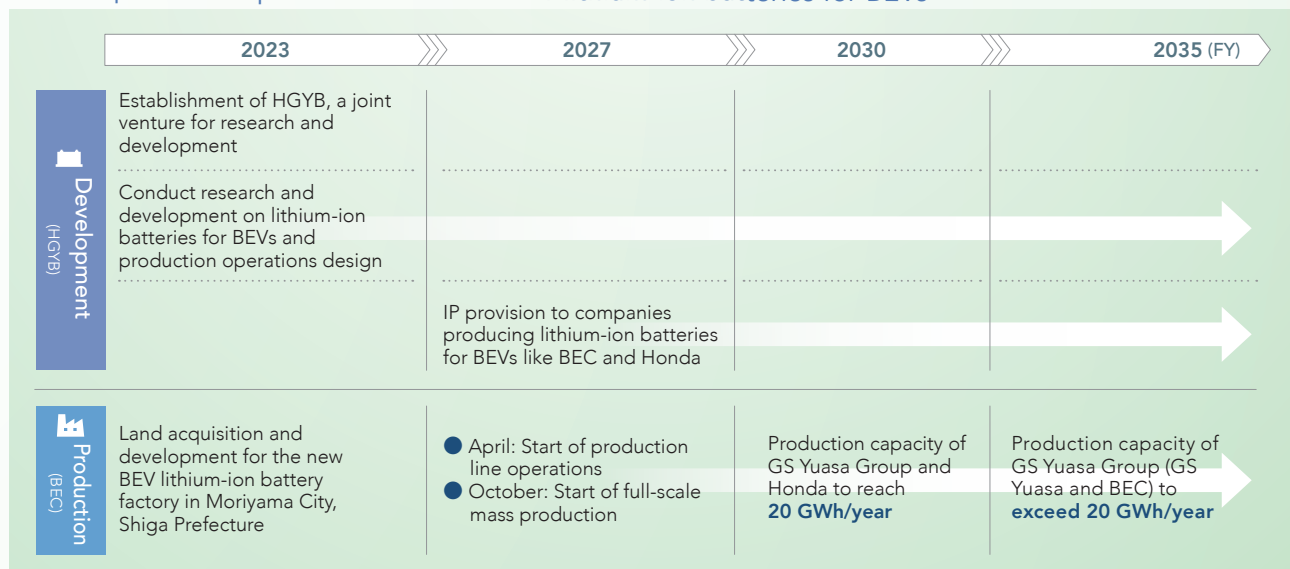


## Strategy in the Mobility Field

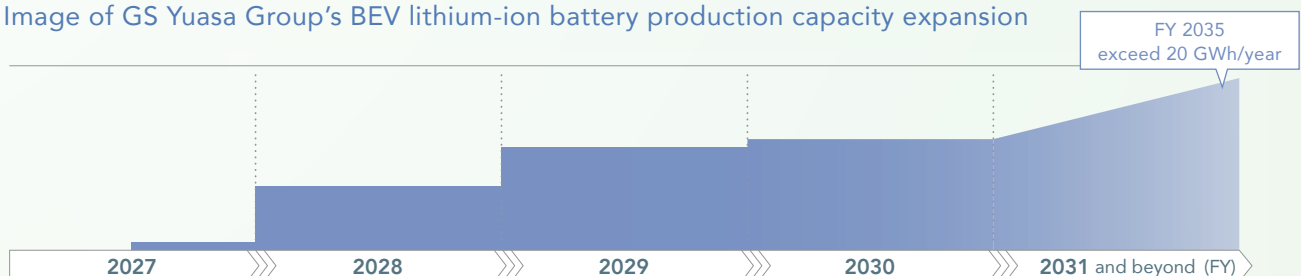
Initiatives for Automotive Lithium-ion Batteries P.52-53

For the mass production of lithium-ion batteries for BEVs, a pillar in the mobility field, research and development results at the joint venture Honda - GS Yuasa EV Battery R&D (HGYB) with Honda Motor Co., Ltd. (Honda) will be utilized. The production line at the new Blue Energy Co., Ltd. (BEC) factory in Moriyama City, Shiga Prefecture, is scheduled to start operations in April 2027, with full-scale mass production beginning in October of the same year. Initially, the batteries will be supplied to Honda's BEVs for the domestic market, and subsequently, sales will be expanded mainly to Japanese automakers, solidifying the foundation in the domestic market. Production capacity is expected to expand in stages, with the GS Yuasa Group targeting over 20 GWh/year by 2035.

## Development and production schedule for lithium-ion batteries for BEVs

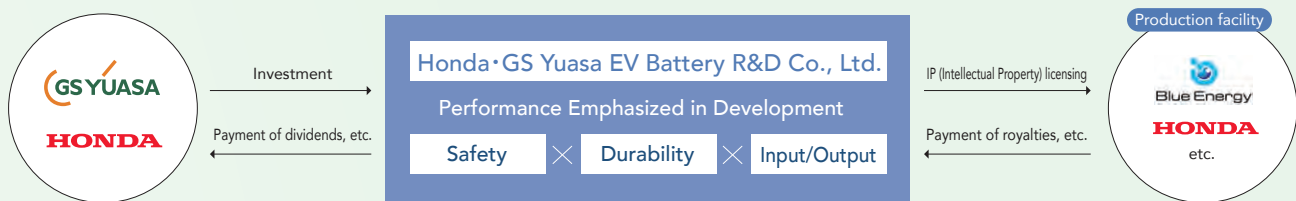


## Image of GS Yuasa Group's BEV lithium-ion battery production capacity expansion



## Business model for Lithium-ion batteries for BEVs

The BEV lithium-ion battery technology developed at HGYB, focusing on key technologies such as safety, durability, and input/output, will be utilized in the form of IP (intellectual property rights) for lithium-ion batteries for BEVs produced at the new BEC plant from 2027. As a result, HGYB will earn royalty income from BEC. In addition to BEC, HGYB's IP will be provided for the production of lithium-ion batteries for BEVs at Honda and other production plants.



## TOPICS

### Regarding Issuance of New Shares by way of Public Offering and Third-Party Allotment and Secondary Offering of Shares

On November 20, 2023, the Company announced "Issuance of New Shares by way of Public Offering and Third-Party Allotment and Secondary Offering of Shares" and conducted a capital raise. Through this capital raising, we aim to strengthen our financial foundation and execute growth investments that contribute to enhancing medium- to long-term profitability, thereby further enhancing shareholder value.

#### Overview

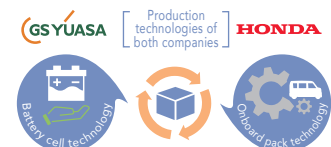
Offering structure	Domestic public offering (former interim report method)
Number of shares to be offered (excluding over-allotment)	15,219,400
Over-allotment	2,129,900 (domestic)
Parallel third-party allotment recipient and number of shares to be allotted	Honda Motor Co., Ltd. 2,497,700
Amount raised	Approx. 39.6 billion yen
Number of shares issued	80,599,442 (as of November 20, 2023) ▶ 100,446,442 (as of December 26, 2023)

#### Reason for financing

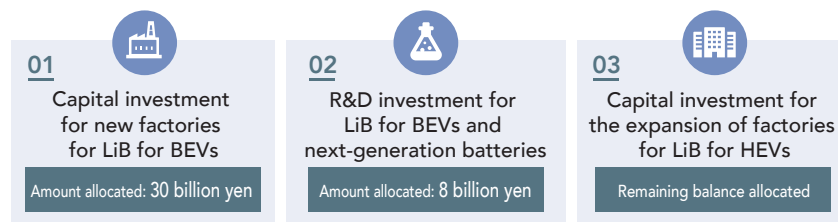
To strengthen the balance sheet in line with the business structure transformation outlined in Vision 2035, and to allocate funds for capital investment and R&D in the rapidly expanding BEV sector and capital investment in the HEV sector, which will serve as a medium- to long-term growth driver.

#### Vision aimed for with parallel third-party allotment to Honda Motor Co., Ltd.

Through further collaboration with Honda, we aim to build a strong supply chain for lithium-ion batteries (LiB) for BEVs, contribute to the spread of BEVs in Japan, and enhance corporate value.

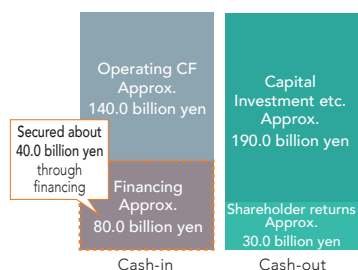


#### Use of funds raised



By executing growth investments that enhance medium- to long-term profitability, we aim to enhance shareholder value further and create new value, contributing to society

Capital Allocation in the Sixth Mid-Term Management Plan Period (FY2023-2025)



#### See here for details

Announced November 20, 2023  
"Notice Regarding Issuance of New Shares by way of Public Offering and Third-Party Allotment and Secondary Offering of Shares"

▶ [https://ir.gs-yuasa.com/en/ir/news/auto\\_20231117592166/pdfFile.pdf](https://ir.gs-yuasa.com/en/ir/news/auto_20231117592166/pdfFile.pdf)

Announced November 29, 2023  
"Notice Regarding Determination of Issue Price and Selling Price and Other Matters relating to Issuance of New Shares and Secondary Offering of Shares"

▶ [https://ir.gs-yuasa.com/en/ir/news/auto\\_20231127594769/pdfFile.pdf](https://ir.gs-yuasa.com/en/ir/news/auto_20231127594769/pdfFile.pdf)

Announced December 26, 2023  
"Notice Regarding Determination of the Number of New Shares to be Issued by Capital Increase by way of Third-Party Allotment"

▶ [https://ir.gs-yuasa.com/en/ir/news/auto\\_20231226508884/pdfFile.pdf](https://ir.gs-yuasa.com/en/ir/news/auto_20231226508884/pdfFile.pdf)

# Vision 2035



## Strategy in the Regular Field

Initiatives in the Regular (Renewable Energy) Field P.48-49

Numerous subsidies related to carbon neutrality are planned in Japan, so the introduction of renewable energy is also expected to expand, increasing the importance of ESS for fluctuation control and supply-demand adjustment. Accordingly, inquiries in the regular field, mainly for ESS, are robust, GS Yuasa has increased its production capacity by 1.3 times from FY2024 to meet demand. From 2027 onward, we plan to further expand production capacity by utilizing the production lines of the new BEV lithium-ion battery factory. In addition, because the competitive environment in the regular field is severe, we are currently developing new lithium-ion batteries. We aim to strengthen our competitiveness further by bringing them to market and enhancing our presence in the regular use market.



<sup>\*2</sup> Power conditioners



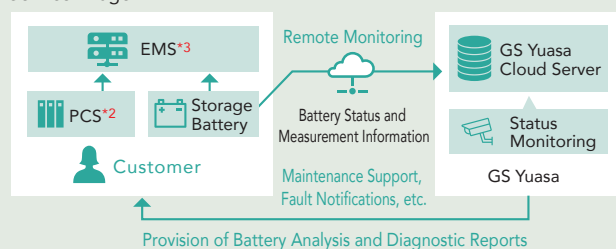
### What is the STARELINK Service?

Maintenance services that use proprietary remote monitoring technology and forecasting and preventive technologies. We offer preventive maintenance services that use AI and DX to maintain the stable operations and optimal control essential for power generating facilities used for extended periods.

For more information on STARELINK service, please refer to the website.

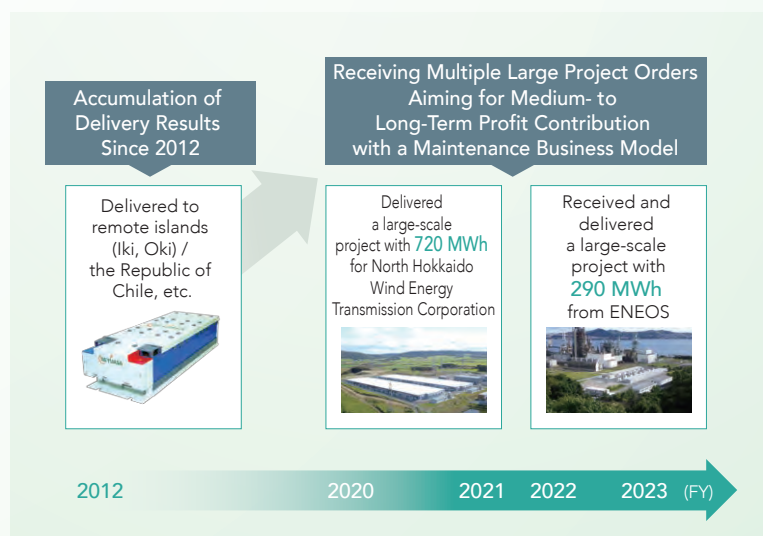
▶ <https://ps.gs-yuasa.com/products/service/starelink/>

### Service Image



<sup>\*3</sup> Energy Management System

## Our strengths in the regular field



Since 2012, the Company has received numerous orders for energy storage system (ESS) projects, and the number of large-scale projects such as those delivered to North Hokkaido Wind Energy Transmission Corporation from 2020 to 2021 and ENEOS has also increased, demonstrating outstanding expertise. In addition, our extensive network of over 100 service locations nationwide, a 24/7 support system, and remote monitoring services like STARELINK Services ensure long-term continuous revenue, which is also a strength. The Company will continue to support public infrastructure and provide safety and security through "Mono" selling business, such as container-integrated ESS, and "Koto" business, starting with services like STARELINK Services.

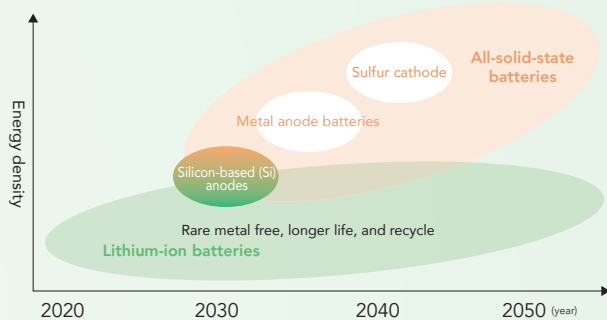


## In Focus

## R&amp;D Initiatives

Research and Development P.56–57

Liquid electrolyte lithium-ion batteries as they currently exist will evolve into batteries free from the use of rare metals, possessing longer lives, and capable of being recycled. As such, we will continue to develop more sustainable batteries with more consideration for resources and environmental issues. Regarding all-solid-state batteries, we are aiming to achieve higher energy density, and will be developing batteries with distinctive features, based on our unique solid electrolyte technology.



## GS Yuasa's strengths

## Technology and development capabilities

- Development of products used in wide-ranging applications from the deep sea to outer space
- Successful mass production of the world's first lithium-ion battery for EVs in 2009 as a result of lithium-ion battery research and development since the 1980s



©JAMSTEC

## High energy density

Based on our unique solid electrolyte technology, develop batteries with distinctive features such as compact batteries with metal-based anode and lightweight batteries with sulfur cathode

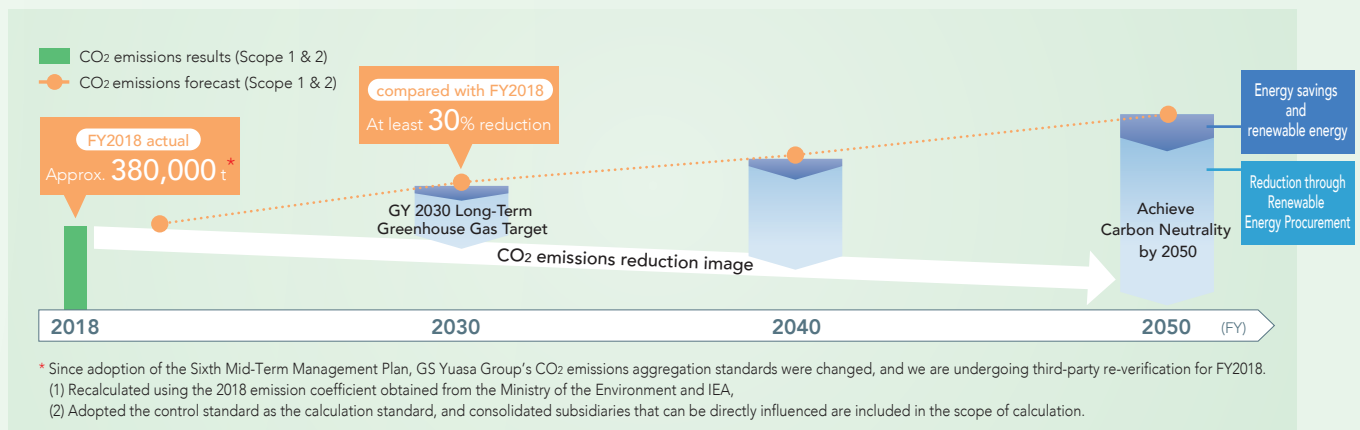
## Sustainable

Develop more sustainable lithium-ion batteries with more consideration for resources and environmental issues

## In Focus

## GY 2050 Carbon Neutrality Target

GY 2050 Carbon Neutrality Target P.65



## Efforts through achieving carbon neutrality

## Promote energy-saving measures

- Install energy-saving equipment
- Develop prescriptions for efficient charging methods and develop new ones

## Promote generating renewable energy

- Maximize introduction in all offices and plants in Japan and overseas
- Introduce our own products including Energy Storage Systems (ESS) and conduct a demonstration experiment

## Procure renewable energy

- Purchase electric power that uses renewable energy
- Procure reports of renewable energy

Long-Term Vision  
Vision 2035 website

Vision 2035 Key Points are explained in an easy-to-understand and concise manner. Please access the site for more information.

▶ <https://ir.gs-yuasa.com/en/ir/management/plan.html>



## Feature DX Promotion Initiatives

### Basic Concept of DX Promotion

Our Group started efforts toward DX promotion around 2018, beginning with the introduction of AI/IoT, and began human resource development in FY2023. In FY2024, we will consider building a DX promotion structure, training human resources, securing budgets, and assigning digital personnel and roles to each department and the Information Systems Division.

The DX promotion system is divided into three phases: Start-up Phase, Transition Phase, and Maturity Phase. The Start-up Phase focuses mainly on training, promoting intermediate training in the Training Dojo for selected members, and introducing education for all employees. During the Transition Phase, we will continue to provide support for DX promotion in each business division and continue the training. In the Maturity Phase, DX leaders will be assigned to each business division, and the Information Systems Division will become the main department responsible for DX promotion.

Internal structure for DX promotion



### Roadmap for DX promotion initiatives

In FY2023, we distributed educational content on DX to all GS Yuasa employees to promote the internal development of DX human resources on a full scale with the aim of raising DX levels by having employees take the course. In addition, we opened a "DX Training Dojo" and conducted specialized training for 49 employees who were recommended by their divisions. In FY2024, in addition to continuing the initiatives from FY2023, we have newly established an external AI consultation desk for DX Training Dojo graduates. We are receiving advisory services for AI development using submitted data.

	2020	2021	2022	2023	2024 and beyond (FY)
	Promoting the use of AI in each division	Starting full-scale measures to implement DX promotion	Establishing awareness of DX promotion among employees	Developing DX human resources and supporting implementation	
In-house training		Officers took the DX Literacy Course	All GS Yuasa employees took the DX Literacy Course	<ul style="list-style-type: none"> <li>Distribute educational content on DX to all employees</li> <li>30 to 40 employees to acquire DX implementation skills at the DX Training Dojo</li> </ul>	
Other initiatives	Individual divisions promoted AI use	<ul style="list-style-type: none"> <li>DX Policy Planning Workshop '21 held and two proposals selected</li> <li>DX Case Study Presentation Conference held with 350 employees attending online</li> </ul>	<ul style="list-style-type: none"> <li>Budgets established for the two proposals selected at the Workshop '21 and measures taken for implementation</li> <li>Workshop '22 held and one proposal selected</li> </ul>	<ul style="list-style-type: none"> <li>Budget established for one proposal selected at the Workshop '22 and measures taken for implementation</li> </ul>	<ul style="list-style-type: none"> <li>Promoting DX implementation centered on DX Training Dojo graduates in each business unit</li> <li>Established an external AI consultation desk</li> </ul>

### Digital Personnel Development Plan

Digital personnel development is targeted at those with basic to intermediate knowledge. For beginners, an in-house training curriculum centered on Microsoft 365 is provided to enable improvements in surrounding tasks. A curriculum combining external content is provided for intermediate-level individuals, divided into three roles: Business Designer/Architect, Engineer/Programmer, and Data Scientist, to acquire the ability to promote DX.

We will continue to consider establishing a DX training system in the future.

Education skills at the DX Training Dojo

Business Skills and Planning Skills			Technical Skills
Lead DX implementation Plan, propose and promote DX			Design, develop, and analyze to realize DX
<b>Producer</b> Decision-maker leading DX and business implementation <ul style="list-style-type: none"> <li>Able to oversee the entire business and lead the organization</li> </ul>	<b>Business Designer</b> Personnel responsible for planning, proposing, and promoting DX and business <ul style="list-style-type: none"> <li>Capable of translating ideas into plans</li> <li>Capable of planning and promoting projects</li> </ul>	<b>Architect</b> Personnel capable of designing systems related to DX and business <ul style="list-style-type: none"> <li>Can translate plans into system-level designs</li> <li>Can do system design</li> </ul>	<b>UX Designer</b> Personnel responsible for user-oriented design of systems (can propose designs) <ul style="list-style-type: none"> <li>Can design while keeping ease of use in mind</li> </ul> <b>Engineer/Programmer</b> Personnel who implement systems and prepare infrastructure foundations <ul style="list-style-type: none"> <li>Capable of developing with Power Platform</li> </ul> <b>Data Scientist</b> Personnel proficient in data analysis <ul style="list-style-type: none"> <li>Can perform information processing, statistics, and analysis</li> <li>Can verify effectiveness</li> </ul>

Digital Personnel Development Framework

- Advanced**: Acquisition of business skills, planning skills, and technical skills in the DX Training Dojo (training 100 people over three years)
- Intermediate**: Acquisition of knowledge on business reform and improvement
- Beginner**: Acquisition of problem-detection skills
- Indifferent Group**: Acquisition of general knowledge about DX through DX Literacy Courses

## Examples of Our Group's DX Initiatives

### Efforts to increase the accuracy of sales demand forecasts for automotive lead-acid batteries using AI

It is a critical mission of GS Yuasa to quickly and reliably deliver automotive (four-wheeled vehicles) replacement lead-acid batteries to our customers. In addition, forecasting sales volume is extremely important to resolve the dilemma of stable supply and inventory reduction.

Traditionally, we have made sales forecasts based on recent shipment trends and our experience from sales employees, but the problem was that grave forecast errors resulted in larger inventories or lost sales opportunities due to running out of products. Thus, in order to improve accuracy, we began working to deploy AI in FY2019, and fully introduced AI-based sales forecasting in FY2020.



A meeting for the sales forecasting AI promotion project

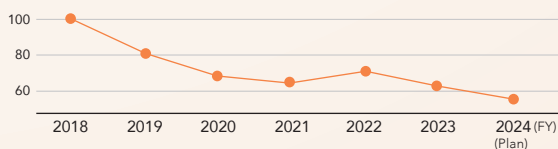
#### What is sales forecasting AI?

We have AI learn past sales volumes, temperature trends, and industry statistics to forecast sales volumes for four months, including the current month. Utilizing a tool (Data Robot) that can automatically learn AI models, the Company drastically reduced the man-hours required to forecast 1,200 different ways (approximately 300 products × 4 shipping locations), which were previously performed by sales staff.

##### [Effect by the introduction]

- Estimated time required halved
- Estimated error reduced by about 40%
- Inventory reduced to record low levels (with delivery rate maintained)

##### Estimated error (with FY2018 as 100)

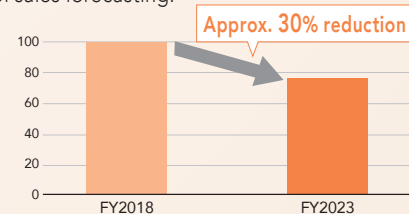


#### Realization of "AI that is used" through on-site promotion

By having the units at work sites serve as the actors and working from the bottom up, we have achieved both "accumulation of IT knowledge in the work sites" and "AI that is used in the work sites and utilized in the business."

When the system was first introduced, some sales employees followed the conventional method of forecasting without using AI forecast values, but we changed the system to one that could reflect the voices and will of the sales frontlines and worked to spread it. We aim to continuously increase the accuracy of our AI by preventing the deterioration of AI accuracy due to changes in demand trends and the consolidation of models, which is an inherent part of sales forecasting.

##### Inventory volume (with FY2018 as 100)



#### Future prospects

We aim to further optimize inventory in FY2024. In addition to AI-based sales forecasting, we are also working to standardize production management methods and improve planning accuracy by introducing a production planning system as the next DX measure.

## Voice Voices of DX Training Dojo Participants

I gained a deeper understanding of data analysis methods, statistical methods, AI business utilization, and machine learning model building, acquiring concrete skills and insights that can be applied to solving everyday problems.



Report from the DX Training Dojo executive briefing in FY2023

I have acquired versatile skills that can be useful for future work, not only in regular work but also in event hosting and promoting new projects.



## Efforts Toward New Business Creation

–New Business Creation Challenge Project “Biz Challenge”–

## Toward New Business Creation

In our Group, aiming for GS Yuasa's medium- to long-term growth as outlined in the long-term vision Vision 2035, we launched a new business creation project, “Biz Challenge,” in December 2022. In this program, we challenge new areas of business through a company-wide public call leveraging the wisdom of our employees. Under the theme “Business that contributes to solving social issues starting from GS Yuasa's unique qualities,” we solicited ideas internally, and over 150 ideas were gathered. From there, we adopted promising ideas, gradually narrowing them down through a stage-gate process, enhancing the resolution of customer issues and solutions, and striving toward commercialization. The second call for proposals was held in 2023, and we plan to continue evolving the project every year in the future.

In addition to this activity, we are also generating new business ideas, focusing on expanding existing businesses and developing derivative business areas utilizing existing business assets. We will challenge new business fields with the two approaches of “Biz Challenge,” which solicits a wide range of ideas, and “Focused Examination (task force style)” for expanding existing businesses.



Presentation of the selected members of the 1st Biz Challenge

## Desired Image of New Business

New businesses include those built from scratch and derivative areas utilizing existing companies' customer base, business base, and technology of existing businesses. Also, utilizing digital technology to add value to existing products, which leads to selling “Koto,” or combining existing products to add new value, is considered a new business. We aim to solve social issues by leveraging GS Yuasa's unique qualities and contributing to people, society, and the global environment.



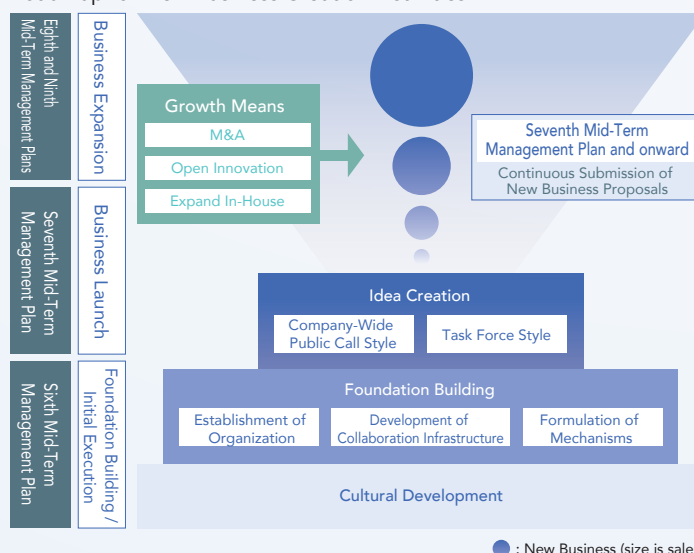
## Time Schedule Towards Commercialization of New Businesses

To commercialize new businesses, we will build a structure that nurtures the foundation of our activities – a culture full of challenging spirit – and fosters new business seeds during the Sixth Mid-Term Management Plan.

Through activities such as brainstorming sessions, training curriculums for new business development, and lectures by external practitioners, we are spreading fundamental knowledge and fostering a proactive atmosphere that encourages challenges. We are working on creating frameworks, collaboration bases, and more.

From the Seventh Mid-Term Management Plan onward, we will proceed with the full-scale launch and expansion of new businesses, accelerating our efforts in new business development. To grow the business quickly, we will broadly consider methods such as open innovation and M&A.

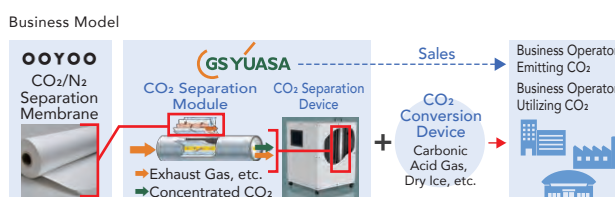
## Roadmap for New Business Creation Activities



## TOPICS New Business

### 01 GS Yuasa and OOOO Sign Basic Agreement for the Development and Market Provision of CO<sub>2</sub> Separation Membrane Systems

The Company, the Group Company GS Yuasa Membrane Co., Ltd., and Kyoto University-based startup OOOO Ltd. reached a basic agreement in October 2023 to develop and provide high-performance CO<sub>2</sub> separation membrane systems that will enable CO<sub>2</sub> capture and reuse. Combining the world's most advanced high-performance CO<sub>2</sub>/N<sub>2</sub> separation membrane technology owned by OOOO with the high-efficiency spiral module technology developed by GS Yuasa Membrane, we will develop compact and energy-efficient CO<sub>2</sub> separation systems. These systems will be able to separate and recover CO<sub>2</sub> from exhaust gases and process gases in factories, contributing to the establishment of carbon recycling technology. This will help create a carbon-neutral society by utilizing the recovered CO<sub>2</sub> to produce items such as carbonated gas, fertilizers, dry ice, chemical products, and fuel.



See here for details ▶ <https://newsroom.gs-yuasa.com/en/news-release/163>

### 02 Concluded Ecosystem Partnership Agreement with Plug and Play Japan

In August 2023, the Company concluded an Ecosystem Partnership Agreement\* with Plug and Play Japan Co., Ltd. Plug and Play Japan is one of the world's top-level accelerators and venture capital firms. They support co-creation between startups with innovative technologies and ideas and large companies. This partnership agreement will further accelerate our efforts to create new businesses by promoting DX and new business creation through collaboration with startups and open innovation.

\* Ecosystem Partnership: A partnership agreement promoting collaboration with startups in the focus areas of business challenges and technology.

## Internal cultural development events

Seminar Theme Name	Main Content
New Business Mindset Development Seminar	The significance of engaging in new business
Intrapreneur Lecture	Examples of other companies' initiatives towards new business
Idea Creation Workshop	How to find new business ideas
Startup Entrepreneur Lecture	The significance of engaging in innovation



Seminar scene

## Voice Voices of New Business Secretariat Members



New business secretariat members

About 100 years ago, one of the founders, Genzo Shimadzu II, emphasized the spirit of invention to contribute to society through the development of high-quality products, while the other founder, Shichizaemon Yuasa, emphasized a pioneering spirit by developing new businesses ahead of the times. Both entered the lead-acid battery industry from different sectors. In the rapidly changing modern era, we will continue our pursuit of "Innovation and Growth," which is our management philosophy, for the next 100 years by advancing the development of new businesses.

## Message from the Director in Charge of Finance

# CFO Message

We will achieve mid- to long-term corporate value through enhanced profitability by the promotion of ROIC management and optimal financing



Hiroaki Matsushima

*Hiroaki Matsushima*

Director and Chief Financial Officer,  
GS Yuasa Corporation

### Financial and Capital Strategy in the Sixth Mid-Term Management Plan

The Group is now at a major turning point as we look ahead to the next 100 years. In Vision 2035, our long-term vision, announced in April 2023, we have designated Mobility and Public Infrastructure as our key focus areas. We outlined our strategy to transform our business structure, with a shift from our core lead-acid battery business, which has contributed to societal development for over 100 years, to lithium-ion batteries, primarily for BEVs. Large-scale investment is necessary to realize this business structure transformation. As CFO, I recognize my responsibility

to guide the success of our business structure transformation by pursuing an optimal capital structure that balances growth investment, financial soundness, optimal financing method, and returns to shareholders.

The Sixth Mid-Term Management Plan, which started in FY2023, is a three-year period to lay the foundation for achieving the vision we set for 2035 in our Vision 2035. At the time of announcing this plan, we set a target of 610.0 billion yen in net sales and 41.0 billion yen in operating profit before amortization of

● Sixth Mid-Term Management Plan (FY2023-2025) P.36-39



goodwill for the final year. During these three years, as investment for foundation-building will take precedence, we aim to strengthen the cash-generating power of existing businesses. We plan to invest the cash generated by these businesses and the funds raised externally into growth areas within Mobility and Public Infrastructure. If we determine that doing so has a high probability of enhancing future corporate value, we will carefully consider M&A as an option.

In the first fiscal year of the plan, FY2023, we achieved record highs in both net sales and profits at each level. The increase in sales volume of lithium-ion batteries for HEVs and ESS, along with efforts to correct sales prices, results in a consolidated net sales increase of 8.7% year-on-year to 562.9 billion yen. Operating profit before amortization of goodwill increased by 31.7% year-on-year to 42.2 billion yen, surpassing the target set for the final fiscal year of the plan. Net profit for the period increased significantly from 13.9 billion yen in the previous fiscal year to 32.1 billion yen, due to factors such as the restructuring of our business in China and the impact of tax effect accounting related to making Lithium Energy Japan a wholly-owned subsidiary.

This year, I feel that our "earning power" has been reliably strengthened. In particular, I consider it a significant achievement that we were able to correct prices amid rising raw material prices and various costs. Behind the price corrections, there are also businesses that have successfully transformed low-profitability business models that have persisted for many years. On the other hand, we had to revise our target upward three times in the previous fiscal year. We recognize the need to improve the accuracy of our budgeting and will strive to make improvements.

For FY2024, we aim for net sales of 590.0 billion yen, operating profit of 44.0 billion yen, and operating profit

before amortization of goodwill of 44.5 billion yen. In July 2024, we updated the target figures for the final year of the Sixth Mid-Term Management Plan, the fiscal year ending March 31, 2026. Taking into account changes in the external environment, such as rising raw material prices beyond expectations, inflation-related cost increases, shifts in the trend of automotive electrification, further strengthening of the earning power of existing businesses, and the continued promotion of strategy execution in growth areas, we revised the net sales target from the initial 610.0 billion yen to 600.0 billion yen, and operating profit before amortization of goodwill from 41.0 billion yen to 46.0 billion yen. As CFO, I intend to clearly guide and strengthen the direction of enhancing earning power and investing cash generated by existing businesses into growth areas.

## Capital Policy

In July 2023, we established a joint venture with Honda Motor Co., Ltd. called "Honda-GS Yuasa EV Battery R&D Co., Ltd." and began research and development in August toward future mass production of high-capacity, high-output lithium-ion batteries for BEVs. In FY2024, we are planning approximately 80.0 billion yen in capital investment to increase the production of lithium-ion batteries for HEVs, with additional investment in Blue Energy No. 2 plant and the construction of a new plant for lithium-ion batteries for BEVs. We also expect large-scale investments in the future. According to the plan, with such large-scale investments, we expect an investing cash flow of approximately 190.0 billion yen over the three years of the Sixth Mid-Term Management Plan. Adjusting for the 140.0 billion yen cumulative operating

### Sixth Mid-Term Management Plan Targets (FY2023-2025)

	FY2025 target		Change ((B) - (A))
	Initial Target (April 2023) (A)	Revised Target (July 2024) (B)	
Net sales	610.0 billion yen or more	600.0 billion yen or more	-10.0 billion yen
Operating profit before amortization of goodwill (operating profit ratio)	41.0 billion yen or more (6.7% or more)	46.0 billion yen or more (7.7% or more)	+5.0 billion yen (+1.0P)
Reference: Operating profit before amortization of goodwill (before applying hyperinflation accounting)	-	48.6 billion yen or more	-
ROE (return on equity)	8% or more	8% or more	-
ROIC (return on invested capital)	10% or more	10% or more	-
Total payout ratio	30% or more	30% or more	-
Prerequisite	Domestic lead price quote	342,000 yen / t	+30,000 yen / t
	LME	2,000 US\$ / t	+100 US\$ / t
	Currency exchange	140.0 yen / US\$	+5.0 yen / US\$

Notes: 1. Above indicators refer to profit before amortization of goodwill (operating profit and profit).

2. ROIC is calculated as follows: Operating profit before amortization of goodwill (pre-tax) / Invested capital (fixed assets [excl. goodwill amortization] + working capital). Invested capital is the average of amount at beginning and end of term.

3. The reference amount for the application of hyperinflation account is recorded at the same level as in FY2023 in the revised target.

# Message from the Director in Charge of Finance

cash flow over three years and the funds required for shareholder returns, we simply face a shortfall of 80.0 billion yen. Therefore, securing funds for investment towards transforming our business structure is our greatest challenge in terms of financial capital strategy. In December 2023, we conducted a capital increase of approximately 40.0 billion yen through public offering and third-party allocation, mainly to strengthen our financial structure for investment in lithium-ion batteries for BEVs. As a result, our equity ratio at the end of FY2023 exceeded 50%, achieving a strengthening of the balance sheet to capture growth opportunities. As investments in BEV lithium-ion battery production intensify going forward, the equity ratio is expected to decline. However, we plan to maintain a ratio of at least 40% to ensure financial soundness. In addition to maximizing operating cash flow by enhancing our earning power, we will also consider various funding methods moving forward.

We work on reducing cross-shareholdings to improve capital efficiency. We will steadily sell shares that do not generate direct profits while carefully evaluating our relationship with partner companies and allocate the proceeds to business assets. Regarding shareholder returns, we aim to maintain a total payout ratio of over 30% during the period of this plan, even while prioritizing investments. The dividend per share for FY2023 was set at 70 yen per share, an increase of 20 yen from the previous fiscal year. The total payout ratio in FY2023 remained at 20.6%. However, this was a result of carefully considering priorities and deciding to prioritize growth investments this time. We expect the dividend for FY2024 to be 70 yen as well.



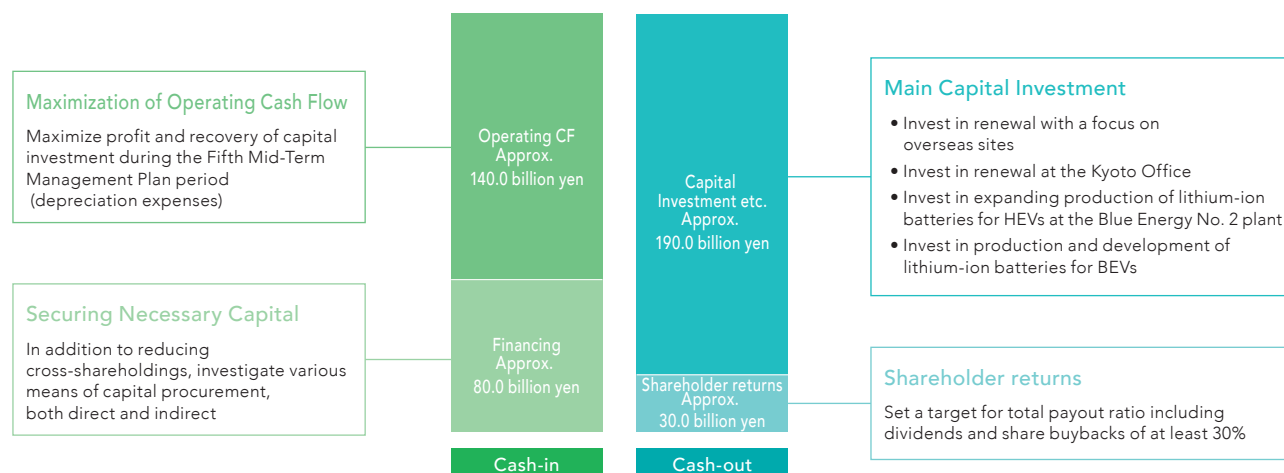
## ROIC Management

○ Actions to Implement Management that is Conscious of Cost of Capital and Stock Price P.34-35

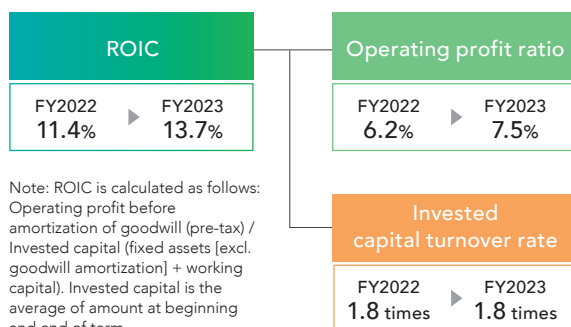
To generate cash that serves as the source of investment and build a highly profitable business portfolio, we believe it is extremely important to enhance capital efficiency by creating returns that exceed capital costs. In the Sixth Mid-Term Management Plan, we have set an ROE of 8% or more and ROIC of 10% or more as management goals. We are committed to this throughout the management team by using ROIC as an evaluation point for the performance-linked remuneration of directors.

The ROE for FY2023 was 11.6%, significantly exceeding the planned target due to an increase in net profit. However, since the denominator, which is total equity before noncontrolling interests, will increase due to the public offering, a downward trend is expected in the coming years. Since our business

### Capital Allocation (FY2023 - 2025)



## ROIC Tree (FY2022 and 2023)



areas are broad, managing businesses solely by ROE is very challenging. Therefore, we aim to improve capital efficiency across the Group by monitoring efficiency with ROIC, which allows us to evaluate the return on invested capital according to each business's characteristics. For the numerator indicating earning power, we use operating profit before amortization of goodwill, rather than the usual after-tax operating profit. To deepen the understanding of ROIC and improve its effectiveness, we are excluding tax elements that are difficult for business units to consider.

The ROIC for FY2023 was 13.7%. However, since the Company will be making significant investments in lithium-ion batteries for BEVs, a temporary decline is expected. For the overall business portfolio, the automotive battery business (Japan), which has many fully depreciated facilities, will maintain a high ROIC, and the cash generated there will be invested in growth areas. Similarly, the industrial battery and power supply business will use the cash secured in the emergency field to invest in regular field such as energy storage systems (ESS) for renewable energy, which are expected to grow. The automotive lithium-ion battery business will work on expanding profits for HEV use. However, a decline in ROIC is anticipated during the process of making large-scale investments in BEV use, as mentioned earlier. Needless to say, for these growth businesses, we will evaluate not only ROIC but also their future growth potential. For the automotive battery business (overseas), we aim to improve capital efficiency through regional strategy shifts, resource concentration on key bases, and profit maximization.

To promote understanding of ROIC, we regularly hold study sessions for managers and on-site employees. Additionally, through reverse tree deployment, we link management indicators with on-site operations, incorporating this into company-wide TQM activities. We are building a more effective system where each department employee's work improves ROIC.

## Toward the Sustainable Enhancement of Shareholder Value

Currently, the PBR of the Company's shares improved from around 0.8x right after the public offering to temporarily exceed 1.0x, but has since remained at a low level. We sincerely accept this market evaluation, aim to grasp the expected returns of our shareholders and investors, and strive for careful communication to ensure understanding of the Company's growth story.

We will strive to ensure that our investors understand that we do not take the easy way out by investing solely in the potential for growth in lithium-ion batteries for BEVs. Instead, we aim to manage our business while keeping ourselves grounded, increasing the profitability of the existing businesses, and taking on new challenges.

Most importantly, it is essential to steadily execute the necessary measures to enhance corporate value. The Company supplies products in various areas, including lead-acid batteries for automotive, forklift, and industrial applications and lithium-ion batteries for HEVs, PHEVs, and EVs. Leveraging our strength in operating across all areas, we will securely capture the expanding demand toward achieving carbon neutrality. We will work toward achieving our targets while addressing rising costs, such as surging raw material prices and increased transportation expenses. We aim to act as a "compass" toward achieving our "North Star" goal of "Vision 2035."

We hope that our shareholders and investors understand our Group's perspective of aiming to enhance corporate value from a mid- to long-term viewpoint and continue to support us.



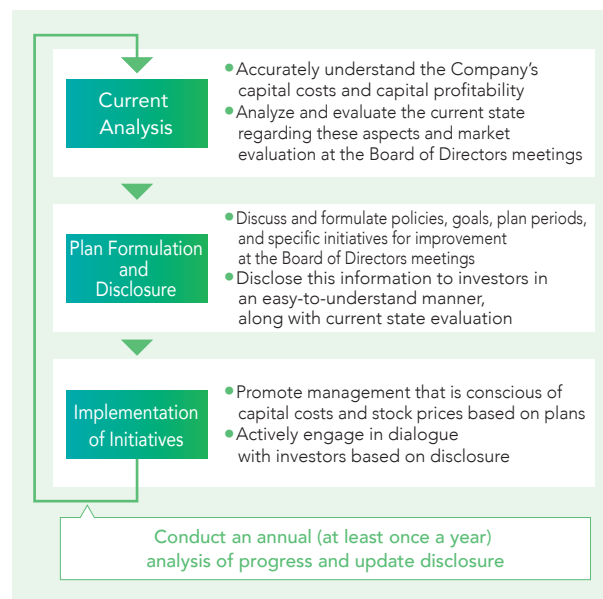


# Action to Implement Management that is Conscious of Cost of Capital and Stock Price

The Company uses indicators such as return on equity (ROE) and return on invested capital (ROIC) to analyze the current state of capital profitability and as target values for the Sixth Mid-Term Management Plan.

We regularly discuss understanding capital costs, analyzing the current state based on market evaluation, and formulating plans at the Board of Directors meetings. We are working towards achieving management that is conscious of capital costs and stock prices to further enhance corporate value.

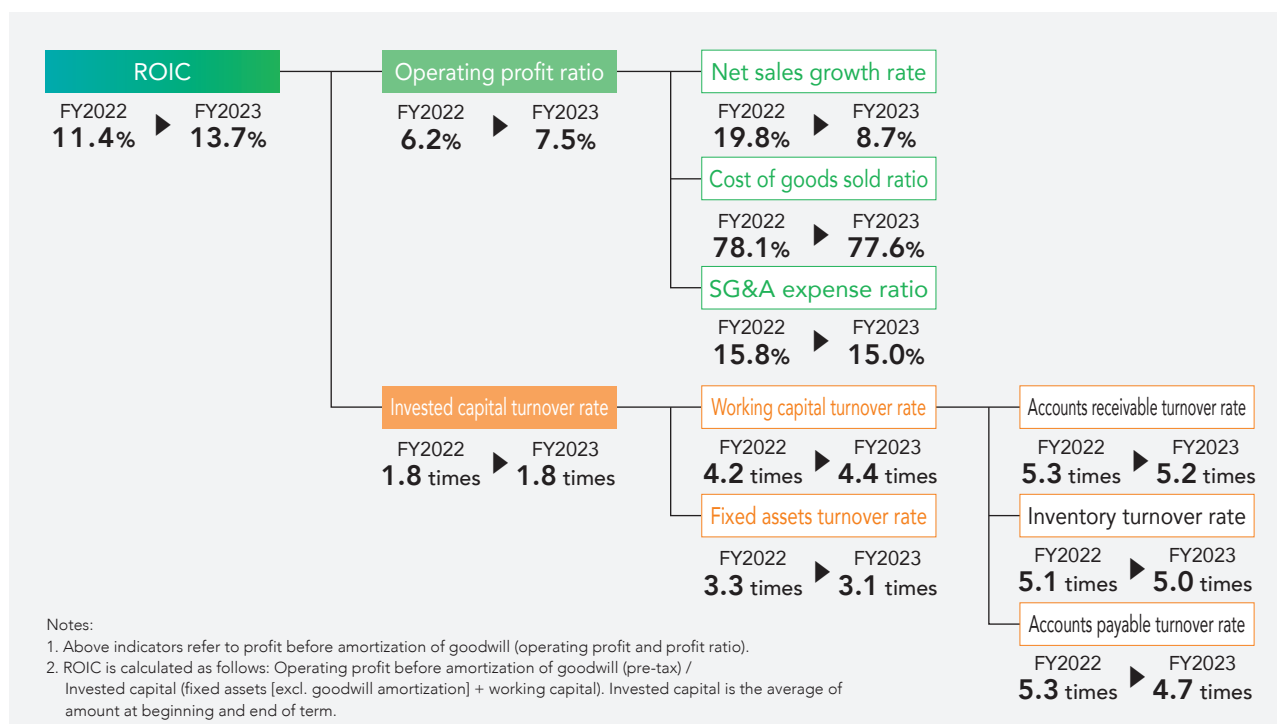
Although there is a possibility that ROE may temporarily decline due to the impact of the recent capital increase, we will promote growth investments to maximize the opportunities presented by the global expansion of storage battery demand toward achieving carbon neutrality. Additionally, by reinforcing the earning capacity in existing businesses, we aim to increase earnings per share (EPS) and improve ROE. We will actively engage in dialogue with investors regarding efforts to achieve mid- to long-term goals, business growth, and future prospects to expand market capitalization and improve price book-value ratio (PBR).



Source: Action to Implement Management that is Conscious of Cost of Capital and Stock Price (Tokyo Stock Exchange)

## ROIC Tree

In the Sixth Mid-Term Management Plan from FY2023, the Company has set ROIC as one of its management goals and aims to improve it. The invested capital turnover rate for FY2023 remained flat, but the operating profit ratio improved mainly due to an increase in sales volume of lithium-ion batteries and lithium-ion batteries for HEVs and ESS, as well as efforts to correct sales prices. As a result, the Company's overall ROIC increased from 11.4% in the previous fiscal year to 13.7%. In the automotive lithium-ion battery business, we are making significant upfront investments in growth areas, leading to fluctuations depending on the fiscal year. Therefore, the company evaluates and manages ROIC on mid- to long-term trends rather than on a single-year comparison.



## TOPICS

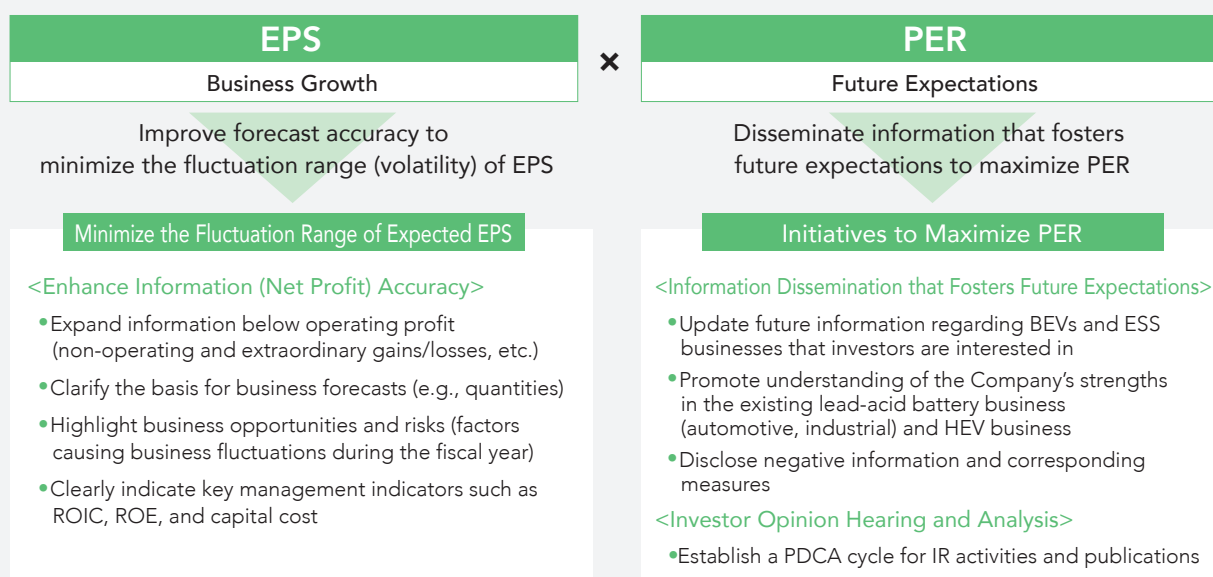
## 01 Initiatives to Promote ROIC Management Within the Company

We are working on awareness activities through various measures tailored to each organizational level. We have held multiple study sessions for management and regularly disseminate information through the internal email newsletter. We are also promoting this understanding through total quality management (TQM) activities. From FY2021, we have requested that Kaizen (improvement) activities be linked with ROIC when formulating the annual plans of each department, incorporating this into employees' goal-setting processes. As a result, each individual is gradually becoming more aware of how improvements through TQM activities affect ROIC. We will continue these efforts to further raise awareness within the Company.

## 02 Measures to Improve Stock Price

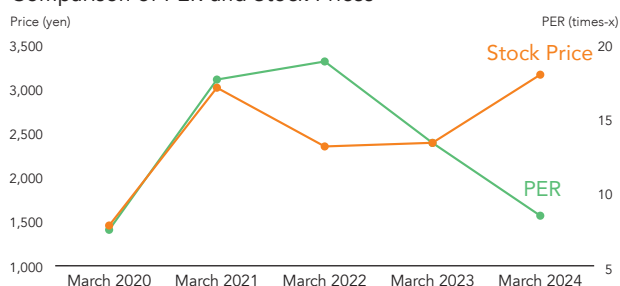
The Company is working toward management that is conscious of capital costs and stock prices, and to this end, we repeatedly discuss understanding capital costs, analyzing the current situation based on market evaluation, and formulating plans at the Board of Directors meetings. Our aim is to enhance corporate value further, expand market capitalization, and improve PBR.

Regarding EPS, a component of stock price, we are promoting growth investments to maximize global storage battery demand opportunities for achieving carbon neutrality. Simultaneously, we are working on initiatives to enhance business growth such as strengthening the profitability of existing businesses. Additionally, we are striving to improve information accuracy to minimize the fluctuation range of expected EPS. Furthermore, we are working to improve price earnings ratio (PER) by actively engaging in dialogue with investors about our initiatives to achieve mid- to long-term goals, business growth, and future potential. This is part of our measures to improve stock prices.



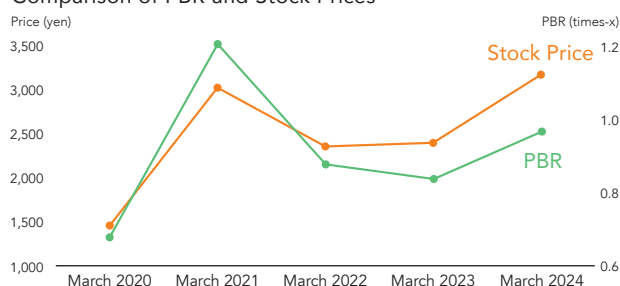
## Reference Data

Comparison of PER and Stock Prices



Note: PER is for operating profit before amortization of goodwill.

Comparison of PBR and Stock Prices



# Sixth Mid-Term Management Plan (FY2023-2025)

## Policy and Measures

### Policy

Positioning this period as one for laying the foundation for reform to realize the vision envisioned in Vision 2035, we will implement a variety of measures to reform our business structure.

### Measures

1	Development of batteries for BEVs	 <ul style="list-style-type: none"> <li>Development of a high-capacity, high-output lithium-ion batteries by utilizing joint venture company with Honda</li> <li>Establishment of production and supply systems of batteries for BEVs to expand mobility and public infrastructure business</li> </ul>
2	Reinforcement of earning capacity in existing business	 <ul style="list-style-type: none"> <li>Thorough value-added creation and improvement in profitability</li> <li>Maximization of profits due to unparalleled superiority in Industrial Batteries and Power Supplies business in Japan</li> <li>Transformation of regional strategy, including review of business in China, maximization of profits by concentrating resources at main sites</li> </ul>
3	DX / new business	 <ul style="list-style-type: none"> <li>DX promotion to enable business structure transformation</li> <li>Create new businesses that contribute to solving social issues</li> </ul>

For details on the strategies and initiatives of each segment, please refer to "Business Outlook."

● Automotive Batteries P.42-45 ● Industrial Batteries and Power Supplies P.46-49 ● Automotive Lithium-ion Batteries P.50-53 ● Specialized Batteries and Others P.54-55

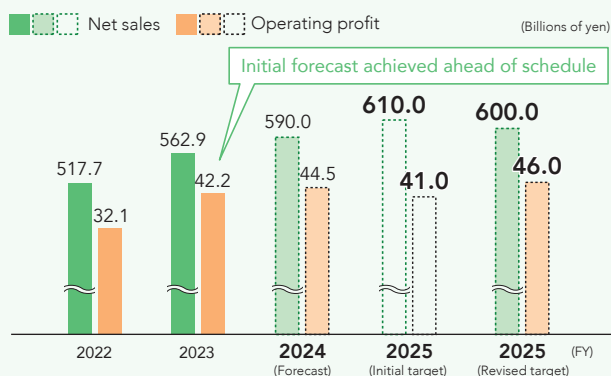
## Changes in the Business Environment and Review of Targets

On July 9, 2024, the Company announced the review of the targets for the final fiscal year (FY2025) of the Sixth Mid-Term Management Plan.

In FY2023, the first fiscal year of the Sixth Mid-Term Management Plan, we strengthened profitability in existing businesses and reviewed our China business, resulting in profit growth at various stages. As a result, we achieved the operating profit target for FY2025 ahead of schedule, prompting us to revise our management goals.

Going forward, the Company will continue to promote the following three initiatives: (1) Development of batteries for BEVs, (2) Reinforcement of earning capacity in existing business, and (3) Digital transformation (DX)/new business.

Changes in net sales and operating profit before amortization of goodwill



### Changes in the Market Environment

Raw material prices corresponding to the weak yen and rising labor costs due to labor shortages

Changes in the trend of EV adoption and a reconsideration of HEVs, mainly in Europe

Expansion of the national carbon neutrality policy (subsidies for ESS and BEVs, etc.)

Reorganization of the supply chain and the growth of competing companies in the lithium-ion battery sector



### Changes at GS Yuasa

Strengthening the earning power of existing businesses, focusing on automotive batteries and industrial batteries and power supplies

Reconsidering the business portfolio through selection and concentration (e.g., transfer of China business)

Strategic execution in growth areas centered on the BEV business  
(e.g., establishment of Honda・GS Yuasa EV Battery R&D Co., Ltd. and acquisition of land for a BEV battery factory)



## Management Targets

	FY2025 target		Change ((B) - (A))
	Initial target (April 2023) (A)	Revised target (July 2024) (B)	
Net sales	610.0 billion yen or more	600.0 billion yen or more	-10.0 billion yen
Operating profit before amortization of goodwill (operating profit ratio)	41.0 billion yen or more (6.7% or more)	46.0 billion yen or more (7.7% or more)	+5.0 billion yen (+1.0P)
Reference: Operating profit before amortization of goodwill (before applying hyperinflation accounting)	-	48.6 billion yen or more	-
ROE (return on equity)	8% or more	8% or more	-
ROIC (return on invested capital)	10% or more	10% or more	-
Total payout ratio	30% or more	30% or more	-

Prerequisite	Initial target (FY2025) (A)	Revised target (FY2025) (B)	Change ((B) - (A))
Domestic lead price quote (yen / t)	342,000	372,000	+30,000
LME (US\$ / t)	2,000	2,100	+100
Currency exchange (yen / US\$)	140.00	145.00	+5.00

Notes:

- Above indicators refer to profit before amortization of goodwill (operating profit and profit).
- ROIC is calculated as follows: Operating profit before amortization of goodwill (pre-tax) / Invested capital (fixed assets [excl. goodwill amortization] + working capital). Invested capital is the average of amount at beginning and end of term.
- The reference amount for the application of hyperinflation account is recorded at the same level as in FY2023 in the revised target operating profit.

### Targets by segment

Targets by segment		FY2025 target				Change (B) - (A))		[Reference] Revised target (FY2025) (before applying hyperinflation accounting)		Reason for revision
		Initial target (April 2023) (A)		Revised target (July 2024) (B)						
		Net sales	Operating profit (profit ratio: %)	Net sales	Operating profit (profit ratio: %)	Net sales	Operating profit (profit ratio: P)	Net sales	Operating profit (profit ratio: %)	
Automotive batteries	Japan	100.0	7.0 (7.0)	100.0	9.0 (9.0)	±0.0	+2.0 (+2.0)	100.0	9.0 (9.0)	•Reflecting the impact of price revision
	Overseas	240.0	17.0 (7.1)	260.0	17.0 (6.5)	+20.0	±0 (-0.6)	260.0	19.6 (7.5)	•Considering the impact of Turkey's hyperinflation accounting •Increased sales volume, and price revision
Industrial batteries and power supplies		140.0	11.0 (7.9)	120.0	13.0 (10.8)	-20.0	+2.0 (+2.9)	120.0	13.0 (10.8)	•Reflecting the impact of price revision •Considering the decrease in overseas sales
Automotive lithium-ion batteries		110.0	6.0 (5.5)	100.0	5.0 (5.0)	-10.0	-1.0 (-0.5)	100.0	5.0 (5.0)	•Reflecting the impact of price decline due to the drop in lithium market conditions
Specialized batteries and others		20.0	0 (-)	20.0	2.0 (10.0)	±0.0	+2.0 (+10.0)	20.0	2.0 (10.0)	•Reflecting the review of administrative expenses
Total		610.0	41.0 (6.7)	600.0	46.0 (7.7)	-10.0	+5.0 (+1.0)	600.0	48.6 (8.1)	

Note:

- Operating profit has been operating profit before amortization of goodwill and the operating profit ratio has been the operating profit ratio before amortization of goodwill.

### Financial policy and capital policy

FY2025 target		
Interest-bearing debt to operating cash flow ratio* <sup>1</sup> Approx. <b>3 years</b>	Total payout ratio* <sup>2</sup> <b>30% or more</b>	Equity ratio Maintain at <b>40% or more</b>
Sixth Mid-Term Management Plan 3-year total		
Operating cash flow <b>140.0 billion yen</b>	Investing cash flow <b>-190.0 billion yen</b>	Free cash flow <b>-50.0 billion yen</b>

\*<sup>1</sup> Interest-bearing debts (including lease obligations) / Operating cash flow\*<sup>2</sup> The total payout ratio is before amortization of goodwill.

### Capital investment, depreciation, R&D costs

		FY2023-2025
Capital investment		<b>190.0 billion yen</b>
Automotive batteries	Japan	<b>12.0 billion yen</b>
	Overseas	<b>20.0 billion yen</b>
Industrial batteries and power supplies		<b>16.0 billion yen</b>
Automotive lithium-ion batteries		<b>105.0 billion yen</b>
Specialized batteries and others		<b>37.0 billion yen</b>
Depreciation expenses		<b>65.0 billion yen</b>
Automotive lithium-ion batteries		<b>24.0 billion yen</b>
R&D expenses		<b>60.0 billion yen</b> * <sup>3</sup>
(Ratio of R&D expenses to net sales)		<b>3.4 %</b> * <sup>4</sup>

\*<sup>3</sup> R&D costs in equity method affiliates are included.\*<sup>4</sup> Plan values as of the end of FY2023.

Sixth Mid-Term Management Plan Update Briefing: Materials and Briefing Video








▶ [https://ir.gs-yuasa.com/en/ir/library/strategy\\_meeting.html](https://ir.gs-yuasa.com/en/ir/library/strategy_meeting.html)

Long-Term Vision and Mid-Term Management Plan Website





▶ <https://ir.gs-yuasa.com/en/ir/management/plan.html>

## Sixth Mid-Term Management Plan (FY2023-2025) — Progress of Materiality

Materiality P.62-63

	Materiality	Activity outline	Scope of application	Indicator	Potential impact on business	FY2023 results	FY2025 target
Governance	 Thoroughly fulfilling our CSR and ensuring compliance	Provision of legal information and promotion of compliance training	Japan	(1) Number of times compliance education information disseminated annually (2) Number of significant compliance violations	Opportunity loss due to penalties, damages, administrative sanctions, or suspension of transactions	(1) 16 (2) None	(1) 16 (2) None
			Overseas	(1) Achievement rate of compliance training plan (2) Achievement rate of significant compliance violation risk response plan	Opportunity loss due to penalties, administrative sanctions, or suspension of transactions due to relation with cartels or bribery	(1) 100% (2) 100%	100%
	 Respect and protection for intellectual property	Promotion of the use of company intellectual property rights	Global	Achievement rate of patent acquisition plans that contribute to the expansion of business	Opportunities for business growth and new business creation	100%	100%
		Thorough avoidance of infringement of third-party intellectual property rights	Japan	Number of third-party intellectual property rights infringement incidents	Losses due to infringement of third-party intellectual property rights	-	None
		Elimination of infringing products	Overseas	Number of imitation product sales websites shut down	Future revenue loss due to the sale of counterfeit products	-	1,000
	 Strict management of confidential information	Promotion of security measures and strengthening of illegal / inappropriate access monitoring	Global	Cyberattack response ratio at time of detecting high security alerts	Losses due to leakage of confidential information	100%	100%
			Japan	Information leak confirmation and response ratio at time of large data output			100%
		Promotion of information security training	Japan	Ratio of employees passing information security proficiency test		96%	95% or more
Social	 Respect for Individuality	Promoting human rights education	Japan	Achievement rate of human rights training plan	<ul style="list-style-type: none"> <li>• Opportunity loss due to transaction suspension caused by human rights violations</li> <li>• Loss of manufacturing and sales opportunities due to labor disputes</li> <li>• Human resource loss due to decreased productivity (resignation, leave, strike)</li> <li>• Litigation and damage compensation risks</li> </ul>	100%	100%
			Overseas	Achievement rate of harassment education plan		100%	100%
		Thorough management of human rights risks	Japan	Harassment incident response ratio		100%	100%
	 Respect for Diversity	Women's empowerment	Japan	(1) Ratio of women in management positions (2) Ratio of women among new graduates recruited for career-track positions (3) Ratio of female workers (4) Achievement rate of training plan for female senior managers	<ul style="list-style-type: none"> <li>• Increase in shareholder equity due to recognition related to women's participation and adoption as a women-friendly investment stock</li> <li>• Securing labor capacity by increasing the retention rate for female employees</li> </ul>	(1) 3.9% (2) 26.7% (3) 14.7% (4) 100%	(1) 6% or more (2) 30% or more (3) 17% or more (4) 100%
		Promotion of the employment of persons with disabilities	Japan	Employment rate of people with disabilities		2.65%	2.7% or more
	 Human resources development	Promotion of human resource development programs	Japan	(1) Achievement rate of training plan for development of autonomous-minded human resources (2) Achievement rate of next-generation manager education plan	<ul style="list-style-type: none"> <li>• Securing personnel who meet the functional requirements</li> <li>• Losses due to failure to obtain IATF16949 certification</li> <li>• Enhancement of human resource performance</li> <li>• Human resource loss due to decreased productivity (resignation, leave, strike)</li> <li>• Securing personnel for future management positions and key roles</li> </ul>	(1) 100% (2) 100%	100%
	 Enhancement of work environments and occupational health and safety	Promotion of the thorough management of employees' working hours and prevention of the recurrence of long working hours	Japan	(1) Response ratio to prevent the recurrence of long working hours (2) Annual frequency of labor-management consultations relating to working hours (3) Operational achievement ratio of standard for number of days of paid leave taken annually	<ul style="list-style-type: none"> <li>• Losses associated with the violation of the Agreement 36</li> <li>• Losses due to unused paid leave</li> </ul>	(1) 100% (2) 12 (3) 99.9%	(1) 100% (2) 12 (3) 100%
			Overseas	Achievement rate of overtime work reduction target	<ul style="list-style-type: none"> <li>• Losses associated with work-related accidents due to overwork resulting from long working hours</li> </ul>	68%	100%
		Thorough implementation of appropriate employment management	Japan	Number of corrective recommendations from the Labor Standards Inspection Office based on spot inspections	Losses associated with corrective recommendations	None	None

**E** Environment **S** Social **G** Governance

	Materiality	Activity outline	Scope of application	Indicator	Potential impact on business	FY2023 results	FY2025 target	
Social	<div>S</div> <div>Enhancement of work environments and occupational health and safety</div> 	Promotion of a work-life balance	Japan	Job turnover of full-time employees	• Increase in additional hiring costs due to employee turnover	2.3%	Less than 2.3%	
		Promotion of health management	Japan	Rate of high stress individuals	• Losses due to employees taking leave or resigning because of mental health issues	10%	10% or less	
		Promotion of occupational health and safety risk management	Global	(1) Number of serious occupational accidents (2) Number of workers not meeting internal blood lead concentration management standards	• Losses due to major industrial accidents	(1) None (2) 308	(1) None (2) None	
			Japan	Number of accidents resulting in missed work		5	2 or less	
			Overseas	Number of accidents resulting in missed work		30	26 or less	
	<div>S</div> <div>Provision of High-quality Products</div> 	Promotion of quality improvement and strengthening of quality communication	Global	Achievement ratio of targets for claims and in-process defects	• Losses due to quality defects	92%	100%	
		Reinforcement of product safety management	Global	(1) Number of serious product accidents (2) Achievement ratio of product safety-related incident reduction target (3) Achievement ratio of product safety education plan	• Losses due to product safety incidents	(1) None (2) 65% (3) 50%	(1) None (2) 100% (3) 100%	
		Reinforcement of service provision	Japan	Achievement ratio of service promotion project plan	• Increased revenue from the promotion of services (including revenue from product maintenance and other service-based sales)	100%	100%	
	Environment	<div>E</div> <div>Promoting environmental protection</div> 	Promotion of effective use of water resources	Global	Ratio of reduction of water use (compared with FY2018)	• Sales opportunity loss due to reputational damage and brand image decline from delays in water usage reduction initiatives	15.3%	15.0% or more
			Contribution to realization of low-carbon society	Global	Ratio of reduction of CO <sub>2</sub> emissions (compared with FY2018)	• Sales opportunity loss due to reputational damage and brand image decline from delays in carbon neutrality initiatives	13.7%	15.0% or more
Prevention of environmental pollution			Global	Number of major environmental accidents	• Losses due to environmental accidents	None	None	
Improvement in ratio of use of recycled materials in products provided to markets			Global	Ratio of recycled lead used as lead raw materials in lead-acid batteries	• Sales opportunity loss due to reputational damage and brand image decline from delays in contributing to a recycling-oriented society	65.7%	70.0% or more	
<div>E</div> <div>Developing and Popularizing Environmentally Considered Products</div>		Expansion of market for GS Yuasa products contained in products contributing to the curbing of global warming	Global	Percentage of environmentally considered products in total sales of all products	• Sales opportunity loss due to reputational damage and brand image decline from delays in carbon neutrality initiatives • Increased revenue due to sales growth of environmentally considered products	38.7%	45.0% or more	
Social	<div>S</div> <div>Promotion of CSR Procurement</div> 	Responses to responsible mineral procurement	Global	Achievement ratio of responsible mineral survey plan	• Losses due to the materialization of supply chain CSR risks	100%	100%	
		Management of supply chain CSR risks	Global	Achievement ratio of supplier CSR issues improvement plan		100%	100%	
			Japan	(1) Achievement ratio of internal education plans related to CSR procurement (2) Achievement ratio of supplier education plans related to CSR procurement		-	(1) 100% (2) 100%	

Note: The scope of the application may not cover all Group companies. This plan is periodically reviewed, and as a result, there may be differences from the details of the plan disclosed last time. Please refer to our website for the latest data on the materiality response plan.

▶ [https://www.gs-yuasa.com/en/csr/pdf/materiality\\_2024.pdf](https://www.gs-yuasa.com/en/csr/pdf/materiality_2024.pdf)



# Business Overview and Market Environment

Business segment	Main applications	Main customers	Characteristics of the business
Automotive Batteries (Japan)	<b>Automobiles</b> For starting Internal combustion engines (ICE) / Vehicles with start-stop systems (ISS: idling stop systems)	For new automobiles Japanese automakers	<ul style="list-style-type: none"> <li>Consistent revenue can be secured through replacement batteries</li> <li>High profit margin for lead-acid batteries for ISS vehicles</li> <li>Earnings affected by fluctuations in lead prices</li> <li>The demand period for replacements is winter</li> <li>The volume ratio of batteries for new automobiles to replacement is approximately 1:1 (the ratio varies from year to year)</li> </ul>
	For auxiliary equipment Hybrid electric vehicles (HEVs) / Plug-in hybrid electric vehicles (PHEVs) / Electric vehicles (EVs)	For replacement Distributors (electrical device shops, etc.) / Automobile accessory mass retailers / Automobile dealers / Oil refiners and sellers, etc.	
	<b>Motorcycles</b> For starting	For new automobiles Japanese motorcycle makers	
		For replacement Distributors, etc.	
Automotive Batteries (Overseas)	<b>Automobiles</b> For starting ICE / ISS vehicles	For new automobiles Japanese automakers, etc.	<ul style="list-style-type: none"> <li>Earnings affected by fluctuations in lead prices</li> <li>As the foundation is local production for local consumption, the impact on foreign exchange earnings will be minimal</li> <li>Industrial lead-acid batteries are also included (Backup batteries in Europe account for the majority)</li> <li>The sales ratio from batteries for automobiles, motorcycles, and industrial applications is approximately 6:2:2 (the ratio varies from year to year)</li> <li>The Company's market share and profitability in Southeast Asia are high</li> <li>Replacement batteries account for a large portion of sales in Europe and Australia</li> </ul>
	For auxiliary equipment HEVs / PHEVs / EVs	For replacement Distributors, etc. (varies by country)	
	<b>Motorcycles</b> For starting	For new automobiles Japanese motorcycle makers	
		For replacement Distributors, etc.	
Industrial Batteries and Power Supplies	<b>Emergency backup</b> Emergency use field	Railways / Electric power / Government agencies / Communications carriers / Plants / Office buildings / Data centers, etc. (sales are also conducted via distributors, electrical construction companies, electrical machinery and communications device makers, and others)	<ul style="list-style-type: none"> <li>Profit margins are high as we offer a one-stop service from design to manufacturing, construction, and maintenance</li> <li>Projects with high profit margin for national and local government offices are concentrated at the end of the fiscal year</li> </ul>
	<b>Energy storage systems (ESS)</b> Regular use field	Power transmission and distribution operators / EPC* operators / Plants / Offices, etc.	
	<b>Forklifts</b> For drive force	Forklift makers / Maker distributors, etc.	
Automotive Lithium-ion Batteries	<b>Automobiles</b> For drive force HEVs / PHEVs / Battery electric vehicles (BEVs)	Japanese automakers, etc.	<ul style="list-style-type: none"> <li>In principle, it is for new automobiles only as product lifespan is long</li> <li>R&amp;D expenses are included in the segment</li> <li>Lithium-ion batteries for ESS manufacturing are also included</li> <li>Expansion of business can be expected</li> </ul>
	For starting & auxiliary equipment (12V lithium) HEVs / PHEVs / BEVs / ICEs		
Specialized Batteries and Others	<b>Submarines</b> <b>Manned research submersibles</b> <b>Aircrafts</b> <b>Rockets</b> <b>Satellites</b> <b>Other special applications</b>	Japanese government / Electrical machinery makers / Aircraft makers / Airlines / Special corporations, etc.	<ul style="list-style-type: none"> <li>Lithium-ion batteries for submarines are posted on a progress basis, and stable sales and profits can be acquired</li> <li>Company-wide expenses are included in the segment</li> </ul>

**Battery applications**

For starting For starting engines

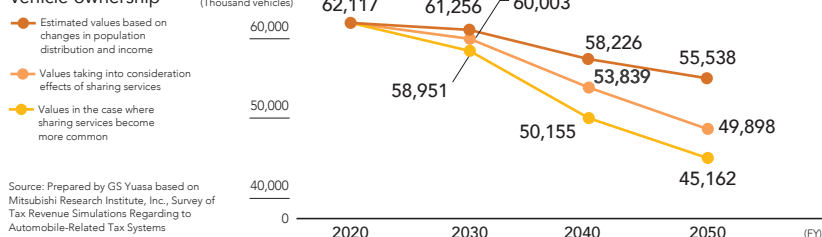
For auxiliary equipment For starting systems for electric vehicles and backup for electrical devices

Emergency use field For backup use in case of emergencies in locations such as data centers and communication base stations

\* A contract format whereby engineering, procurement, and construction are contracted out as a project.

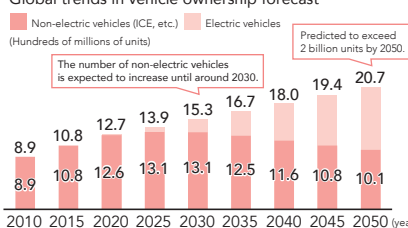
## Market Environment and the Company's Response

## Forecast of domestic vehicle ownership

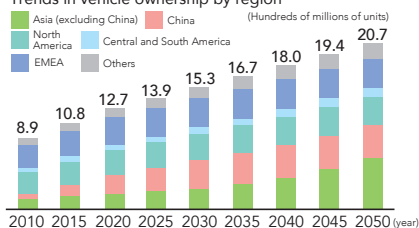


The number of vehicles owned in Japan affects sales volume. In the long term, due to the declining population, the number of vehicles owned and new car sales in Japan are expected to gradually decrease. Therefore, the Company plans to strengthen profitability by establishing appropriate sales prices and enhancing the sales of high-value-added products, both for new automobiles and replacements.

## Global trends in vehicle ownership forecast

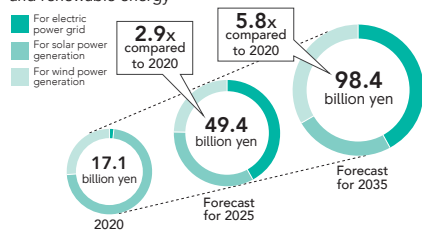


## Trends in vehicle ownership by region



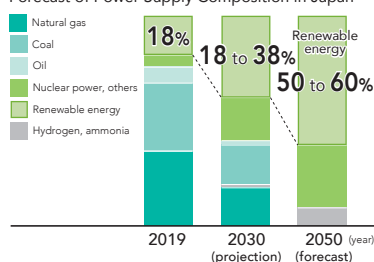
Electrification is progressing in developed countries, but in other regions, internal combustion engine (ICE) vehicles will remain, and the number of ICE vehicles is not expected to decrease significantly. Therefore, the demand for lead-acid batteries for starting and auxiliary use is not expected to decrease significantly in 2035. Furthermore, the demand for lead-acid batteries in our main markets, ASEAN and Australia, is expected to remain stable. As such, the Company will continue to focus resources on ASEAN, Australia, and Europe, where demand is expected, aiming to further enhance profitability.

## Domestic market for secondary batteries for storage battery systems for simultaneous use of power grid and renewable energy



Source: Prepared by GS Yuasa based on Fuji Keizai, Research on the Global Market for ESS and Stationary Batteries

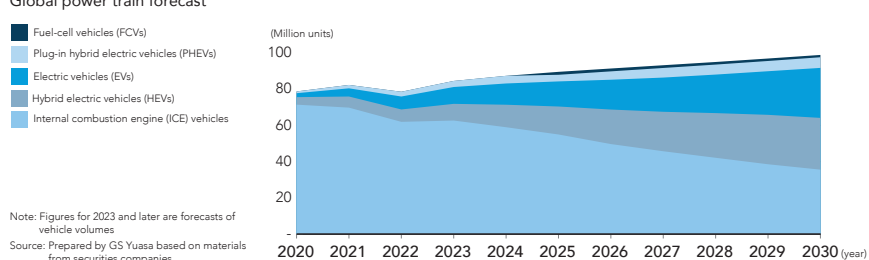
## Forecast of Power Supply Composition in Japan



Source: Prepared by GS Yuasa based on Agency for Natural Resources and Energy, Considerations for Achieving Carbon Neutrality in 2050 and Summary of the Sixth Strategic Energy Plan

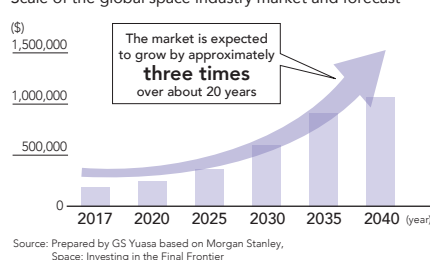
In Japan, numerous subsidy programs related to renewable energy have been announced, and it is expected that renewable energy will account for the majority of Japan's energy mix by 2050. On the other hand, since renewable energy generation fluctuates significantly depending on weather conditions and time of day, it may adversely affect the electric power grid. Demand for storage batteries is increasing as they play a key role in mitigating these output fluctuations. In FY2024, the Company is expanding production capacity for energy storage systems (ESS) to 1.3 times that of FY2023 to meet demand.

## Global power train forecast

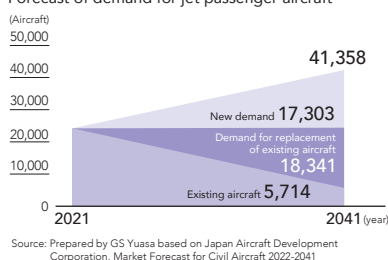


Environmental regulations on automobiles, with annual global sales exceeding 90 million units, are being strengthened worldwide, and the proportion of electric vehicles, such as HEVs and BEVs, is expected to increase significantly. In Japan, there is a goal to make all new car sales electric vehicles by 2035. The Company expects HEVs to remain the mainstream in the automobile market until the mid-2030s and is expanding production capacity to meet this demand. After 2030, EV and BEV numbers are expected to gradually increase. The Company is advancing research, development, and factory construction to begin mass production of batteries for BEVs starting in FY2027.

## Scale of the global space industry market and forecast



## Forecast of demand for jet passenger aircraft



The Company holds a large market share in the specialized batteries business, particularly in lithium-ion batteries for space and satellites. The global space industry market is forecasted to three times in size over the 20 years following 2017. We will continue to provide products with top-tier performance and quality, contributing to the development of the space industry. In the field of lithium-ion batteries for aircraft, the market for replacement batteries has been steady with the recovery from the COVID-19 pandemic. Significant growth is expected in the overall aircraft market, including both new and replacement demand.

**For drive force** For driving motors

**Regular use field** For daily, uninterrupted charging and discharging in renewable energy, energy management, etc.

# Business Outlook

## Automotive Batteries (Japan)

### Message from the Business Unit Manager

In the domestic market, the decline in vehicle numbers due to the declining population caused by aging and low birthrates and the expected decrease in demand for automotive batteries in the mid-to-long term are considered risks for the Company. On the other hand, the move to electrification is progressing slower than anticipated, and demand for lead-acid batteries remains steady. We expect this solid demand for lead-acid batteries to continue for the time being.

Under the Sixth Mid-Term Management Plan, we are advancing the transformation into a business that continuously earns stable profits while also building an optimal supply system looking toward the future, with sustainable management in mind. In FY2023, we ensured stable profits by achieving a stable supply and implementing corrective activities for appropriate pricing for both new automobiles and replacements.

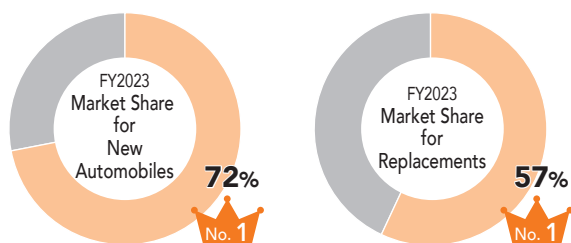
#### Takao Ohmae

Director, Business Unit Manager  
of Automotive Batteries,  
GS Yuasa International Ltd.



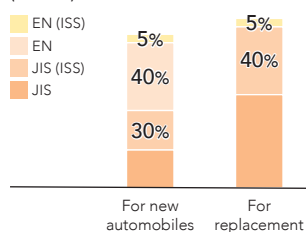
We anticipate that the rising costs of raw materials, labor, and logistics will continue beyond FY2024. For new automobiles, we will continue efforts to secure appropriate profits, while for replacement batteries, we will work on expanding sales while monitoring competitive conditions. Going forward, we will strengthen communication with distributors and customers to deliver greater added value to the market. We will also expand the sales of high-value-added products and implement timely promotional measures to steadily capture demand.

### Basic information



Note: Based on the Company research (Imported batteries are not included)

ISS / EN Batteries Shipment Ratio (FY2023)



Number of sites (As of March 31, 2024)

**Production** 4 sites

**Sales** Over 4,000 distributors

### SWOT analysis

- Advanced technology, quality, and expertise in lead-acid batteries accumulated over 100 years
- A production system that ensures a stable supply
- Sales know-how developed with distributors and a strong customer base
- Brand (domestic No. 1 share)

Strengths

S

Weaknesses

W

- Decreased price competitiveness due to price corrections
- High costs due to high-mix production

Opportunities

O

Threats

T

- Demand for auxiliary batteries for electric vehicles
- Slowing pace of vehicle electrification

- Ongoing increases in raw material, labor, and logistics costs
- Decrease in automobile demand due to a declining birthrate and aging population, and reduced demand for lead-acid batteries due to vehicle electrification
- Cost competition due to commoditization
- Impact on the supply chain due to increasing environmental and geopolitical risks



## Outlook for the Sixth Mid-Term Management Plan

### Policy

Build an optimal supply system in response to change of business environment and improve profit rate

### Strategies and important tasks

#### Production

- Establish supply system that enables both rapid response to demand fluctuations and inventory reduction

#### Future initiatives

- Formulation of a mid- to long-term production system vision
- Provision of an optimal production and stable supply system that corresponds to BCP

#### Sales

[For new automobiles]

- Improve profit ratio due to optimal price revision such as raw material prices

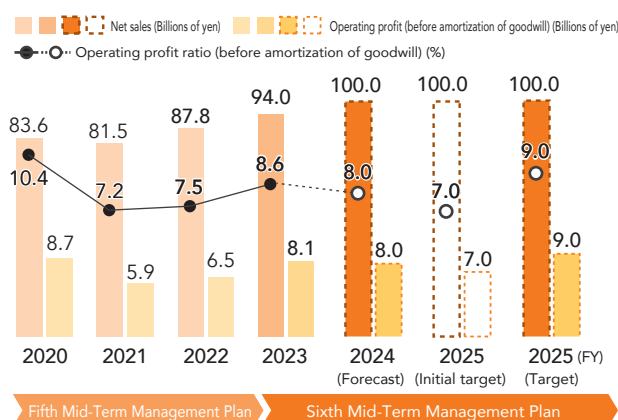
[For replacement]

- Rebuilt marketing strategies and maintain high market share
- Optimization due to IoT and digital transformation (DX)

#### Future initiatives

- Ongoing initiatives for strengthening further profitability

### Net sales, operating profit, operating profit ratio



### Outlook for the fiscal year ending March 31, 2025

#### For new automobiles

- Ongoing activities for securing suitable profits

#### For replacement

- Definite acquisition of demand through the promotion of high-value-added products and sales promotion measures

## TOPICS

### Briefing on Automotive Lead-Acid Battery Business for Institutional Investors and Analysts

On March 15, 2024, we held an Automotive Battery Business Briefing for institutional investors and analysts. Takashi Abe, former Business Unit Manager of Automotive Batteries, provided an explanation of future market trends in Japan and overseas, as well as the mid- to long-term strategy. Please take a look.

Video of the automotive lead-acid battery business briefing

▶ <https://www.youtube.com/watch?v=zXRkeQVyx8>



# Business Outlook

## Automotive Batteries (Overseas)

### Message from the Business Unit Manager

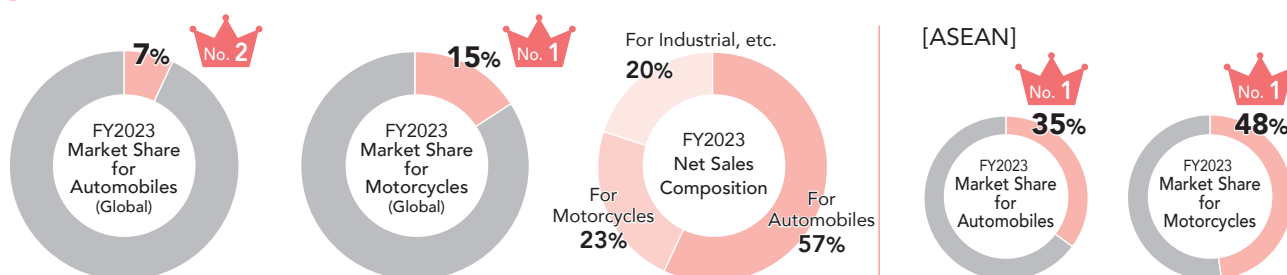
In overseas markets, we are promoting our business by closely monitoring market trends in each region, adopting a regionally-focused sales model in each country. Therefore, it is essential to establish good relationships with local partners who understand the market and share policies.

In ASEAN, where the move to electrification is slower than in Europe and the U.S., we recognize the intensified price competition due to the entry of Chinese lead-acid battery manufacturers as a risk. To address this risk, it is essential to improve cost competitiveness, technology, and sales and service competitiveness at our sites. We will focus on Thailand for automotive batteries and Indonesia as the central region for motorcycle batteries, while also concentrating on Vietnam, where demand is expected to grow. Europe is at the forefront of global trends and is an

important region for the Company. We will promote sales expansion to Europe and neighboring regions, utilizing our base in Turkey. For automotive batteries, we will focus on developing large AGM\* batteries and promote the introduction of high-value-added products. Australia has a stable demand and provides an environment where we can leverage our opportunities and strengths as the only lead-acid battery manufacturer in the country. To promote “Made in Australia” marketing as the only lead-acid battery manufacturer in Australia where there is stable demand, we are expanding the sales of our own manufactured products and also promoting sales through our retail network and services to distribution networks such as distributors.

\* Abbreviation for Absorbent Glass Mat battery. A sealed lead-acid battery.

### Basic information



Note: Based on the Company research (Imported batteries are not included)

Number of sites (As of March 31, 2024) **21** sites

### SWOT analysis

<ul style="list-style-type: none"> <li>Business development tailored to regionally-focused sales and strong trust-based relationships with partners in each country</li> <li>Extensive business knowledge in the introduction and expansion of lead-acid batteries overseas</li> <li>No. 1 market share and brand power in ASEAN</li> <li>Established presence as the only lead-acid battery manufacturer in Australia</li> </ul>	<p>Strengths <b>S</b></p>	<ul style="list-style-type: none"> <li>Sales ability in area without sites</li> <li>Decentralization of resources</li> </ul>	<p>Weaknesses <b>W</b></p>
<ul style="list-style-type: none"> <li>Slowdown in the pace of vehicle electrification</li> <li>Improved competitiveness through strategic responses to competitors, including those in China</li> <li>Progress of motorization in emerging countries</li> <li>Expansion of auxiliary batteries market</li> </ul>	<p>Opportunities <b>O</b></p>	<ul style="list-style-type: none"> <li>Price weakening and intensified competition in ASEAN due to the entry of Chinese lead-acid battery manufacturers amidst rapid electrification in China</li> <li>Impact on the supply chain and business strategy due to European-specific policies</li> <li>Increasing geopolitical risks and worsening economic conditions in sales regions</li> </ul>	<p>Threats <b>T</b></p>

## Outlook for the Sixth Mid-Term Management Plan

### Policy

Reform management structure for the future by selection and concentration and strengthen profitability

### Strategies and important tasks

[Strategic Sites]

#### Southeast Asia

- Maximize profits by strengthening ASEAN sites

#### Europe

- Reinforce sales to Europe and nearby regions utilizing the Turkish site

#### Australia

- Strengthen production base and expand market share of replacement batteries

#### Future initiatives

- Strengthen the management base and further improve profitability by concentrating resources

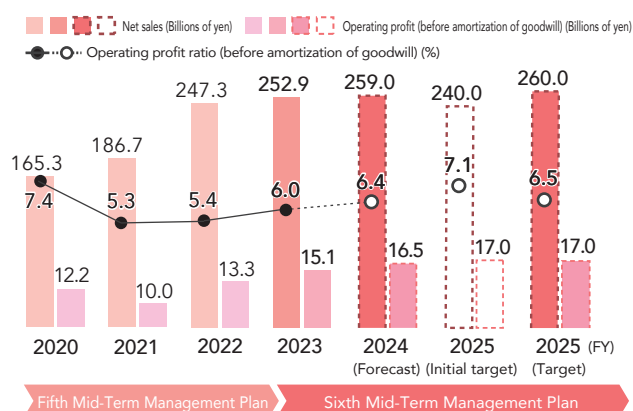
#### China

- Promote fundamental review of business

#### Future initiatives

- Promote a strategy based on selection and concentration following the equity method as implemented in sites in China

### Net sales, operating profit, operating profit ratio



### Outlook for the fiscal year ending March 31, 2025

#### Southeast Asia

- For automobiles: Increase in volume, mainly in Thailand
- For motorcycles: Increase due to recovery in Indonesia

#### Europe

- Expect strong exports due to the depreciation of the Turkish lira

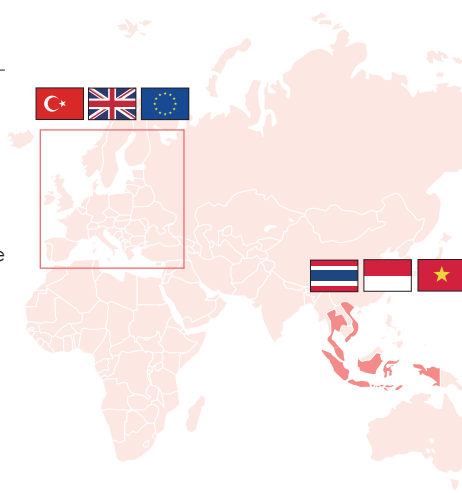
#### Australia

- Expansion of sales under "Made in Australia"

### Strategy by region

#### European Region

- Turkey site  
Form a product mix centered on high-value-added products, and expand sales as an export base to Europe and neighboring regions, leveraging the depreciation of the Turkish lira



#### Southeast Asia

- Thailand site  
As a core site for automotive batteries, leverage brand and product strength to expand sales of high-value-added products
- Indonesia site  
As a core site for motorcycle batteries, improve profit margins by strengthening the expansion of batteries for replacement and export

#### Production Volume (Thailand)

FY2023: 5 million units/year

Further market share expansion in Thailand and strengthen sales expansion into neighboring countries

- Vietnam site  
Increase productivity through the introduction of labor-saving equipment and expand sales by reviewing the sales structure



# Business Outlook

## Industrial Batteries and Power Supplies

### Message from the Business Unit Manager

As the external environment surrounding society changes rapidly, the Company also needs to respond steadily to market changes without delay. In the emergency use field, we expect an expansion in demand for data centers, leading to an increased need for our proprietary technologies. However, on a global scale, it is also necessary to adapt to the trend toward lithium-ion batteries. In the regular use field, the market for energy storage systems (ESS) is expected to continue expanding, while responding swiftly amid intensifying competition remains a challenge.

For forklifts, the shift to battery-powered models still presents opportunities. However, the move towards lithium-ion batteries overseas also poses potential risks.

The period of the Sixth Mid-Term Management Plan is positioned as the Business Foundation Building phase within Vision 2035, during which we are working to strengthen our

### Takashi Taniguchi

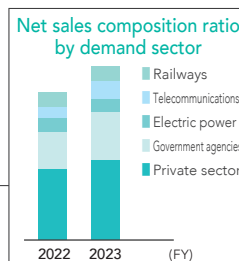
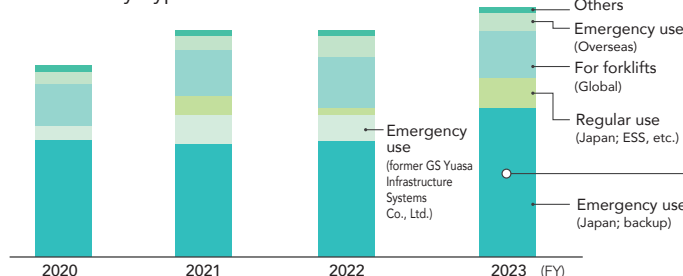
Managing Director, Business Unit  
Manager of Industrial  
Batteries and Power Supplies,  
GS Yuasa International Ltd.



earning power. We believe that solving social challenges together with our customers will ultimately lead to an increase in our "earning power." Our business has expanded from the emergency field, where batteries were only used for backup during emergencies, to the regular field, which involves constant charging and discharging to regulate fluctuations in renewable energy. As a result, we believe that our role in realizing sustainable public infrastructure will continue to grow.

### Basic information

#### Net Sales by Type



#### Number of sites (As of March 31, 2024)

##### Production and Sales

8 sites

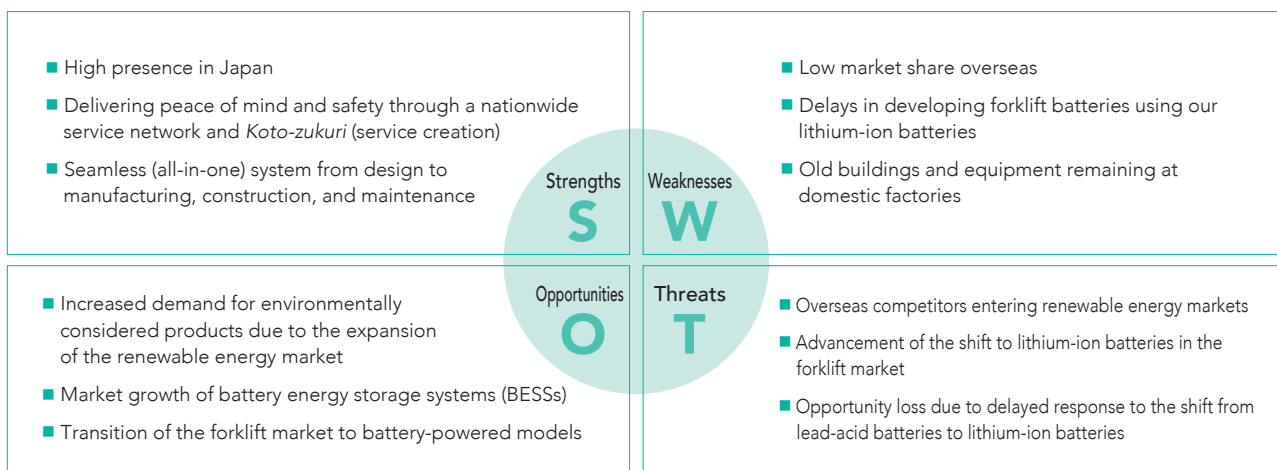
##### Service Network

Over 100 sites

Note: In FY2022, the sub-segments were reviewed, and "For forklifts," which was previously included in "Overseas," was transferred to "For forklifts (Global)."

Therefore, data in FY2020–FY2021 are also presented according to the classification after the change. GS Yuasa Infrastructure Systems was integrated into the industrial battery and power supply business in FY2023.

### SWOT analysis



## Outlook for the Sixth Mid-Term Management Plan

### Policy

Building a business foundation to capture the growth of the next generation

### Strategies and important tasks

#### Emergency field (Japan)

- Maximize profit by utilizing unparalleled superiority

#### ► Future initiatives

- Optimize the organization through sales structure restructuring
- Change the image of lead-acid batteries to recycling-oriented products

#### Regular field (Japan)

- Set the stage for a second pillar of business

#### ► Future initiatives

- Secure production capacity to meet strong demand
- Expand sales with new ESS products equipped with power conditioning systems (PCS)

#### Emergency field (Overseas)

- Establish a global supply system to expand sales

#### ► Future initiatives

- Introduce prior art into overseas production sites
- Promote OEM procurement by utilizing 2nd brand

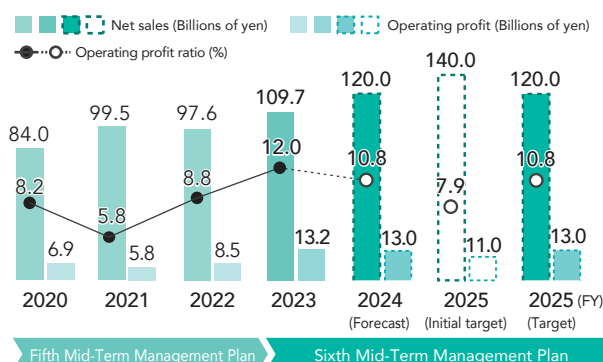
#### For forklifts

- Survive through coexistence and co-prosperity strategies for lead-acid and lithium-ion batteries

#### ► Future initiatives

- Establish an efficient production system through the operation of a new plant for lead-acid batteries for forklifts
- Expand globally centered on ASEAN with Thailand as a hub

### Net sales, operating profit, operating profit ratio



Note: Some consolidated subsidiaries in the "Industrial Batteries and Power Supplies" segment were transferred to the "Specialized Batteries and Others" segment from FY2023. In conjunction with this change, figures for FY2022 were restated according to the modified segments.

### Outlook for the fiscal year ending March 31, 2025

#### Emergency field

- Strong performance of battery power supply systems for nuclear power projects and others

#### Regular field

- Increase in sales volume and improvement in profitability

#### For forklifts

- Utilize batteries from other manufacturers to respond to the lithium-ion battery adoption in forklifts

## TOPICS

### New Forklift Lead-acid Battery Plant Completed

In March 2024, we held the completion ceremony for the new forklift lead-acid battery plant constructed at the Kyoto plant site. The new plant building is a three-story structure with a total floor area of approximately 25,000 square meters, and it will produce lead-acid batteries used in forklifts, automated guided vehicles, electric wheelchairs, and more. The plant is scheduled to begin operations in June 2025.



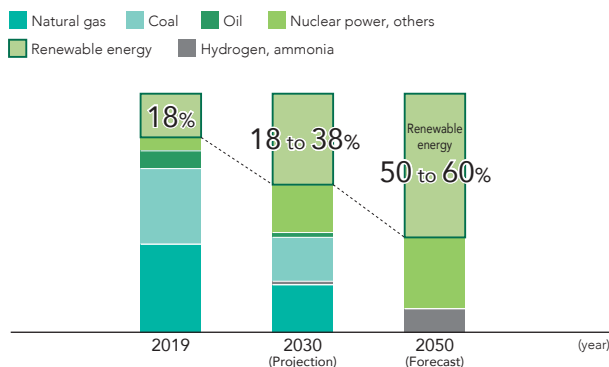
# Initiatives in the Regular Use (Renewable Energy) Field

## Market Environment

Renewable energy such as wind and solar power is attracting attention as the trend of carbon neutrality accelerates. In Japan, many subsidy programs related to renewable energy have been released, and their introduction and use are encouraged by various measures.

Under such circumstances, renewable energy is expected to account for more than half of Japan’s energy mix in 2050.

Forecast of Power Supply Composition in Japan



Source: Prepared by GS Yuasa based on Agency for Natural Resources and Energy, Considerations for Achieving Carbon Neutrality in 2050 and Summary of the Sixth Strategic Energy Plan

Estimated budget related to renewable energy

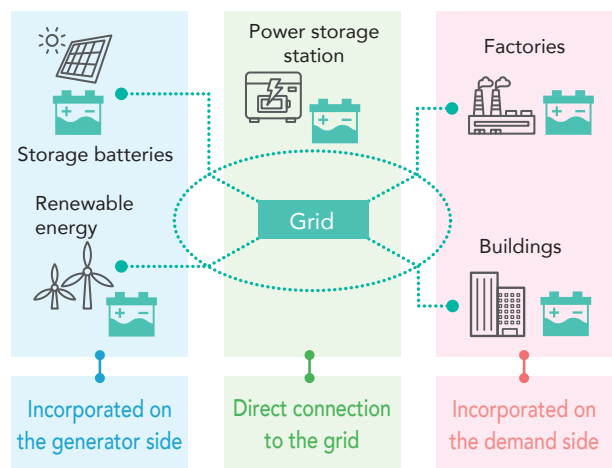
Project to support the introduction of power storage systems such as storage batteries for the electric power grid to expand the introduction of renewable energy	Proposed Budget for FY2024 <b>8.5 billion yen</b>
Project to support the introduction of consumer-driven photovoltaic power generation and storage batteries with renewable energy sources	Proposed Budget for FY2024 <b>10.0 billion yen</b>
Project to support the introduction of large-scale storage batteries for the electric power grid with a view to expanding the introduction of renewable energy (Tokyo Metropolitan Government)	Proposed Budget for FY2024 <b>13.0 billion yen</b>

Source: Project Summary for FY2024 Budget, Ministry of Economy, Trade and Industry  
Tokyo Metropolitan Government: Project to support the introduction of large-scale storage batteries for the electric power grid with a view to expanding the introduction of renewable energy

## Roles of Storage Batteries

Renewable energy varies largely in energy generation depending on the weather and time zone and may adversely affect an electric power system in terms of stability. The key device that plays a role in mitigating such output changes is a storage battery. The market of storage batteries that are indispensable to control demand and supply is expected to expand rapidly with the spread of renewable energy. We think this is a great opportunity for us.

GS Yuasa will increase value to be offered to customers by packaging power conditioners and storage batteries and doing all-in-one business that can provide services from products to installation and maintenance through an integrated system. In addition, we will enhance our presence in the regular use market by taking advantage of our strengths: networks and footwork.



### GS Yuasa’s strengths

#### Network

Maintenance and operation services making use of digital transformation



#### Footwork

Support services available 24 hours a day, 365 days a year





## Major Orders Received and Delivery Records

### Muroran Station, ENEOS Corporation (Muroran City, Hokkaido)

Operator	ENEOS Corporation
Date of operation	FY2023
Output	50 MW
Capacity	88 MWh



Muroran Station,  
ENEOS Corporation

### Chiba Refinery, Osaka International Refining Company, Limited (Ichihara City, Chiba Prefecture)

Operator	ENEOS Corporation
Date of operation	FY2025
Output	100 MW
Capacity	202 MWh



Chiba Refinery, Osaka  
International Refining Company

### Tagawa Power Storage Station (Kawara Town, Tagawa-gun, Fukuoka Prefecture)

Operator	NTT Anode Energy Corporation, Kyushu Electric Power Company Incorporated, Mitsubishi Corporation
Date of operation	From July 2023
Output	1.4 MW
Capacity	4.2 MWh



Image of after installation

### Kitatoyotomi Substation (Toyotomi-cho, Teshio-gun, Hokkaido)

Operator	North Hokkaido Wind Energy Transmission Corporation
Date of operation	From March 2023
Output	240 MW
Capacity	720 MWh



Storage battery facilities  
Source: Chiyoda Corporation

### Kumamoto Factory, Honda Motor Co., Ltd. (Ozu Town, Kikuchi-gun, Kumamoto Prefecture)

Operator	Honda Motor Co., Ltd.
Date of operation	From April 2024
Output	2.6 MW
Capacity	20 MWh



Image of after installation

### Hagigaoka Water Purification Plant (Wakkanai City, Hokkaido)

Operator	Wakkanai City, Hokkaido
Date of operation	From March 2022
Capacity	2 MWh



Storage battery system

### Storage battery facility with new power conditioners (Konohana Ward, Osaka City), Osaka Gas

Partner to contract for demonstration experiment	Osaka Gas Co., Ltd.
Operation period for demonstration	April 2025 to March 2028 (Planned)
Equipment	Power conditioner: 500 kW Lithium-ion batteries: 840 kWh
What to verify	Verification of operation for multiple uses supporting multiple electricity markets and verification of patterns of optimal operation control in line with storage battery characteristics and operation of the storage battery facility

Division of roles	
[Osaka Gas]	- Construction of equipment and provision of a site required for operating the storage battery facility - Maintenance of the storage battery facility based on simulated transactions in electricity markets
[GS Yuasa]	- Provision of the Storage Battery Facility and implementation of action in terms of operation and maintenance (O&M) - Implementation and review of equipment modifications and improvements based on data

### Tsunokobaru Power Storage Station, Nijio Co., Ltd. (Oita City, Oita Prefecture)

Operator	Nijio Co., Ltd.
Date of operation	FY2026 (planned)
Output	25 MW
Capacity	50 MWh



Conceptual image  
\*Created by Chiyoda Corporation  
(using Google Maps and map data from the Geospatial Information Authority of Japan)

### Eurus Shiratori Battery Park (Tagawa City, Fukuoka Prefecture)

Operator	Eurus Energy Holdings Corporation
Installation location	Tagawa City, Fukuoka Prefecture
Date of operation start	From January 2024
Capacity	4.58 MWh



External view of lithium-ion  
storage battery facility

### Yatogo Energy Storage Station (Kumagaya City, Saitama Prefecture)

Operator	Bandou Power Storage Station No. 1 Limited Liability Company
Date of operation	February 2025 (planned)
Output	1.96 MW
Capacity	7.46 MWh



Conceptual image of  
Yatogo Energy Storage Station

### Niraduka Energy Storage Station (Isesaki City, Gunma Prefecture)

Operator	Bandou Power Storage Station No. 1 Limited Liability Company
Date of operation	June 2025 (planned)
Output	1.96 MW
Capacity	7.46 MWh



Conceptual image of  
Niraduka Energy Storage Station

# Business Outlook

## Automotive Lithium-ion Batteries

### Message from the Business Unit Manager

We supplied batteries for the world's first mass-produced EVs and started mass production ahead of other manufacturers of lithium-ion batteries for HEVs, and have continued to supply batteries stably for over 15 years. Our experience as a pioneer with stable delivery of high quality products has deepened relationships with Japanese automobile manufacturers.

With the electrification of automobiles advancing on a global scale, the demand for lithium-ion batteries is on an irreversible trend. The demand for lithium-ion batteries for HEVs is expected to be strong until the mid-2030s, and gradual shift to lithium-ion batteries for BEVs is expected from the late 2020s. If there is a change in the speed of shift to BEVs, the HEV and PHEV markets are expected to expand, which will be advantageous for GS Yuasa that operates these businesses as well.

We expect the demand for lithium-ion batteries for HEVs to increase during the term of the Sixth Mid-Term Management Plan and plan to increase Blue Energy's production capacity to 70 million cells annually in FY2025 in

### Toshiyuki Aoyama

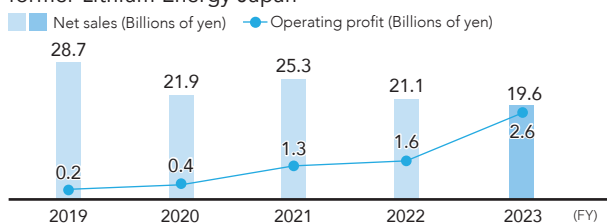
Executive Officer,  
Business Unit Manager of  
Lithium-ion Batteries,  
GS Yuasa International Ltd.



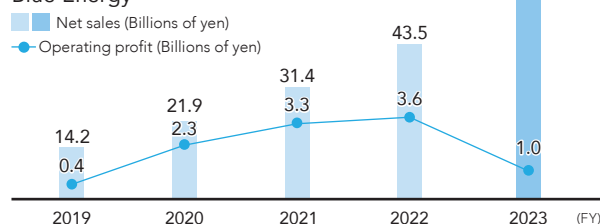
order to meet the demand. For lithium-ion batteries for PHEVs, we will strengthen the expansion of supported vehicle models. As for former LEJ absorbed in February 2024, we took over business dealings with existing customers, and future uses are under consideration. Regarding lithium-ion batteries for BEVs, we will pursue the development of high performance batteries with high international competitiveness, aiming to start mass production in 2027 led by HGYB, a joint venture with Honda Motor. Initially, we will steadily proceed with the starting up of businesses in Japan and solidify the foundation toward the establishment of technologies and supply chains.

### Basic information

#### Change in net sales and operating profit of former Lithium Energy Japan



#### Change in net sales and operating profit of Blue Energy



### SWOT analysis

- Solid customer base based on high quality evaluation and trust from Japanese automakers
- Delivery results by BEC and LEJ
- Over 10 years of experience in mass production of HEVs and PHEVs in the market

Strengths  
**S**

Weaknesses  
**W**

- Expanding demand for HEVs by Japanese automakers
- Growing demand for batteries for BEVs along with the electrification

Opportunities  
**O**

Threats  
**T**

- Business scale compared to manufacturers in China and Korea
- Concentration of production sites in Japan

- Concerns about higher raw material prices and stable procurement of raw materials
- Legal regulation in Europe and the U.S.
- Inferior competitiveness of next-generation products due to a high market share by foreign manufacturers
- Shortage of workers

## Outlook for the Sixth Mid-Term Management Plan

### Policy

Achieve sustainable growth in the lithium-ion battery business by taking carbon neutrality and government targets as opportunities

### Strategies and important tasks

#### For HEVs

- Improve yield rate and plant utilization rate
- Establish further increasing production system of Blue Energy No. 2 plant

#### Future initiatives

- Revise sales price to suit the circumstances such as soaring raw material price and inflation
- Ensure stable operation of facilities and improve yield rates in line with production capacity
- Respond to demands through expansion of production capacity

#### For PHEVs

- Improve yield rate and plant utilization rate
- Strengthen production systems of batteries for PHEVs

#### Future initiatives

- Respond to demands through expansion of production capacity

#### For BEVs

- Strengthen development systems
- Prepare to enter business

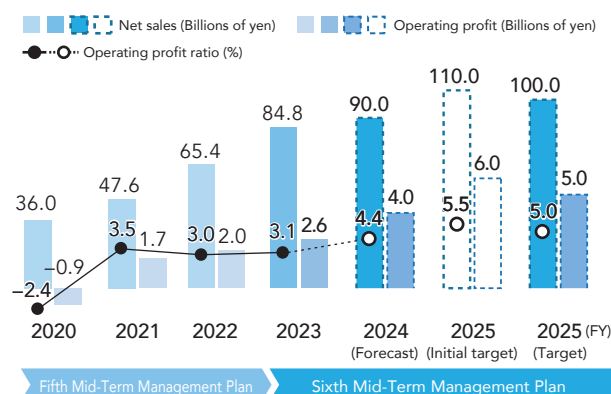
#### Future initiatives

- Preparations for the start of factory operation in FY2027

#### 12V (auxiliary and backup use)

- Development of products / preparation of production

### Net sales, operating profit, operating profit ratio



### Outlook for the fiscal year ending March 31, 2025

#### For HEVs

- Increase in sales volume buoyed by growing demand for HEVs by Japanese automakers

#### For PHEVs

- Increase in sales volume by expansion of vehicle models and production capacity  
(FY2023: 6 million cells/year ⇒ FY2024: 8 million cells/year)

#### For BEVs

- Promoting the development of batteries for BEVs

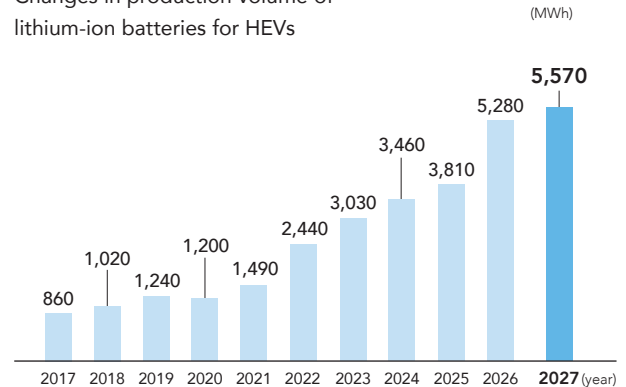


# Initiatives for Automotive Lithium-ion Batteries

## Market Environment Surrounding Lithium-ion Batteries for HEVs

The production volume of lithium-ion batteries for HEVs is increasing year by year. Especially in Japan, the demand for lithium-ion batteries for HEVs is expected to grow in the medium- to long-term partly because of Japanese automakers' strategies toward the goal of electrification of all new automobiles in the mid-2030s. GS Yuasa responds to the demand from Japanese automakers by increasing production capacity.

Changes in production volume of lithium-ion batteries for HEVs



Source: "FY2020 In-depth Analysis and Research on the Market Related to HEVs and EVs" by Fuji Keizai

Note: Expectation for 2020; forecasts for 2021 and beyond

## Outline of Blue Energy

### Automotive Lithium-ion Batteries

<Group companies>

Blue Energy Co., Ltd. (BEC)

A joint venture company which is 51% funded by GS Yuasa and 49% by Honda Motor Co., Ltd.

Former Lithium Energy Japan (LEJ)

Liquidated and dissolved in March 2024. Its business has been continued in GS Yuasa since FY2024.









GS Yuasa Hungary Ltd. (GYHU)

100% funded by GS Yuasa



Blue Energy No. 2 plant

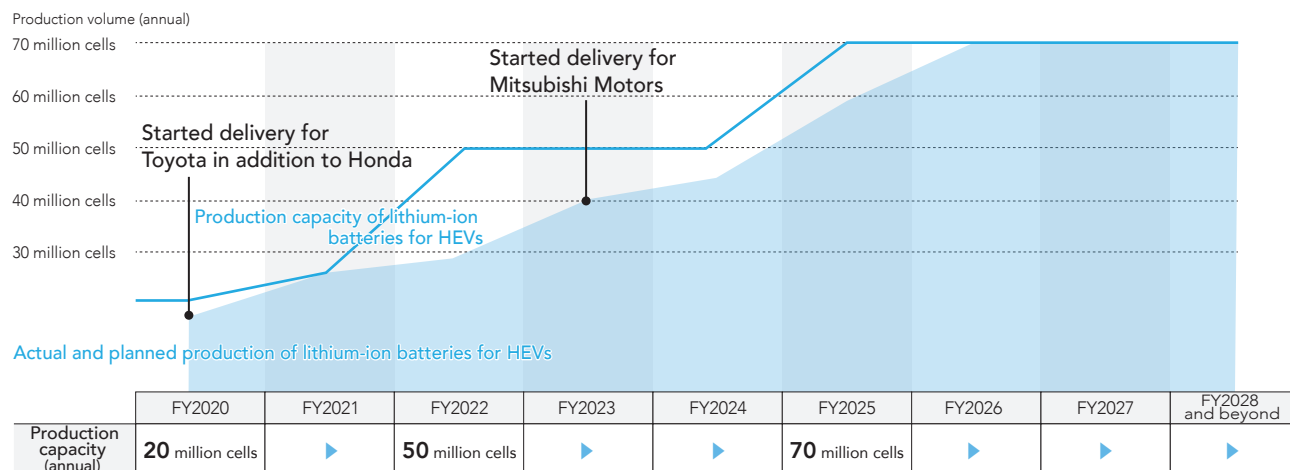
## Major Models Equipped with Lithium-ion Batteries for HEVs

		FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026 and beyond
Blue Energy's financial performance	Net sales	21.9 billion yen	31.4 billion yen	43.5 billion yen	58.7 billion yen	-	-	-
	Operating profit	2.3 billion yen	3.3 billion yen	3.6 billion yen	1.0 billion yen	-	-	-
	Operating profit ratio	10.6%	10.7%	8.4%	1.8%	-	-	-
Blue Energy's production capacity (annual)		20 million cells	▶	50 million cells	▶	▶	70 million cells	▶
Models	Honda	 FIT HYBRID	 VEZEL HYBRID	 STEP WGN HYBRID	 Accord HYBRID	 FREED		
	Toyota	 HARRIER HYBRID	 RAV4 HYBRID					
	Mitsubishi Motors							

Continue to expand models for sale

For details, please see the website of Blue Energy. ▶ <https://www.blue-energy.co.jp/en/products/>

## Changes in Production Capacity and Volume of Lithium-ion Batteries for HEVs



### TOPICS

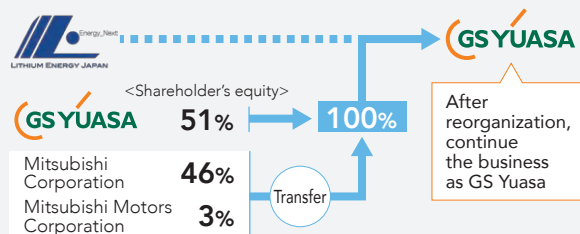
#### About the reorganization of Lithium Energy Japan

In March 2024, the shares of former Lithium Energy Japan which had manufactured lithium-ion batteries for PHEVs were transferred to GS Yuasa from Mitsubishi Corporation and Mitsubishi Motors Corporation, and GS Yuasa made it a wholly owned subsidiary, which was then dissolved.

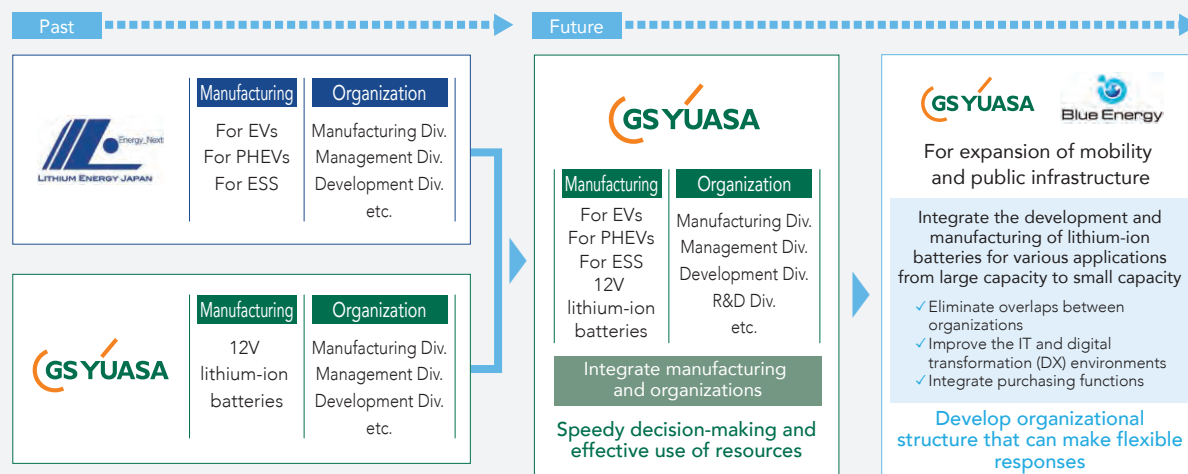
The main purpose of this reorganization is to make effective use of the resources of GS Yuasa and conduct the lithium-ion battery business more efficiently. We continue to supply lithium-ion batteries to Mitsubishi Motors Corporation as GS Yuasa.

##### [Effect by the reorganization]

- As the GS Yuasa Group, it is possible to realize flexible responses to the expansion of on-board products and ESS
- Receiving shares involves non-recurring costs but leads to improvements in net profit and ROE in the medium- and long-term



##### [Responses after the reorganization]



# Business Outlook

## Specialized Batteries and Others

### Message from the President of GS Yuasa Technology

We have a track record of the world’s first adoption of lithium-ion batteries for aircraft and submarines and boast high recognition in special areas. We are No. 1 in the world in terms of the capacity of batteries installed in satellites. Our strength is technology development capabilities that allow us to win adoption into new public infrastructure making use of this advantage.

For batteries for defense applications, we receive orders for development and mass production of thermal batteries and proceed with a production increase plan. As for space applications, thermal batteries and lithium-ion batteries are adopted for domestic H3 rockets, and the amount of orders received for commercialization is expected to increase. In addition, we participated in the US’s Artemis (lunar exploration) program, developed batteries to be used in a living environment like the International Space Station, and have already delivered some products. As for aircraft applications,

#### Yoshiaki Namikawa

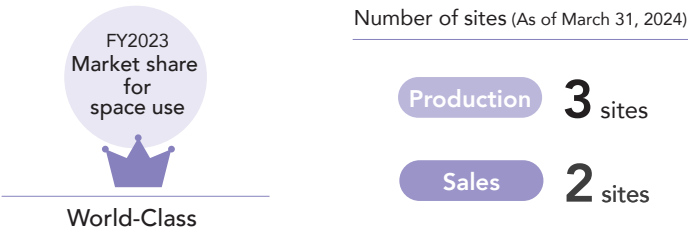
Corporate Officer,  
GS Yuasa International Ltd.  
President,  
GS Yuasa Technology Ltd.



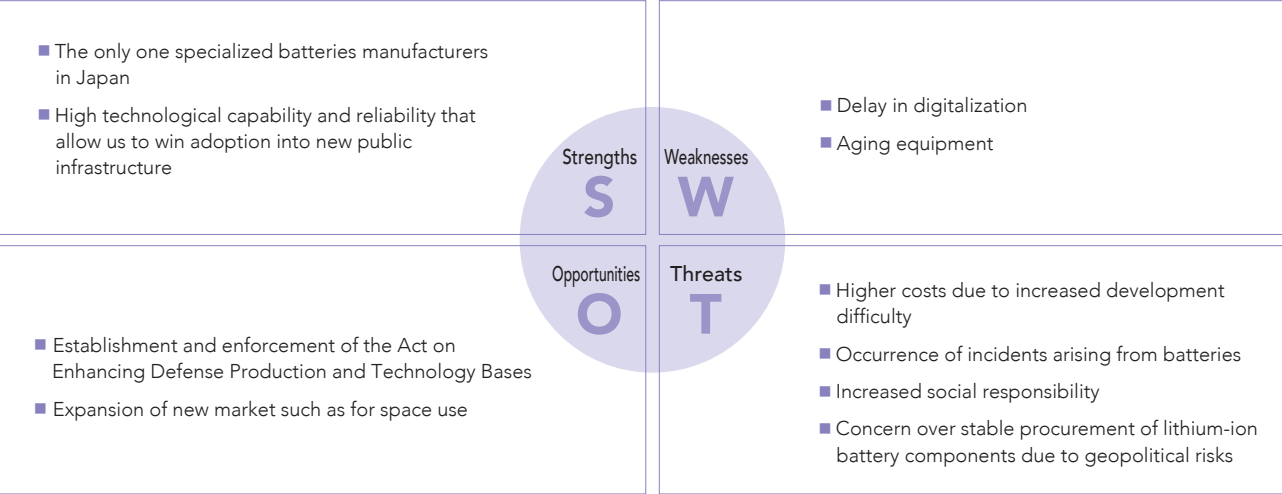
the replacement of lithium-ion batteries delivered on an OEM basis has been in steady progress and is a main source of profit.

During the term of the Sixth Mid-Term Management Plan, demand for lithium-ion batteries for submarines is expected to remain firm, while demand from airlines (for replacement) for lithium-ion batteries for aircraft will expand and volumes will increase. We expect year-on-year increases in sales and profit in FY2024 as well and hope to achieve three straight quarters of increases in sales and profit.

### Basic information



### SWOT analysis





## Outlook for the Sixth Mid-Term Management Plan

### Policy

Contribute to the building of new public infrastructure through batteries with the highest level of performance and quality

### Strategies and important tasks

#### Specialized batteries business

- Improve profitability due to efforts to strengthen the foundation of the defense industry
- Development of next-generation lithium-ion batteries for submarines
- Response to expanded demand of lithium-ion batteries for aircraft
- Expand sales of lithium-ion batteries for satellites

#### Others

- Increase in environmental response costs
- Increase in costs for DX and creation of new business

### Future initiatives

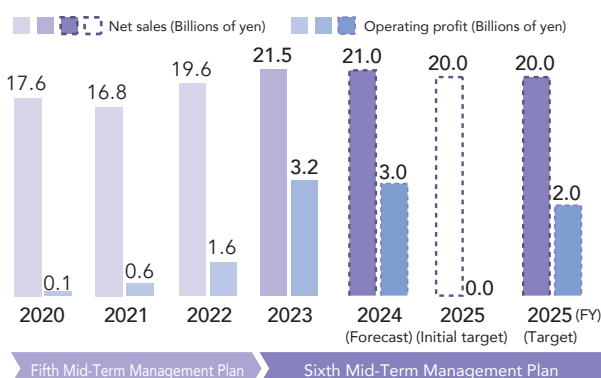
[Lithium-ion batteries for submarines]

- Secure reasonable profits and prepare for the demand for battery replacement

[Other special batteries]

- Boost production to improve defense capabilities

### Net sales, operating profit, operating profit ratio



Note: Some consolidated subsidiaries in the "Industrial Batteries and Power Supplies" segment were transferred to the "Specialized Batteries and Others" segment from FY2023. In conjunction with this change, figures for FY2022 were restated according to the modified segments.

### Outlook for the fiscal year ending March 31, 2025

#### Lithium-ion batteries for submarines

- In addition to the new ships previously produced, promote preparations to increase production to accommodate replacement batteries

#### Lithium-ion batteries for aircraft and space use

- Expansion of order-taking activities for constellation satellites\* for intended uses

\* A system where multiple satellites are linked and operated as a single unit.

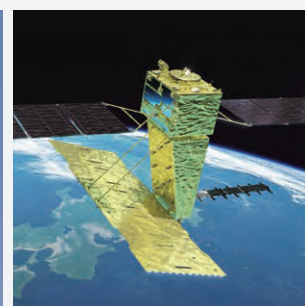
## TOPICS

### Dedicated Batteries Developed by GS Yuasa Installed in the Third H3 Launch Vehicle and the Advanced Land Observing Satellite-4 "DAICHI-4" (ALOS-4)

Batteries developed and manufactured by GS Yuasa Technology Ltd. (GYT) have been installed in the Third H3 Launch Vehicle developed by Mitsubishi Heavy Industries, Ltd. and the Japan Aerospace Exploration Agency (JAXA), which was launched on July 1, 2024, as well as the Advanced Land Observing Satellite-4 "Daichi-4." GYT's lithium-ion batteries\*<sup>2</sup> for use in space have been installed in the Daichi-4, an advanced land observation satellite which contributes to disaster monitoring, forest observation, marine surveillance, etc. The batteries will supply power to the satellite when it's unable to generate power in the shadow of the Earth.



H3 launch vehicle  
(Source: JAXA)



Daichi-4 advanced land observation satellite  
(Source: JAXA)

# Research and Development

## Message from the Head of the R&D Center

GS Yuasa released its R&D roadmap through 2050 in Vision 2035.

The R&D Center, which is primarily responsible for the development of next-generation batteries, pursues development from the most long-term perspective among the research and development divisions of GS Yuasa and promotes research and development with a policy of pursuing research and development with top priority given to delivering truly valuable products and services to customers. Currently, the center proceeds with research and development, focusing on (1) permeation of corporate philosophy, (2) establishment of competitive advantage through differentiation, and (3) realization of high added value strategy, and produces results steadily in the development of next-generation batteries.

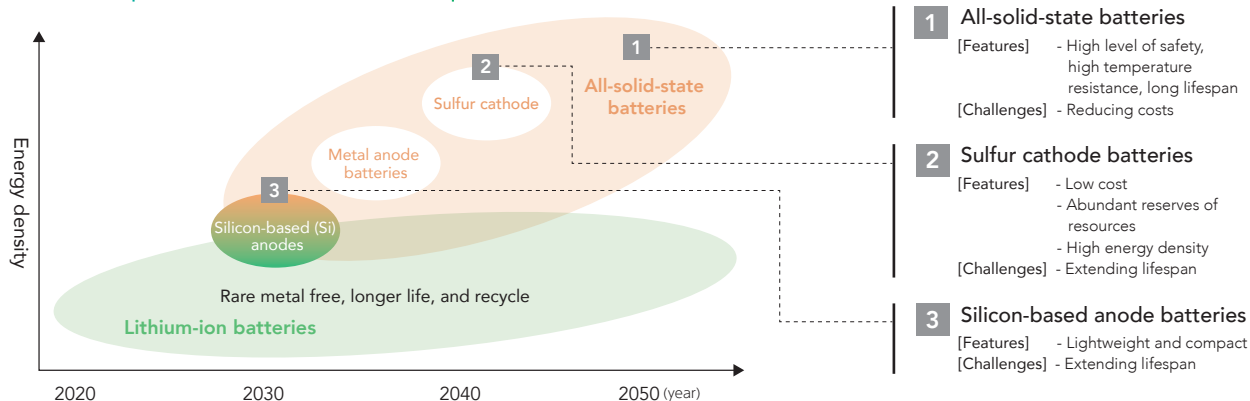
In research and development of all-solid-state batteries, the center pursues technology development to differentiate ourselves from other companies in terms of both battery performance and manufacturing costs, and the current success is GS Yuasa's proprietary high-performance solid electrolyte with high ionic conductivity with superior water resistance. For silicon anode batteries, the center is trying to achieve a balance between mass energy density, cycle performance, and life performance in order to develop truly valuable batteries. For sulfur cathode batteries, the center succeeded in demonstration of a mass energy density of 500 Wh/kg (more than twice that of the current lithium-ion batteries) and is currently working on further performance improvement to achieve differentiation with battery performance (lightness, life, reliability).

The R&D Center will continue to tackle the challenge of technological innovation for early commercialization of next-generation batteries by taking advantage of the R&D Center's strength: cooperation with experts who are well versed in battery technology and analysis technology.



**Hiroaki Yoshida**  
Officer, Head of the R&D Center,  
GS Yuasa International Ltd.

## Roadmap for research and development



### High energy density

Based on our unique solid electrolyte technology, develop batteries with distinctive features such as compact batteries with metal-based anode and lightweight batteries with sulfur cathode

### Sustainable

Develop more sustainable lithium-ion batteries with more consideration for resources and environmental issues

## Research and development system



## TOPICS

## Research and development of next-generation batteries

## All-solid-state batteries

In 2021, we succeeded in developing a nitrogen-containing sulfide solid electrolyte with high ionic conductivity of a sulfide solid electrolyte, a key material for commercialization of all-solid-state batteries, and boosted water resistance, and are currently working on improving it. GS Yuasa is conducting joint research with Osaka Metropolitan University on development of next-generation storage batteries and next-generation motors, a technology proposal selected in April 2022 for the NEDO Green Innovation Fund (the selected research topic is "Next-Generation Storage Battery and Motor Development").

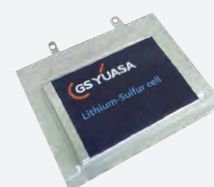
## Silicon-based anode batteries

By developing technologies that achieve both high energy density and long service life in silicon-based anode batteries, which face many practical challenges, we demonstrated in 2023 high energy density of 400 Wh/kg, which exceeds that of conventional lithium-ion batteries. The silicon-based anode is a technology is also applicable to all-solid-state batteries, and this represents substantial progress in terms of the practical application of next-generation lithium-ion batteries.



## Sulfur cathode batteries

For the five-year period from FY2019 to FY2023, we engaged in research and development of lithium-sulfur batteries in the NEDO project for practical application of advanced propulsion systems for aircraft, aiming to mature the technology to a level where it can be proposed for next-generation aircraft. Even after project completion, we continue challenging the early commercialization of next-generation batteries.

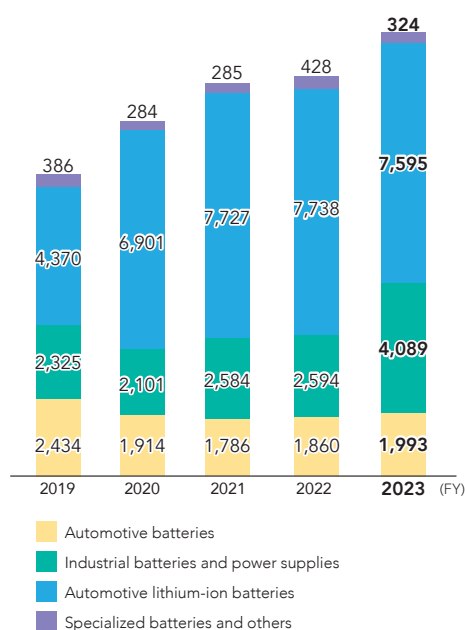


## Research and development in segments

In each segment, the Group conducts active research and development activities from fundamental technologies to product and manufacturing technologies.

## Changes in R&amp;D expenses by segment

(Millions of yen)



## FY2023 R&amp;D topics

Automotive batteries (Japan)	<ul style="list-style-type: none"> <li>Promote the development of auxiliary batteries for HEVs and BEVs</li> <li>Release batteries with reduced burden of refill maintenance and improved durability, both of which are achieved through technology development with EN batteries for replacement</li> </ul>
Automotive batteries (Overseas)	<ul style="list-style-type: none"> <li>Start the development of VRLA (AGM)* batteries with the Turkish site</li> <li>Expand the variety of auxiliary batteries for automobiles (for use with a 12V power supply) in the European market, and promote market introduction</li> </ul>
Industrial batteries and power supplies	<ul style="list-style-type: none"> <li>Promote the development of products that allow for saving air-conditioning power of a storage battery facility through improved high thermal resistance; for example, batteries for use in a data center</li> <li>Promote the development of products suitable for market needs of products for forklifts at the site in Thailand</li> <li>Start the development of a large-capacity PCS for use with a storage battery system, and plan to release two models within FY2024</li> <li>Develop an outdoor power storage board for a storage battery system, and plan to release it within FY2024</li> </ul>
Automotive lithium-ion batteries	<ul style="list-style-type: none"> <li>Promote the development of the next model of a cell/module to be delivered to new car manufacturers as a battery for HEVs</li> <li>Proceed with the development of new batteries for PHEVs with an energy density higher than that of conventional batteries by 40% or more and with high output and long life, and start mass production in FY2024</li> <li>Regarding 12V lithium-ion batteries, promote the development of next-generation auxiliary batteries for BEVs</li> <li>Promote the development of batteries using high-capacity silicon anodes as post-lithium batteries</li> </ul>
Specialized batteries and others	<ul style="list-style-type: none"> <li>Succeeded in developing a cell with a mass energy density of 500 Wh/kg in the research and development of lightweight lithium-sulfur batteries in the advanced aircraft system commercialization project</li> <li>Promote the development of new membrane products in the membrane area</li> </ul>

\* Valve-regulated lead-acid batteries.

# Intellectual Property

## Message from the Director in Charge of Intellectual Property

To realize our long-term vision “Vision 2035,” it is necessary to improve corporate value by strengthening intellectual capital. To strengthen intellectual capital, I think we need to secure key patents for stable business growth and secure patents considering the feasibility of other companies. Such patents that will serve as a core of the future business are called “essential patents” in the company. We make adjustments for key technology with responsible persons in the research and development division, conduct detailed patent analysis on the technology, and file a patent application with special care. We will continue to ensure that our efforts lead to results in cooperation with business and development divisions and patent offices.

Currently, the intellectual property division supports about 300 national patent applications a year, overseas patent applications, patent search, a clearance activity, patent alliance with other companies, and patent litigation. Recently, the division also conducts comparison with competitors by IP landscape and intellectual property evaluation in the event of business absorption or business tie-up and is indispensable for GS Yuasa to formulate its management strategy.

It takes a long time for intellectual property activities to produce results and so the time when current activities bear fruit may be after 2035; however, with the confidence that a business backed by intellectual property rights is a truly strong business, we will continue to support our corporate philosophy of “Innovation and Growth” through intellectual property activities.



**Ryoichi Okuyama**

Managing Director, In charge of intellectual property and the lithium-ion battery business,  
GS Yuasa International Ltd.

## Intellectual property strategy

### FY2024 policy

Further promote the reform of the process of obtaining an intellectual property right, and increase (essential) intellectual properties that are truly necessary to improve business value, creating steps for utilization.

### <Main initiatives>

#### ① Calculation of patent scores and patent inventory

We made use of a patent analysis tool to analyze our own patents and those of other companies, calculated patent scores to measure the degree of contribution of intellectual property activities to medium- to long-term growth and expansion of profits, visualized the position of the Group's intellectual property rights, and shared the results with management, the business units, and the development divisions. We will use patent score information to make an inventory of patents possessed, consider priority areas, and leverage promising patents.

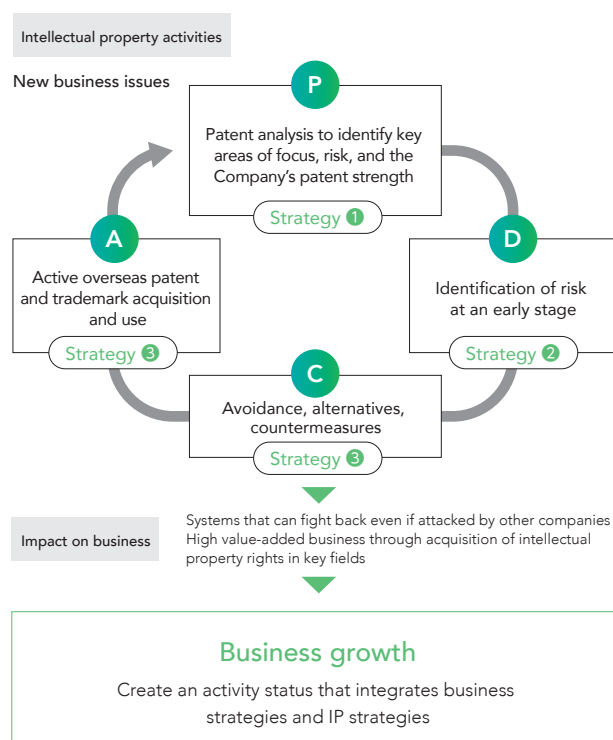
#### ② Reforming the rights acquisition process by using specialized and intellectual property information

We scrutinized the technologies that the development divisions focus on and regarded technologies that can significantly influence future business as key technologies. Not like activities for normal patent applications, we will not only consider filing a defensive application of the company's own technology but also consider the feasibility of other companies and avoidance technologies with in-house specialists in order to build a strong patent network.

#### ③ Acquisition of patent rights in new business fields

We have started measures to identify patents related to the provision of “Koto” at an early stage before providing solutions and services toward achieving Vision 2035. This means creating patent assets that will be necessary for collaborating with other companies in the future. In FY2023, 12% of the patent applications filed by GS Yuasa were related to “Koto-zukuri” (service creation) and is expected to increase to 16% in FY2024.

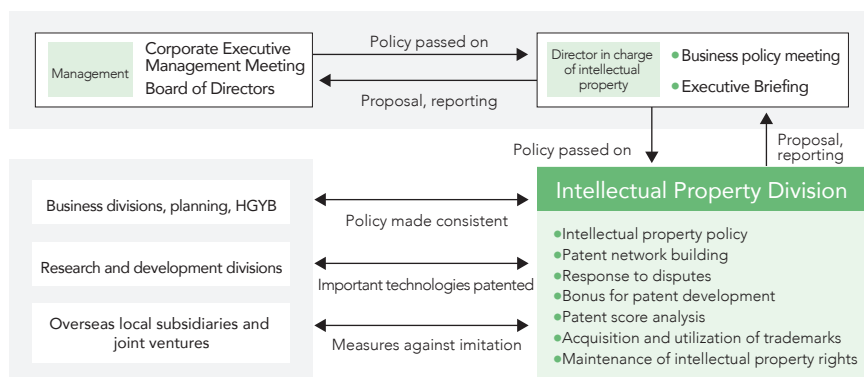
### Image of the Group's intellectual property activities





## Intellectual property systems

The intellectual property division is positioned as an administrative department at headquarters. The department is responsible for application and management of patents and trademarks of the entire GS Yuasa Group, plans various measures related to intellectual properties to increase added value of business, and is pushing hard to realize them in cooperation with relevant divisions.

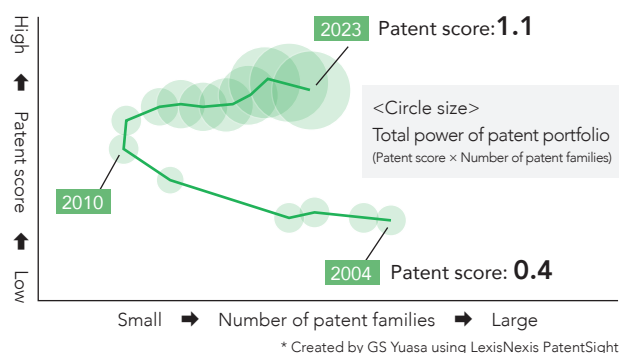


## Intellectual property creation activities

The Group increases truly necessary patents for improving business value and promotes turning technologies into entitlements in overseas countries with a large market size through cooperation between the intellectual property division and the business and development departments.

Regarding the patent score, which represents measured quality per patent possessed on the basis of the number of citations by other companies, located on the longitudinal axis and the number of patent families, which is obtained by organizing and counting similar patents, on the horizontal axis, changes in the results of intellectual property creation activities so far are shown. The patent score has grown significantly compared to that at the time of the corporate merger in 2004.

Changes in the Group's patent score (2004 to 2023)



## Communication with management

At the beginning of each fiscal year, we hold a business policy meeting to discuss activity policies with management as well as Executive Briefings twice a year to report on these policies, new issues, and the status of disputes. In addition, we participate in Corporate Executive Management Meetings, etc. as necessary.

### Themes at an Executive Briefing (partial list)

- Situation of patent infringement lawsuits from competitors in Japan
- Patent score calculation
- Building a network of important patents

## TOPICS

### Initiatives to prevent imitation products

We filed a lawsuit against a copycat firm for trademark infringement to stop the manufacturing and sales of imitation products in China. At the High People's Court of Jiangsu Province, our claim was accepted effective March 28, 2024, and a judgment became final. The amount of compensation for damages was 2 million yuan (approx. 40 million yen).

A dispute over patent infringement is also underway, and we conduct an activity to eliminate obstacles by any third party through intellectual property rights in order to help business growth.



# Sustainability Management

## Message from the Director in Charge of Sustainability Promotion

It is our mission to contribute to people, society, and the global environment. Through our business activities, we aim to respect people, build a sustainable society together with our stakeholders, and pass on a beautiful global environment to future generations.

As our Group’s main product, storage batteries are vital devices in next-generation vehicles, renewable energy generation, and energy storage systems. This means that through technological innovation, the Company can significantly contribute to realizing a decarbonized society. In addition to reducing the environmental burden associated with our business activities, ensuring health and safety in the manufacturing process, and managing human rights risks in the supply chain, providing social value through innovation, in other words, practicing our corporate philosophy of “Innovation and Growth” while promoting the integration of financial and non-financial strategies, forms the core of our Group’s sustainability management.

We do not focus solely on short-term profit but instead promote sustainable management with a long-term perspective. We pursue strengthening our business foundation and enhancing corporate value across the Group.



**Hiroaki Matsushima**

Director and Chief Financial Officer (CFO),  
GS Yuasa Corporation Director,  
GS Yuasa International Ltd.

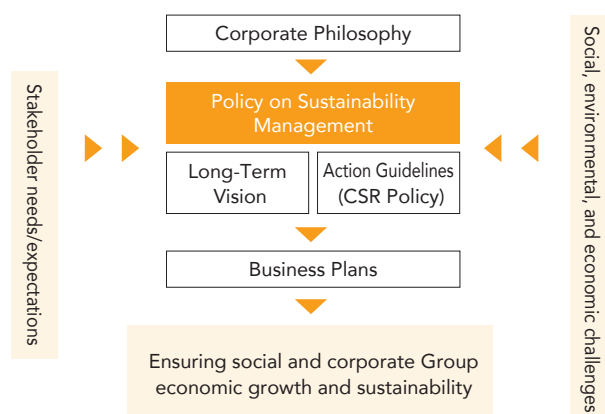
## Sustainability Promotion Process

### Policy on sustainability management

We are committed to utilizing advanced technologies developed in the field of stored energy solutions to deliver security and comfort to our customers around the globe, to make a real contribution to the global effort toward sustainability, and to grow corporate value.

1. We will strive to help address the challenges to sustainability and seek lasting growth together with the community.
2. We will pursue fair and healthy business practices, and maintain steadfast business foundations able to support sustained growth.
3. We will strive to earn the understanding and trust of a diverse range of stakeholders through dialogue.

### Overview of the sustainability promotion process

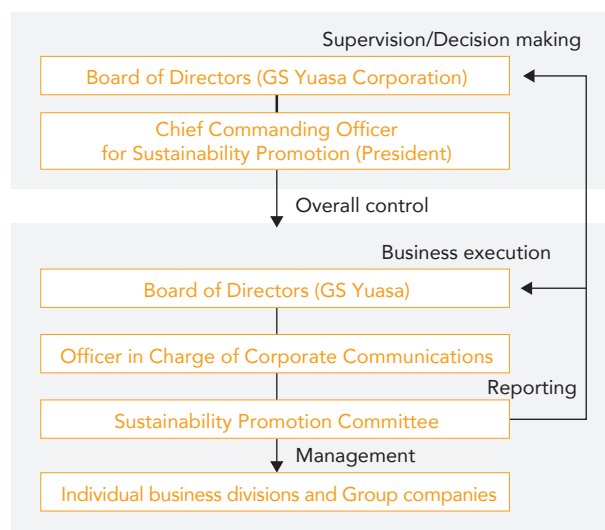


### Sustainability promotion framework

Within the Group, the president has been designated as the Chief Commanding Officer for Sustainability Promotion managing the entire Group’s sustainability promotion. Further, the Board of Directors plays a central role in making important management decisions for the Group as a whole and supervises and manages the suitability of sustainability management in the Group.

Moreover, the Sustainability Promotion Committee, established at our core operating subsidiary, GS Yuasa International, is the primary decision-making body for the Group’s business execution and works to discuss, formulate, and promote overall sustainability activities, thereby promoting group-wide sustainability management initiatives.

► Promotion of Sustainability Management  
<https://www.gs-yuasa.com/en/csr/structure.php>



## Sustainability promotion committee's main activities

The Sustainability Promotion Committee is chaired by an officer in charge of corporate communications who has a role to promote medium- to long-term initiatives to address key sustainability issues and consists of members from heads of major business divisions and Group companies. This committee manages the response to risks and opportunities related to sustainability issues that need to be handled by each division and Group company.

### Main activities details

#### 〈Viewpoint of investors (ESG)〉

- Responding to investor expectations and needs regarding ESG issues
- Improving external ESG evaluations
- Ensuring transparency in ESG-related disclosures (such as integrated reports, annual securities reports, and corporate governance reports)

#### 〈Viewpoint of global society (sustainability)〉

- Responding to sustainability issues with consideration of international frameworks and standards
- Promoting activities contributing to the SDGs through business activities
- Meeting global sustainability information disclosure requirements

#### 〈Viewpoint of the company (CSR)〉

- Response to important CSR issues
- Promotion of supply chain CSR risk management
- Addressing stakeholder expectations and needs concerning CSR issues
- Ensuring transparency in CSR-related activities

### Main discussion themes in FY2023

- Evaluating the achievement of major CSR issues from the previous year and reviewing plans for subsequent years
- Deploying plans to address significant CSR issues to domestic and overseas Group companies
- Responding to new sustainability information disclosure standards
- Improving external ESG/CSR evaluation scores
- Evaluating the status of supply chain CSR risk management
- Promoting risk management related to the employment of foreign employees
- Addressing climate change and biodiversity
- Reporting on sustainability progress and discussions with the Board of Directors

## TOPICS

### Efforts to embed sustainability within the Company

#### Distribution of the VISION BOOK and CSR Manual

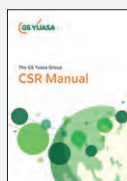
To promote company-wide sustainability initiatives, the Group distributes the VISION BOOK, a document that clarifies our corporate philosophy and company system, to all our employees.

Our CSR Manual, detailing the CSR Policy which serves as action guidelines for sustainability management, is also distributed to all our employees. The CSR manual has also been translated into local languages (six languages\*) that local employees can understand and distributed to overseas Group companies. The Group is committed to ensuring that all domestic and overseas employees are cognizant of sustainability issues related to our CSR Policy and is making efforts for the promotion of sustainability initiatives through business activities.

\* English, Chinese (simplified), Chinese (traditional), Indonesian, Thai, and Vietnamese



VISION BOOK



CSR Manual

#### Introducing sustainability issues in rank-based training

The Group integrates CSR-focused sustainability issues into rank-based training programs.

List of hierarchical training courses with lectures on sustainability issues

- New general manager / manager / assistant manager (leader) training
- Career advancement training (6 years since joining)
- Skills improvement training (3 years since joining)
- Power-up training (4 years since graduating high school)
- New employee training
- Management training (5th year as section manager)
- Promotion exam etc.

# Materiality

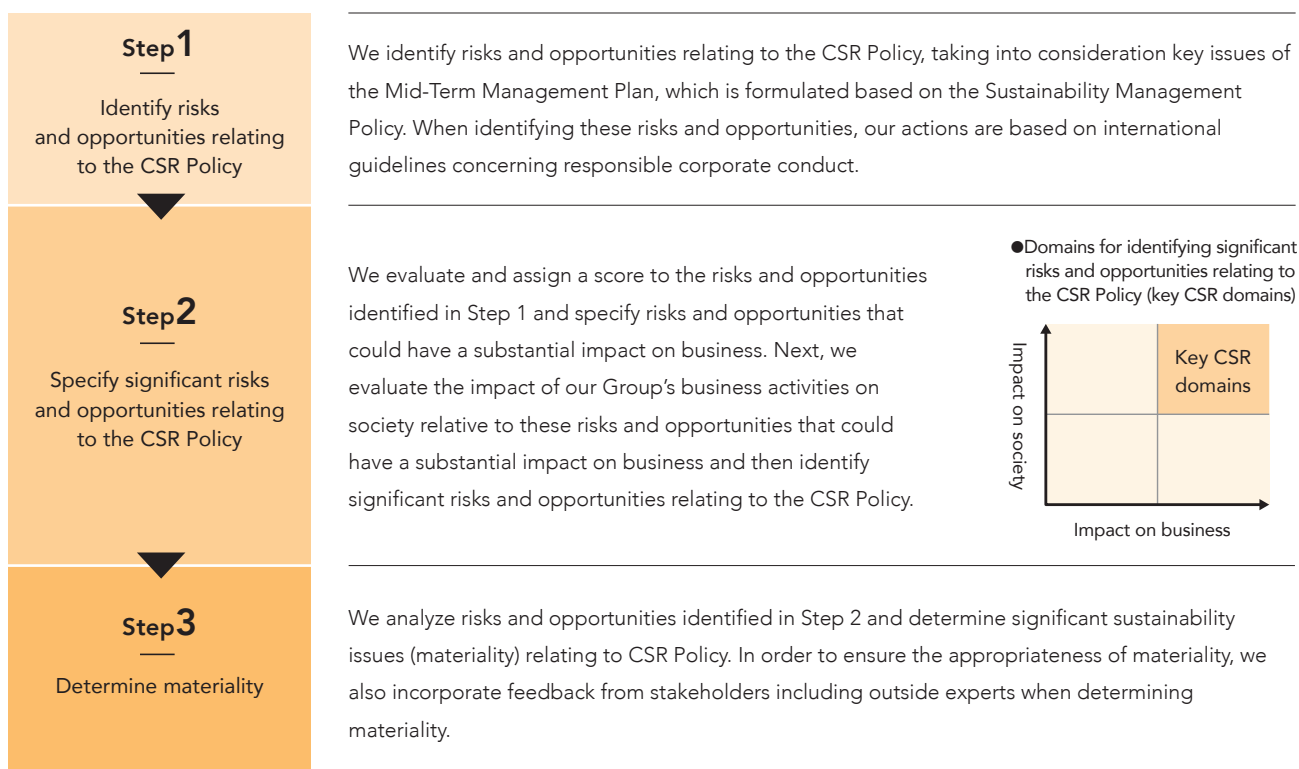
## Materiality Initiatives

To achieve our sustainability management goals, the Group identifies risks and opportunities associated with the action guidelines outlined in our CSR Policy, evaluates their impact on business and society, and identifies key sustainability issues (materiality) related to the CSR Policy. After considering perspectives such as reinforcing our business foundations and enhancing corporate value, we formulate a business plan that corresponds to those material issues (a materiality response plan) and set management indicators and targets to measure the progress of the plan. In addition, the Group body that promotes sustainability (the Sustainability Promotion Committee) regularly reviews materiality and the content of the materiality response plan, taking into account the needs and expectations of the stakeholders, sustainability issues, and other considerations. Furthermore, appropriate risk responses are implemented by using the Group’s risk management system to address significant risks that concern the CSR Policy.

The GS Yuasa Group aims for enhanced management of financial and non-financial operations, as well as for sustainable corporate and social growth through execution of business processes that incorporate materiality in the Long-Term Vision and Mid-Term Management Plan.

● Progress of Materiality P.38–39

## Materiality identification process



## Materiality operations

With respect to formulated materiality, we are conducting operations and management based on the measurable target management and management criteria, making ongoing improvements, and performing effective maintenance and management. The details of the plans are periodically reviewed and revised according to changes in sustainability issues and the needs and expectations of stakeholders.



## Towards Global Social Issue Solutions

We are aware that sustainability issues include issues relating to the creation of a world where people can lead healthy and free lives; economic, social, and technological development with consideration for the natural environment and the creation of a conflict-free, peaceful society; and the achievement of an abundant global environment that can coexist with nature. We believe that these human, social, and global environmental issues are closely related to the SDGs, global goals for sustainable development to be achieved by 2030.

By addressing materiality, GS Yuasa Group aims to contribute to the resolution of global social issues.



► Contribution to Achieving SDGs through Materiality Response [https://www.gs-yuasa.com/en/csr/pdf/SDGs\\_2024.pdf](https://www.gs-yuasa.com/en/csr/pdf/SDGs_2024.pdf)

### TOPICS

The "GS Yuasa's Initiatives for the SDGs" page was launched in July 2024

GS Yuasa's efforts toward achieving the SDGs are listed by SDG target. Please take a look.

► <https://www.gs-yuasa.com/en/company/sdgs.php>



# Environment

## Message from Director in Charge of Environment

### GS Yuasa’s mission is the pursuance of realizing carbon neutrality

Our main product, storage batteries, is recognized by society as a key device for realizing carbon neutrality. Therefore, as part of our mission to contribute to solving social issues through our business activities, we are committed to environmental conservation, including the realization of carbon neutrality.

In April 2023, we announced GY 2050 Carbon Neutrality Target, presenting three initiatives: promoting energy-saving measures, promoting renewable energy generation, and procuring renewable energy. In addition, we are tackling the following four issues as important environment-related targets:



**Masahiro Shibutani**

Vice President and Representative Director,  
GS Yuasa Corporation

Vice President and Representative Director,  
GS Yuasa International Ltd.

**>> Reduction of own CO<sub>2</sub> emissions** Reducing CO<sub>2</sub> emissions from business activities and allocating resources for this purpose is a top management priority, and discussions are ongoing within executive meetings. Since effective methods for reducing Scope 1 emissions have not yet been established, we are substituting them with reductions in Scope 2 emissions and strategically advancing renewable energy procurement. For Scope 3, we recognize that our most significant source of emissions is Category 1, Purchased Goods and Services. Cooperation from suppliers is essential for achieving reductions, and we are currently preparing to move forward.

**>> Reduction of water use** We use a lot of water in the manufacturing process for cooling batteries. We are investigating water risks, including water intake risks, at our domestic and overseas sites while reducing water usage through water recycling efforts at each site.

**>> Increased usage rate of recycled lead** Since recycling lead, the main raw material for lead-acid batteries, is important, we have set a target for the proportion of recycled lead used as raw material for lead-acid batteries. However, with the EU Battery Regulation raising the target for recycled lead use to over 85% after FY2031, further improvements in the recycled lead usage rate are required. Currently, we are working with suppliers to promote increased use of recycled lead.

**>> Expanded sale of environmentally considered products** We position products that contribute to the electrification of vehicles and the expansion of introducing renewable energy as environmentally considered products and are working to promote their sales. We will strengthen our production system for environmentally considered products and aim to achieve our sales ratio goals.

## Fundamental environmental policy

### <Basic Philosophy>

We are committed to people, society, and the global environment through the “Innovation and Growth” of our employees and business entities. We will apply the advanced energy technologies we have built up through battery research and development work to deliver comfort and peace of mind to customers around the world, and aim to realize a sustainable society and increase corporate value.

### <Action Guidelines>

#### 1. Compliance with laws, regulations, and other requirements

We will strive to prevent environmental incidents, comply with legal requirements, reduce risks connected with the use of chemical substances, and continually improve our environmental management system with the aim of enhancing our environmental performance.

#### 2. Reducing environmental burden

We will aim to be carbon neutral by reducing greenhouse gas emissions throughout our supply chain to limit climate change impacts. We will also recognize water as an important resource and strive to conserve it by reducing consumption levels.

#### 3. Efficient utilization of natural resources

Toward a circular economy\*, we will strive to minimize the amount of natural resources we use through a range of means, including reducing raw material usage, using recycled materials, and reducing waste throughout product life cycles and services.

#### 4. Environment-friendly products

To be able to continue “creating the future of energy”, we will develop and manufacture products and services that can contribute to the formation of a carbon-neutral circular economy.

#### 5. Biodiversity

Given that our business activities, products, and services depend on the natural environment, we will promote biodiversity conservation activities to protect the ecosystems of endangered and rare species.

#### 6. Disclosure

We will disclose environment-related information to stakeholders in an appropriate manner, and strive to coexist harmoniously with communities by engaging in proactive communication.

#### 7. Human resource development

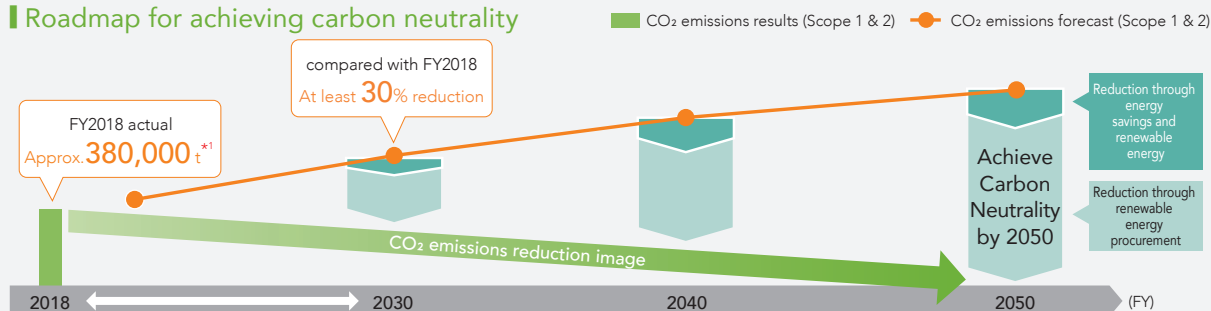
We will foster, across the entire GS Yuasa Group, personnel able to forge the future of our business with the aim of meeting our responsibilities in helping to create a carbon-neutral circular economy.

\* Resource recycling society with zero waste

## GY 2050 Carbon Neutrality Target

GS Yuasa is pursuing carbon neutrality by FY2050

### Roadmap for achieving carbon neutrality



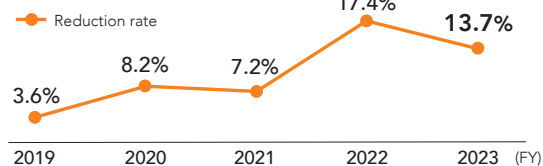
### GY 2030 Long-Term Greenhouse Gas Target

<sup>\*1</sup> Since adoption of the Sixth Mid-Term Management Plan, the GS Yuasa Group's CO<sub>2</sub> emissions aggregation standards were changed, and we are undergoing third-party re-verification for FY2018.  
(1) Recalculated using the 2018 emission coefficient obtained from the Ministry of the Environment and IEA  
(2) Adopted the control standard as the calculation standard, and consolidated subsidiaries that can be directly influenced are included in the scope of calculation.

#### Overview of GY 2030 Long-Term Greenhouse Gas Target

Target	Reduce FY2030 CO <sub>2</sub> emissions by at least 30%
Base year	FY2018
Period	12 years (FY2019–2030)

#### CO<sub>2</sub> emissions reduction rate from FY2019 to 2023 (compared to FY2018)



Note: Figures for past years have been revised in line with the scope review for FY2023.

### Efforts through achieving carbon neutrality

Contribution to realization of low-carbon society P.71-72

#### Promote energy-saving measures

- 1 Install energy-saving equipment
- 2 Develop prescriptions for efficient charging methods and develop new ones



#### Promote generating renewable energy

- 1 Maximize introduction in all offices and plants in Japan and overseas
- 2 Introduce our own products including Energy Storage Systems (ESS) and conduct a demonstration experiment



#### Procure renewable energy

- 1 Purchase electric power derived from renewable energy
- 2 Procure reports of renewable energy



### Contribute to reducing CO<sub>2</sub> emission by expanding sales of environmentally considered products

Development and Provision of Environmentally Considered Products P.70-71

Reducing CO<sub>2</sub> emissions by products

FY2021  
At least **8 million t**

#### GS Yuasa Group's environmentally considered products

- ⊙ Lithium-ion batteries for HEVs / PHEVs / BEVs
- ⊙ Lead-acid batteries for ISS vehicles
- ⊙ Power conditioners / Industrial lithium-ion batteries etc.



Further CO<sub>2</sub> emission reduction

2018 2030 2040 2050 (FY)

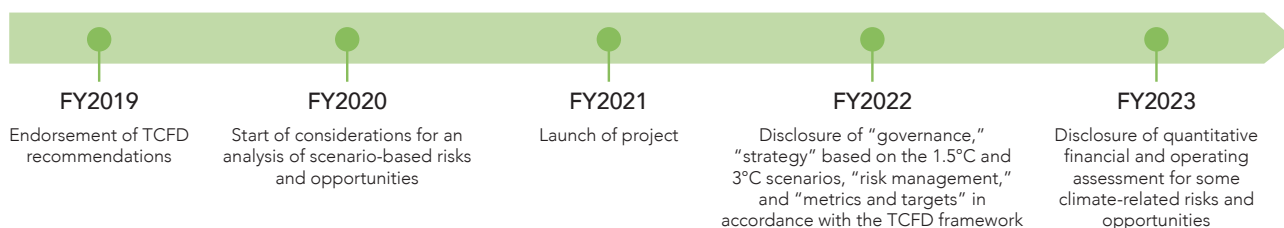
## Environment — Response to Climate Change (TCFD)

The GS Yuasa Group recognizes that climate-related issues are one of our important management issues. In December 2019 we announced our support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and we are working on climate-related information disclosure based on the TCFD framework.



In FY2021, we launched a project to examine climate-related risks and opportunities in accordance with the TCFD framework. The major scenarios adopted for our analysis of risks and opportunities were the 1.5°C scenario and the stated policies scenario (equivalent to the 3°C scenario). We devised strategies based on the short-term (FY2025), medium-term (FY2030), and long-term (FY2040 and FY2050) time axes.

In FY2023 we disclosed quantitative financial impact assessments for each business for some climate-related risks and opportunities.



### Governance

GS Yuasa International Ltd., our core operating company, plans and implements responses to climate change in the Group. The company’s Board of Directors supervises the entire Group, receiving regular progress reports from GS Yuasa International Ltd. and providing guidance as necessary.

Policies, targets, and important topics related to the environment are formulated and deliberated upon by the Sustainability Promotion Committee\*<sup>1</sup> and reported to the Corporate Executive Management Meeting and the Executive Briefing which is headed by the president.

#### Governance structures relating to climate issues

<b>Board of Directors</b> [Engages in deliberation and discussion at least once every three months] Approves proposed responses to environmental issues (including climate change), receives status reports, and monitors and oversees progress Directors and auditors	<b>Corporate Executive Management Meeting</b> [Engages in deliberation and discussion several times annually] Discusses proposed responses to environmental issues (including climate change) Directors and auditors
<b>Executive Briefing</b> [Meets once every six months] Receives reports on proposed responses to environmental issues (including climate change) and manages the progress of responses President, director in charge of the environment, and relevant directors	<b>Sustainability Promotion Committee*<sup>1</sup></b> [Meets once every two months] Formulates and discusses proposed responses to environmental issues (including climate change) and manages the progress of responses Director in charge of sustainability promotion, sustainability promotion managers of each division and each business office

\*<sup>1</sup> The CSR Committee was reorganized as the Sustainability Promotion Committee in FY2023.

#### Examples of past reports and agenda items related to climate change (FY2019–2022)

Meeting entity	Topics reported and discussed
Board of Directors	<ul style="list-style-type: none"> <li>Formulation of the Fundamental Environmental Policy</li> <li>Establishment of the GY 2030 Long-Term Greenhouse Gas Targets</li> <li>Disclosure of business strategies based on the TCFD</li> <li>Renewable energy procurement policy</li> <li>Setting of carbon neutrality targets</li> </ul>
Corporate Executive Management Meeting, Executive Briefing, Sustainability Promotion Committee* <sup>1</sup>	<ul style="list-style-type: none"> <li>Endorsement of TCFD recommendations and membership of the TCFD Consortium</li> <li>Launch of the Energy Saving and Renewable Energy Project to reduce CO<sub>2</sub> emissions</li> <li>Progress report on the Energy Saving and Renewable Energy Project</li> <li>Introduction of internal carbon pricing (ICP)</li> <li>Introduction of in-house solar power generation</li> <li>Formulation of environmental targets in the Sixth Mid-Term Management Plan</li> </ul>

### Risk management

Risks and opportunities are identified and evaluated through the process described below. Identified risks and opportunities, and the responses to them, are managed under our governance structures including the Sustainability Promotion Committee.

In FY2021, each business division and management division established a project team to conduct companywide analysis of scenarios and examine countermeasures.





## Strategy

### Assumed Conditions / Main Scenarios

Main scenarios used in scenario analysis<sup>\*2</sup>

Temperature increase	Main scenarios used	Overview
1.5°C	IEA <sup>*3</sup> Net Zero Emissions by 2050 Scenario (NZE) (NZE: Net Zero Emissions by 2050 Scenario)	A scenario indicating what the world (policies, technologies, markets, etc.) needs to look like in order to achieve net zero global greenhouse gas (GHG) emissions by 2050 (assumed through a backcasting method)
	IPCC <sup>*4</sup> RCP <sup>*5</sup> 2.6 Scenario and SSP <sup>*6</sup> 1-2.6 Scenario	RCP2.6: A scenario that assumes future temperature rise to be limited to less than 2°C used in the IPCC Fifth Assessment Report SSP1-2.6: A scenario for the introduction of climate policies to limit future temperature increases to less than 2°C under sustainable development used in the IPCC Sixth Assessment Report
3°C	IEA Stated Policies Scenario (STEPS) (STEPS: Stated Policies Scenario)	A scenario based on energy and climate policies previously implemented and individual policies that are currently being implemented by individual governments
	IPCC RCP 8.5 Scenario and SSP 5-8.5 Scenario	RCP8.5: A scenario with maximum GHG emissions used in the IPCC Fifth Assessment Report SSP5-8.5: A scenario with no climate policies used in the IPCC Sixth Assessment Report

<sup>\*2</sup> Scenario analysis uses the scenarios of public agencies and may differ from actual future social conditions. <sup>\*3</sup> International Energy Agency

<sup>\*4</sup> Intergovernmental Panel on Climate Change <sup>\*5</sup> Representative Concentration Pathways <sup>\*6</sup> Shared Socioeconomic Pathways

Time axis	Short term	Medium term	Long term
End year	2025	2030	2050
Reason for adoption	Fifth (FY2019–2022) and sixth (FY2023–2025) mid-term management plan periods	Achievement period of the GY 2030 Long-Term Greenhouse Gas Targets and SDGs	Achievement period of the GY 2050 Carbon Neutrality Target

### Assumed social conditions based on scenario analysis

		Through 2025 (short term)	Through 2030 (medium term)	Through 2050 (long term)
	Operations	–20%	–40%	–100%
	Carbon price	\$75 / t-CO <sub>2</sub>	\$130 / t-CO <sub>2</sub>	\$250 / t-CO <sub>2</sub>
1.5°C scenario	Automotive related business	<ul style="list-style-type: none"> <li>Expansion of automobile electrification</li> <li>Structural changes in the automobile industry in conjunction with electrification</li> </ul>	Passenger cars (Global)	
			Number of vehicles (compared to present) • Sales: 1.3 times • Ownership: 1.6 times	Number of vehicles (compared to present) • Ownership: 2.1 times
			Percentage of EVs, PHEVs, and FCVs <sup>*7</sup> • Sales: 64% • Ownership: 20%	Percentage of EVs, PHEVs, and FCVs <sup>*7</sup> • Sales: 100% • Ownership: 86%
	Industrial battery and power supply related business	<ul style="list-style-type: none"> <li>In conjunction with increasing demand for batteries for applications relating to transportation and electric power, prices will decline for alternative technologies, such as lithium-ion batteries, to take the place of lead-acid batteries</li> </ul>	Motorcycles and three-wheel vehicles (global)	
			Percentage of EVs • Sales: 85% • Ownership: 54%	Percentage of EVs • Sales: 100% • Ownership: 100%
	Development of alternative technologies to replace lead-acid batteries	In conjunction with increasing demand for batteries for applications relating to transportation and electric power, prices will decline for alternative technologies, such as lithium-ion batteries, to take the place of lead-acid batteries		
3°C scenario	Operations	Changes in energy-related markets	<ul style="list-style-type: none"> <li>In conjunction with the rapid expansion of solar and wind power generation, demand for batteries used for electric power will expand</li> <li>Batteries for storing excess power from renewable energy sources will increasingly be converted to use for backup applications</li> </ul>	
		Development of alternative technologies to replace lead-acid batteries	<ul style="list-style-type: none"> <li>In conjunction with increasing demand for batteries for applications relating to transportation and electric power, prices will decline for alternative technologies, such as lithium-ion batteries, to take the place of lead-acid batteries</li> </ul>	
	Supply chains R&D	Raw materials	<ul style="list-style-type: none"> <li>Demand for lithium, nickel, and other resources will increase rapidly as demand for lithium batteries increases for use with energy storage technologies and renewable energy</li> <li>Competition to sustainably secure raw materials will intensify</li> </ul>	
		Acceleration of the circular economy <sup>*8</sup>	Needs for products adapted to a recycling-oriented society will increase year-by-year	
		Emergence and spread of alternative technologies to replace lithium-ion batteries	<ul style="list-style-type: none"> <li>As battery demand for transportation and electric power related applications expands, the development and spread of battery technologies with higher added value in terms of safety, energy density, cost, charging speed, and life span will progress</li> </ul>	
3°C scenario	Operations	Storm and flood damage, storm surges	<ul style="list-style-type: none"> <li>The frequency of flooding will more than double compared to now in Japan and other regions</li> <li>Sea levels will rise approximately 0.3 m</li> <li>The frequency of intense storms in the vicinity of Japan will increase</li> </ul>	
		Storm and flood damage, storm surges	Expansion of business relating to disaster countermeasures	

<sup>\*7</sup> EV: Electric Vehicle; PHEV: Plug-in Hybrid Electric Vehicle; FCV: Fuel Cell Vehicle

<sup>\*8</sup> An economic mechanism for the circulation of resources without waste. Positioned as a medium- to long-term economic growth policy, particularly in European countries.

# Environment — Response to Climate Change (TCFD)

## Risks and Opportunities

1.5°C scenario	Operations	Introduction of carbon tax and renewable energy	
		<b>Risk</b>	Increased costs for energy saving and renewable energy to reduce CO <sub>2</sub> emissions
		<b>Risk</b>	Increased carbon costs for the company's emissions in conjunction with the introduction of a carbon tax
		<b>Risk</b>	Increased carbon costs for emissions in upstream segments of supply chains
	Automotive related business	Higher demand for batteries in conjunction with increased sales and ownership of passenger vehicles	
		Starting batteries and batteries for auxiliary equipment	
		<b>Opportunity</b>	Higher demand for batteries for auxiliary equipment used in EVs and PHEVs
		<b>Opportunity</b>	Replacement of lead-acid batteries with lithium-ion batteries
		<b>Risk</b>	Declining demand for starting batteries used in internal combustion engine vehicles
		Batteries for HEVs*, PHEVs, and EVs	
		<b>Opportunity</b>	Higher demand for batteries used in EVs and PHEVs
		<b>Opportunity</b>	Fluctuations in HEV and PHEV demand (expansion in the short to mid-term, contraction in the long-term)
	Industrial battery and power supply related business	Lead-acid batteries for backup applications and forklifts	
		<b>Opportunity</b>	Higher demand for batteries
		<b>Risk</b>	Replacement of lead-acid batteries with lithium-ion batteries
	Supply chains R&D	Energy storage systems (ESS) for renewable energy	
		<b>Opportunity</b>	Higher demand for batteries and peripheral systems and devices
		Raw materials procurement and circular economy	
		<b>Opportunity</b>	Improvement in the superiority of recyclable lead in a recycling-oriented society
		<b>Risk</b>	Difficulty procuring and rising price for metal resources
		<b>Risk</b>	Difficulty sustainably procuring and rising price for sustainable raw materials
		Technological innovation	
		<b>Opportunity</b>	Increased business opportunities as a result of leading development of next-generation batteries technologies (all-solid-state batteries, etc.)
		<b>Risk</b>	It is expected that the development and spread of higher added value battery technologies (all-solid-state batteries, metal-air batteries, sulfur batteries, etc.) for transportation and electric power related applications will advance. In cases where the company can lead the development of new technologies, business opportunities will arise.
3°C scenario	Operations	Natural disasters and temperature rise	
		<b>Risk</b>	Increased damage to facilities due to storm and flooding disasters and increased loss of profit due to business suspension
		<b>Risk</b>	Business suspension due to damage to supply chains
		<b>Risk</b>	Increased costs for air conditioning and cooling processes
	Industrial battery and power supply related business	Emergency power supplies	
		<b>Opportunity</b>	Increased demand for emergency power supplies as countermeasures against severe disaster
		It is expected that demand for emergency power supplies will increase out of concern regarding intensification of natural disasters due to climate change.	



Note: Those items that were determined in the risk assessment to be of particular importance in the short to long term are listed. \*9 HEV: Hybrid Electric Vehicle

## Direction of Business Strategies


		Now	2050
1.5°C scenario	Operations	Reduce CO <sub>2</sub> emissions by at least 30% by 2030 Implement measures for energy conservation and use of renewable energy	Further accelerate measures for achieving carbon neutrality Further implement measures for energy conservation and procurement of renewable energy
	Automotive related business	<b>Securing profits from lead-acid batteries for internal combustion engine vehicles</b> Introduce differentiated products, strengthen our sales capabilities, and increase sales of high-value-added products with a focus on regions where internal combustion engine business remains such as ASEAN	
		<b>Capture demand for batteries for auxiliary equipment used in electric vehicles</b> Capture demand for 12V lead-acid or lithium-ion batteries for auxiliary equipment used in electric vehicles as well (for new automobiles and for replacement)	
		<b>Capture demand for redundant batteries used in electric vehicles</b> Capture demand for lithium-ion batteries used for backup of self-driving vehicles	
		<b>Expand production of lithium-ion batteries for HEVs and PHEVs</b> Production will increase, particularly for Japanese automakers, but will decline in the future	
1.5°C scenario	Industrial battery and power supply related business	<b>Full-scale entry into EV lithium-ion battery market</b> Invest development resources to enter the market for lithium-ion batteries used in EVs, which are used under demanding environments and must be highly reliably	
		<b>Apply automotive lithium-ion battery know-how to industrial applications</b> Establish a lineup that includes both lead-acid batteries and lithium-ion batteries for industrial applications according to market needs	
	Supply chains R&D	<b>Focus on the renewable energy and energy management fields</b> • Strengthen operation, maintenance, and inspection services • Develop more price-competitive batteries • Introduce products and services aligned with customer needs to capture demand for renewable energy • Capture demand for peak cutting, peak shifting, and other energy management services for business sites	
3°C scenario	Operations	<b>Develop the market for lead-acid batteries with high recycling rates</b> Commercialize lead-acid batteries compatible with the needs of a recycling-oriented society	
		<b>Conduct R&amp;D of and commercialize rare metal-free batteries</b> Promote R&D on and commercialize rare metal-free batteries such as sulfur cathode batteries	
	Industrial battery and power supply related business	<b>Conduct R&amp;D of and commercialize post-lithium-ion batteries</b> Promote R&D of all-solid-state batteries and put them into practical application, promote R&D of and commercialize Si anode batteries, Li metal anode batteries, and sulfur cathode batteries	
3°C scenario	Operations	<b>Countermeasures against intensifying disasters</b> • Evaluate future risks including climate risks and implement countermeasures as necessary • Undertake BCP including supply chains	
	Industrial battery and power supply related business	<b>Contribute to countermeasures against intensifying disasters using backup power supplies</b> Focus on market expansion conditions and respond to needs	

## Metrics and targets


### Sixth Mid-Term Management Plan (FY2023-2025)

 <b>CO<sub>2</sub> emissions</b> (compared with FY2018) At least <b>15%</b> reduction	 <b>Water consumption</b> (compared with FY2018) At least <b>15%</b> reduction
 <b>Percentage of environmentally considered products in total sales of all products</b> <b>45%</b> or more	 <b>Ratio of recycled lead used as lead raw materials in lead-acid batteries</b> <b>70%</b> or more

### Target for reduction of CO<sub>2</sub> emissions (Scope 1 and 2)

 <b>2030</b> (compared with FY2018) At least <b>30%</b> reduction	<b>2050</b> <b>Carbon neutrality</b>
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### ICP (Internal Carbon Pricing)

 The price will be set at <b>¥15,000</b> / t-CO <sub>2</sub> Use as reference information when making investment decisions regarding energy-saving and renewable energy measures
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# Environment — Environmental Initiatives

## Development and Provision of Environmentally Considered Products

The GS Yuasa Group's products have an impact on the environment during every stage of the product life cycle, from procurement and manufacturing to transportation, use, and disposal. In order to reduce the environmental burden throughout the entire product life cycle caused by the consumption of resources and the generation of greenhouse gases and waste, the Group is committed to improving the product performance through designing that considers selection of raw materials, ease of disassembly and segregation, energy conservation, and appropriate labeling. Also, by actively developing and promoting products that contribute to reducing greenhouse gas emissions, we contribute to mitigating global warming.

### Designing environmentally conscious products

For an environmental assessment of product design, design departments employ design standards and then evaluate the suitability of products in design review (DR) meetings based on environmental impact assessments of every stage of the product life cycle. When environmental impact standards are not met, we review the design standards and redesign the product. We use the expertise of several departments in addition to design departments, including engineering, marketing, procurement, quality, and the environment, to make sure that the results of Design for the Environment (DfE) are communicated widely, which also maximizes their effectiveness.

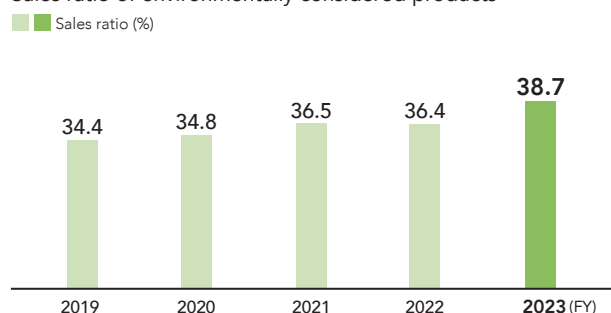
#### Environmental assessment items

- |                                 |   |                                 |                       |
|---------------------------------|---|---------------------------------|-----------------------|
| 1 Energy conservation           | 2 Volume reduction                      | 3 Recyclability                 | 4 Ease of disassembly |
| 5 Ease of separation processing | 6 Safety and environmental conservation | 7 Material selection            |                       |
| 8 Ease of maintenance           | 9 Energy efficiency                     | 10 Reusability (life extension) |                       |


### Popularizing environmentally considered products

The Group defines environmentally considered products as those products that help mitigate global warming, and we are actively working to develop and popularize such products. We incorporate into the Mid-Term Management Plan sales targets for environmentally considered products, making it part of our business strategy to work on climate change through the products we provide to customers.

#### Sales ratio of environmentally considered products



#### Examples of environmentally considered products

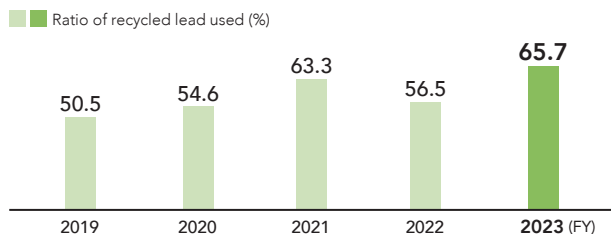
Business sector	Examples of Product
 <b>Automotive batteries</b>	<ul style="list-style-type: none"> <li>● Lead-acid batteries for vehicles with start-stop systems (ISS: idling stop systems)</li> </ul>  <p>Batteries for ISS vehicles for improving gas mileage by allowing the engine to stop instead of idling to reduce fuel consumption</p>
 <b>Industrial Batteries and Power Supplies</b>	<ul style="list-style-type: none"> <li>● Power conditioners</li> <li>● Lithium-ion batteries</li> </ul>  <p>Effectively utilizing renewable energy</p>
 <b>Automotive Lithium-ion Batteries</b>	<ul style="list-style-type: none"> <li>● Lithium-ion batteries for HEVs</li> <li>● Lithium-ion batteries for BEVs and PHEVs</li> </ul>  <p>Batteries for HEVs, BEVs, and PHEVs installed in electric vehicles and that contribute significantly to reducing greenhouse gases</p>



## Increasing usage rate of recycled lead in products

The GS Yuasa Group is working to increase the usage rate of recycled lead—the primary material used in lead-acid batteries, one of our core products. We take action to realize a recycling-oriented society as part of our business strategy by incorporating into the Group's Mid-Term Management Plan targets for the usage rate of recycled lead contained in our lead-acid batteries. The GS Yuasa Group has been taking action to recycle our post-use products by building and operating a recycling system based on extended producer responsibility (EPR). Going forward, we also plan to strengthen our efforts to promote the use of recycled materials in our products.

Ratio of recycled lead used as lead raw materials in lead-acid batteries

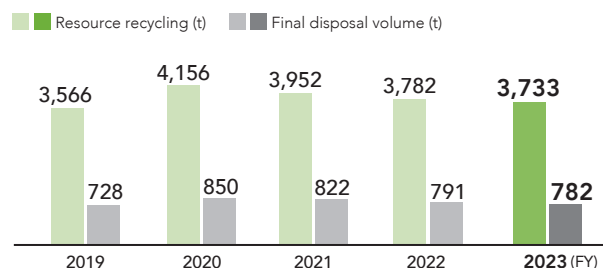


Note: Figures for past years have been revised in line with the scope review for FY2023.

## Resource recycling of used products

The GS Yuasa Group believes in the importance of creating and operating a system for recycling resources from used products to help create a recycling-oriented society. To achieve this goal, the Group is working on adequately treating and recycling used products using the wide-area certification system.\*1 In January 2008, we acquired wide-area certification from the Ministry of the Environment for industrial batteries and power supplies, and we commenced operation of a recycling system based on this certification starting with orders received in January 2009. Even following the start of operations, we took actions such as expanding the scope of covered products and reviewing operational rules to create mechanisms for the reliable and proper disposal of used industrial batteries.

Status of resource recycling pursuant to wide-area certification system



\*1 A wide-area certification system aims to involve the manufacturers of a product in the product's recycling and disposal once it reaches the end of its useful life. These systems make possible more efficient recycling and provide feedback on product design leading to easier disposal and reuse, while ensuring that discarded goods are disposed of properly.

## Contribution to Realization of Low-carbon Society

### Reduction of CO<sub>2</sub> emissions by promoting group-wide energy management

The GS Yuasa Group believes that it is important to continuously improve the energy management system associated with its business activities and promote the reduction of greenhouse gas emissions in order to respond to the social changes accompanying the transition to a decarbonized society (such as requests from stakeholders to reduce greenhouse gas emissions, addition of carbon prices to the use of fossil fuels, and shift from fossil fuels to renewable energy).

In FY2030, we established an organization dedicated to promoting group-wide energy management in order to achieve GY 2050 Carbon Neutrality and long-term environmental goals. This organization promotes activities to formulate specific action plans for business divisions in order to continuously engage in company-wide project activities (promoting measures to save energy, introducing solar power generation systems in our own factories, and procuring renewable energy) carried out in FY2021 and beyond. We have also participated in the GX League\*2, which was established mainly by the Ministry of Economy, Trade, and Industry, since February 2024.

\*2 The GX League is a platform for companies to collaborate with the government and academia to realize carbon neutrality and social transformation. Its goal is to achieve sustainable growth in present and future societies.

Note: GX (Green Transformation) refers to transforming the entire economic and social system through efforts toward a decarbonized society.



# Environment — Environmental Initiatives

Main activities of the Energy Saving and Renewable Energy Project (FY2023)

Categories	Item	Main initiatives
Promoting measures to save energy	Review of facility renewal standards	● Formulate an effective facility renewal plan (utilization of facility management ledger)
	Improvement of production processes	● Improvement of storage battery charging process ● Examining for improvement of charging facilities
	Efficient use of production facilities	● Thorough periodic inspections of capacity utilization status
Introduction of solar power generation facility in our own factories	Examination and implementation of the plan to introduce solar power generation facilities	● Installed a solar power generation system at the Ritto Plant (rated capacity: 2.2 MW, expected reduction: 700 t-CO <sub>2</sub> /year) ● Examining for the introduction of mega solar power generation facility at business sites and Group companies in Japan Solar power generation equipment installed at the Ritto Plant
	Survey on the introduction of solar power generation facilities	● Survey the feasibility of introducing equipment at all 11 sites and Group companies in Japan
Procuring renewable energy from the market	Procuring electricity derived from renewable energy	● Switching to 100% renewable energy for electricity used at the Kyoto Plant (Procured 100 GWh equivalent per year from November 2021; FY2023 reduction volume: approx. 40,000 t-CO <sub>2</sub> )

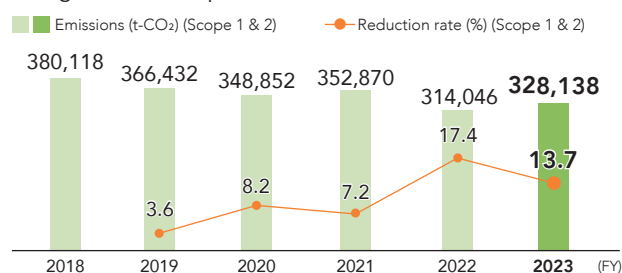


Usage status of renewable energy at our factories by region (FY2023)

Country	Production sites	Categories	Electric power (MWh)	Country	Production sites	Categories	Electric power (MWh)
Japan	GS Yuasa International Ltd. Kyoto Office	In-house	12	U.S.	Yuasa Battery, Inc.	In-house	286
		External	91,836		Siam GS Battery Co., Ltd.	In-house	2,555
	GS Yuasa International Ltd. Osadano Office	External	303	Thailand	Yuasa Battery (Thailand) Pub. Co., Ltd.	In-house	638
	GS Yuasa International Ltd. Ritto Office	In-house	2,719		GS Yuasa Siam Industry Ltd.	In-house	1,049
UK	GS Yuasa Battery Manufacturing UK Ltd.	External	2,018	Vietnam	GS Battery Vietnam Co., Ltd.	In-house	152
				Indonesia	PT. Trimitra Baterai Prakasa	In-house	69

\* The utilization rate of renewable energy in power usage at our factories is 15.3%.

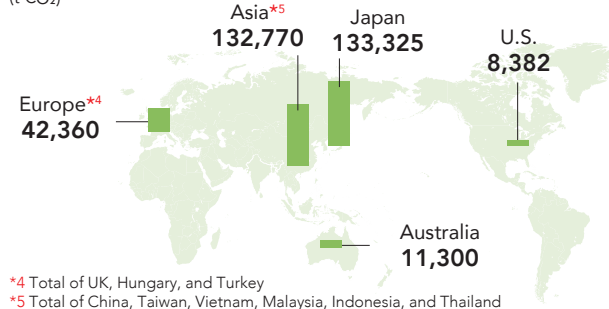
Changes in the Group's CO<sub>2</sub> emissions and the reduction rate\*<sup>3</sup>



\*<sup>3</sup> Compared to FY2018.

Note: Figures for past years have been revised in line with the scope review for FY2023.

Group's CO<sub>2</sub> emissions by region (FY2023) (t-CO<sub>2</sub>)



\*<sup>4</sup> Total of UK, Hungary, and Turkey

\*<sup>5</sup> Total of China, Taiwan, Vietnam, Malaysia, Indonesia, and Thailand

## TOPICS

### Energy conservation activities in the manufacturing process

GS Yuasa Technology Ltd. is working to save energy in the manufacturing process. In FY2023, airtightness was improved by installing safety covers without any gaps on production equipment, and new covers were installed on the open parts of equipment to turn production equipment into airtight booths. Also, dewpoint sensors were installed in the airtight booths, and dry clean control was changed from entire rooms to the airtight booth level. Dry air and air circulation volume are optimized by switching air conditioning capacity according to operating conditions. As a result of these measures, the company reduced CO<sub>2</sub> emissions by 25 tons per year. To curtail greenhouse gas emissions, the Group is continuously implementing measures to streamline energy usage.



Production equipment with sealed booths

## Initiatives for Water Security

The Group uses a large amount of quality fresh water for applications such as dilution of electrolytes, which are storage battery materials, and cooling of storage batteries in the charging process. Since water resources are important natural resources for the continuation of business activities, we believe it is important to work on ensuring quality freshwater and reducing water consumption. In addition, in the production process of lead-acid batteries, water containing harmful substances (such as lead) is discharged. We recognize the importance of properly treating wastewater so that such wastewater does not adversely affect the surroundings of our business sites.

### Responding to water risks

By securing water necessary for business activities and through an appropriate response to water risks such as environmental pollution around business sites due to wastewater, the Group aims to promote water security initiatives as well as realize the sustainable use of water resources. Further, we are responding to climate change-related risks based on the TCFD recommendations with respect to risks of damage due to floods (such as the shutdown of our factories due to flooding and disruptions in the supply chain).

#### Water risk response examples

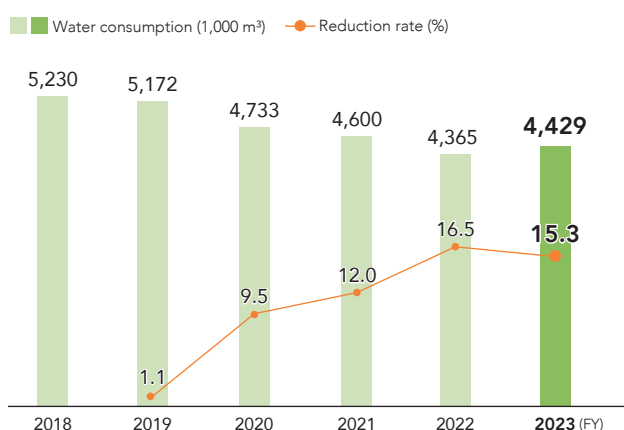
Categories	Items	Example of Initiative
Water consumption	Reduction of water consumption	<ul style="list-style-type: none"> <li>Reducing unnecessary water usage through improvements in manufacturing processes</li> <li>Introducing water-saving equipment</li> <li>Recycling water used in the production process</li> <li>Raising awareness of water conservation among employees</li> </ul>
	Wastewater management	Thorough implementation and management based on voluntary management standards that are stricter than regulatory standards; regular maintenance and management of wastewater treatment facilities
Treatment of wastewater	Preventing under seepage	Installation of dikes at wastewater treatment facilities and impermeability of floor surfaces
	Responding to emergency situations	Establishing response procedures and training for emergency situations in case of water leakage

### Reduction of water consumption associated with production activities

The Group promotes the effective use of water by taking measures at production plants such as recycling water and reducing water use.

At lead-acid battery plants, we are undertaking measures to reduce water intake including reusing cooling water, which is used in large volumes during the charging process, and recycling water that has been appropriately treated, such as rainwater and backwash water from industrial water filtration equipment. In addition, by switching the water nozzles of water-cooling devices in the outdoor units of dehumidifiers to spray nozzles at specialized battery factories, we are working to reduce the amount of cooling water used by air conditioning equipment while maintaining the necessary cooling performance.

#### Changes in the Group water consumption and the reduction rate<sup>\*6</sup>

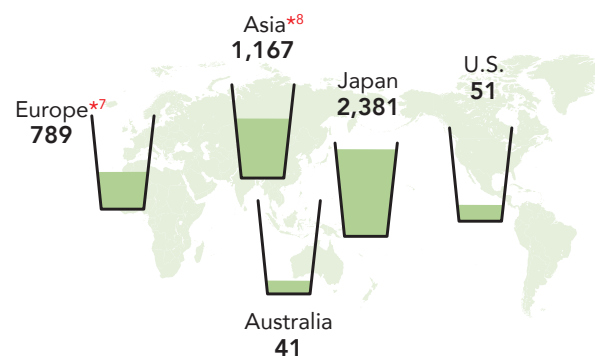


<sup>\*6</sup> Compared with FY2018

Note: Figures for past years have been revised in line with the scope review for FY2023.

#### Group's water consumption by region (FY2023)

(1,000 m³)



<sup>\*7</sup> Total of UK, Hungary, and Turkey

<sup>\*8</sup> Total of China, Taiwan, Vietnam, Malaysia, Indonesia, and Thailand

# Social

## Message from Director in Charge of Human Resources

### Maximizing the value of human capital to continue “Innovation and Growth”

To continue practicing our philosophy of “Innovation and Growth” and realizing Vision 2035 to solve social issues, it is essential to harness the abilities of people who can create a future equipped with flexibility and resilience to tackle changes in the environment and business structure and technological transformations aimed at providing new value. To strengthen such human resources, developing autonomous-minded human resources who can autonomously generate ideas that lead to innovation and competitiveness, make quick decisions, and act in response to environmental changes is necessary. Strengthening systems for rapidly assigning personnel in accordance with changes in the business structure and creating an environment where diverse talents can demonstrate their abilities are also necessary.

In the Sixth Mid-Term Management Plan, we focus on promoting diversity, equity, and inclusion (DE&I) and linkage with management strategies as major pillars of our human capital strategy. We are actively investing in human capital to develop “autonomous-minded human resources” and create systems where individual abilities can be fully utilized through the following initiatives.

- Establishing an education system and introducing an internal recruitment system where everyone can proactively obtain opportunities for self-innovation
- Introducing a personnel system that makes it easier to take on more challenging roles and tasks than before
- Strengthening talent management to achieve the centralized management of personnel information and appropriate placement of personnel aimed at improving personnel mobility between businesses
- Creating an environment that supports flexible work styles tailored to each individual’s personality, abilities, and life stage

We will continue to achieve speedy responses to environmental changes and improve engagement simultaneously, accelerating the creation of new value by fostering a sense of well-being where employees and the Company feel they are growing together.

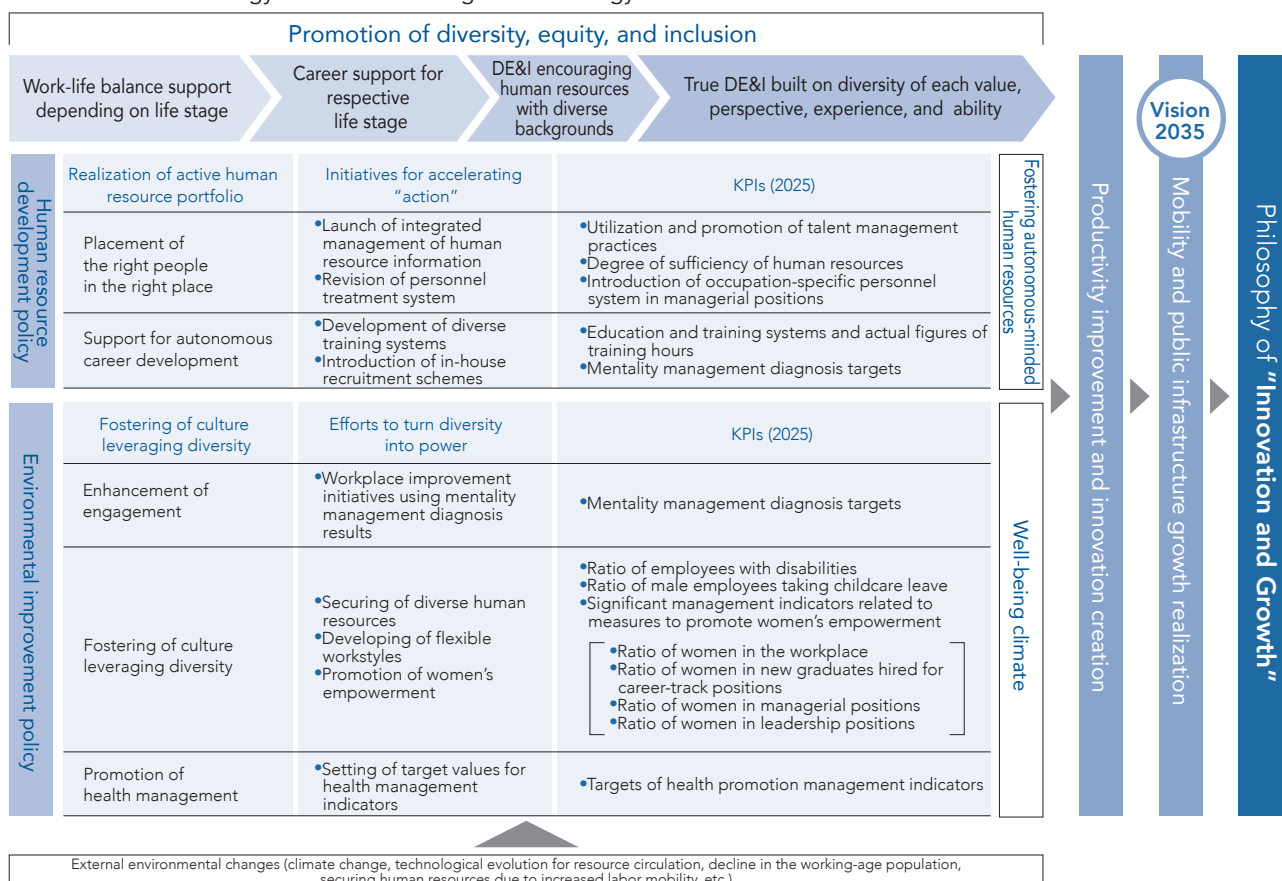


**Kazuhiro Fukuoka**

Director and General Manager,  
Human Resources Division,  
GS Yuasa International Ltd.

### Diagram of human resource strategy

Human resource strategy linked with management strategy





# Social — Social Initiatives

## Respect for Human Rights

The GS Yuasa Group is aware that respect for human rights is at the foundation of business activities and that preventing the occurrence of human rights violations through the Group's decision-making and activities is a key element of management. Furthermore, since the Group engages in business on a global scale, we believe that appropriate management of human rights issues not only within GS Yuasa and its Group companies, but also in our transactional relationships with business partners including domestic and overseas suppliers is essential.

### Identifying and addressing human rights risks

The GS Yuasa Group conducts risk assessments regarding human rights issues and determines priority issues to be addressed. We use human rights risk response checklists that enable us to determine the status of responses to human rights issues and the occurrence of human rights risk and assess the degree of impact on human rights. We assess risk that originates not from business but from people from the perspective of whose rights and which rights will be negatively impacted by Group business activities. We address priority human rights issues by taking human rights risk countermeasures integrated into existing business processes.

To undertake human rights risk management in the supply chain, we administer a questionnaire survey of suppliers to confirm the status of their responses regarding human rights issues, and when necessary, request that suppliers take human rights risk countermeasures. We collaborate with a variety of stakeholders in the mineral supply chain and undertake activities to avoid being complicit in human rights violations in mineral procurement.

Priority human rights issues (GS Yuasa International Ltd.)

Issues	Human rights risk	Persons impacted by human rights
Unsafe and unhealthy work environments	Risk that workers are unable to work in a healthy manner due to inappropriate occupational health and safety management	Employees
Harm to health due to environmental pollution	Risk of harm to the lives and health of local residents due to atmospheric pollution or water contamination resulting from business activities	Local residents

### Promoting human rights education

Informative and educational initiatives help employees to grasp various human rights issues and the importance of business activities keyed to human rights. When necessary, personnel participate in human rights management training sessions, nurturing and expanding knowledge vital in properly recognizing and evaluating human rights risks and their negative effects.

Human rights worksite training implementation rate (FY2023)

**100%**

Average implementation time of human rights worksite training (FY2023)

**3.0 hours**

Scope: 378 GS Yuasa worksites and 166 domestic Group companies

#### Education on respect for human rights

- Workplace education (meetings, discussions) on the themes of respect for human rights and harassment
- Distribution of booklets and internal email newsletters created for the purpose of raising awareness of respect for human rights
- Distribution of manuals explaining the Group's CSR Policy
- Holding briefing sessions on human rights risks for overseas site managers

### Management of human rights risks involving foreign workers

The Group has created guidelines to appropriately manage human rights risks related to the employment of foreign workers based on international guidelines on responsible employment management for foreign workers. These guidelines set out management principles for human rights risks that should be considered throughout the employment process, from recruitment to retirement. They are being rolled out to domestic and overseas Group companies. We confirm compliance with these guidelines for Group companies employing foreign workers and make operational improvements where necessary.

In addition, in the supply chain, we have established and require suppliers to adhere to the Responsible Procurement Guidelines, which set forth management guidelines for responsible corporate behavior, including addressing human rights issues unique to foreign workers. We regularly verify suppliers' compliance with the Responsible Procurement Guidelines and request improvements where necessary.

## Social — Social Initiatives

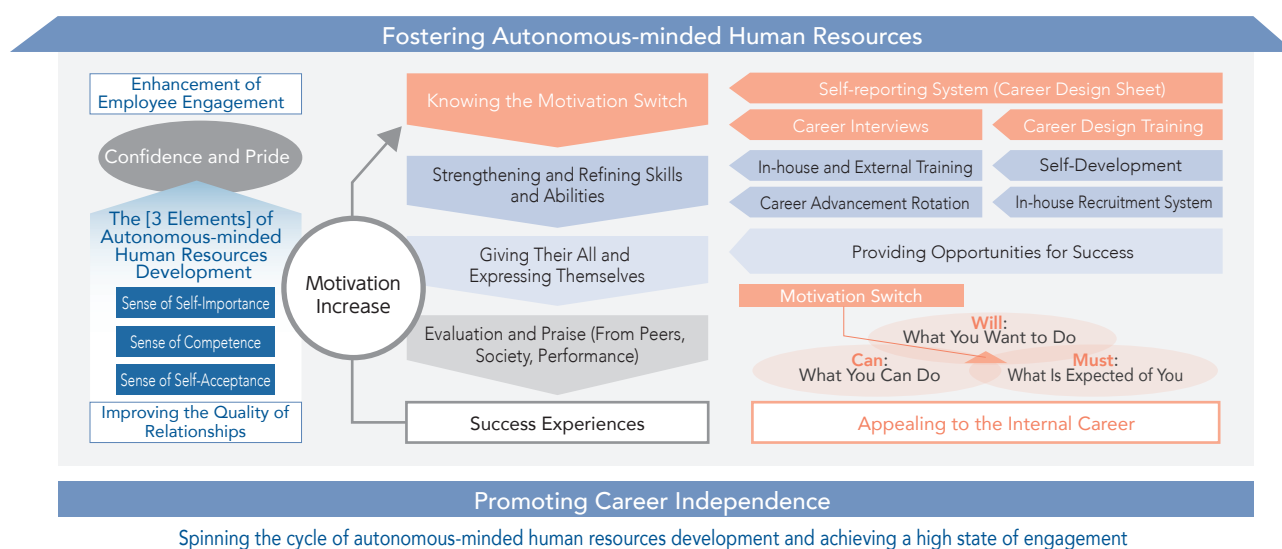
### Human Resource Development / Respect for Diversity

At the Group, we believe that front-line workplaces are the engines that generate corporate value, and the lead players in those workplaces are employees. Thus, we encourage the development of “autonomous-minded human resources” who can think independently, work proactively, and generate results at their day-to-day work sites, which are the best places for developing human resources. In addition, in order to nurture a culture in which diverse human resources can grow together and play an active role, we undertake diversity management so that we can fully utilize the diverse individuality of employees and strengthen organizational capabilities.

#### Fostering autonomous-minded human resources

The Group focuses on fostering and supporting the success of autonomous-minded human resources through on-the-job training (OJT) centered around the task management system. Autonomous-minded human resources are those with a strong desire for self-growth and self-management skills, who can act proactively. As they are key individuals for the future, we are actively investing in the development of autonomous-minded human resources.

We are currently developing an educational system that provides learning opportunities for all employees to promote self-innovation. We are also considering introducing a personnel system that allows employees to participate in important roles and tasks, regardless of age or experience, and to receive evaluations commensurate with their achievements. We plan to systematically promote education and talent management to develop the next generation of leaders while fostering mobility between businesses.



#### Enhancement of employee engagement

The Group is working to enhance corporate competitiveness by securing human resources with excellent talent and improving labor productivity through enhancing employee engagement initiatives.

Since FY2021, we have conducted an annual Mentality Management Diagnosis that combines engagement and mental health to regularly monitor the status of employees and the organization. Based on the diagnostic results, we conduct group analysis, develop organizational improvement activities, and promote the creation of a Vibrant Organization. We also use this analysis, which comprehensively covers various factors such as individual career autonomy, trust relationships, and psychological safety, to verify and improve the effectiveness of human resource measures.

Important management indexes of mentality management diagnosis (deviation value)\*1

		FY2021 actual	FY2022 actual	FY2023 actual	FY2025 target figures
KGI	Work engagement	50.7	50.0	50.3	Maintain at 50 or more
	Stress response	50.5	49.7	49.5	50 or more
KPI	Mental toughness level*2	50.9	50.4	50.4	Maintain at 50 or more

\*1 Results for GS Yuasa International Ltd., including employees seconded to other companies and excluding employees seconded from other companies.

\*2 This index correlates both stress response and engagement.

## Career development support initiatives

The Group promotes initiatives that balance the career visions employees envision with creating new corporate value. To bolster our efforts for diverse career development by employees, we introduced rank-based training and age-based career design training that promote career autonomy to supplement existing rank-based career development training. We have created a career interview support handbook for managers and employees and introduced support training for managers to assist employees in their career autonomy.



Career Interview Support Handbook (For Employees)

## Fostering a culture that leverages diversity

To continue the proactive recruitment of diverse talent and create an environment where each individual can fully utilize their unique personality and abilities, we launched the GY Mirai Project in 2018. We are working to create a workplace where everyone can work with enthusiasm and fulfillment.

Additionally, discussions on DE&I (Diversity, Equity & Inclusion) are held in executive meetings and reported regularly to the Board of Directors. DE&I-related topics are set as critical issues for directors, incorporating DE&I initiatives into management objectives.

### Roadmap for promoting DE&I

2015										2016		2017		2018		2019		2020		2021		2022		2023	
										★Kurumin certification		★Launch of the GY Mirai Project						★Platinum Kurumin certification				★Nadeshiko Brand certification		(FY)	
Work-life balance support according to life stage												Career support based on life stage						DE&I, where diverse attributes can thrive				True DE&I, where the diversity of each individual's values, thinking, experience, and abilities becomes a strength			
● Start of internal report series										● Announcement of KPI for female new graduate recruitment rate		● Publication of Message from the President "Three Ls"						● Announcement of KPIs for promoting women's empowerment		● Launch of "GS Yuasa's Diversity" Special Website				● Establishment of Diversity Consultation Desk	
Main initiatives	Career development	Hosting of "Women's Shine Gathering"	First training for women hosting of "Women's Shine Training"	Hosting of Women's Future Lecture	Abolition of mandatory business attire for women through the introduction of a work dress code	Introduction of Career Development & Framework into third-year training	Sending employees to an on-site "Management Candidate Training" program	Hosting of opinion exchange meetings with female directors and female managers	Conducting Career Advancement Training for female assistant managers	Introduction of career interview support training															
		Participation in "Team spring!" - a platform for information and opinion exchange among Kyoto-based companies	Development and announcement of Action Plan for Promoting Women's Empowerment	Hosting of Women's Future Career Design Training and Management Training for Supervisors with Female Subordinates	Hosting of Women's Health Care Seminar		Conducting "Awareness Survey on Promoting Women's Participation in the Workforce"	Introduction of diversity management video education for newly appointed managers		Systematization of career design training for various levels and 42, 50, and 57 years old)															
		Development and announcement of an Action Plan for Next-Generation Development Support	Creation of handbook on supporting work-life balance		Establishment of consultation desk for pregnancy and childcare leave returnees	Hosting of "Thinking about a Workplace Friendly to Both Men and Women (Men's Studies)"	Conducting Awareness Survey on Balancing Work and Caregiving	Publication of articles on women's health issues in the Company's quarterly magazine	Setting of 100% KPI for men's rate of taking childcare leave																
	Support for work-life balance			Extension of flexible working hours and shortened working hours for childcare of those with children up to 6th grade	Hosting of work-childcare balance information exchange meetings																				
	Work style reform	10 days of mandatory annual leave (for general employees)	Encouragement of consecutive vacation	Introduction of hourly leave	Introduction of a work-from-home system for childcare and caregiving needs and a re-entry system	Establishment of work-life synergy leave (5 consecutive days of leave)	Introduction of work-from-home system for all employees																		

## Social — Social Initiatives

### TOPICS

#### Conduct information exchange meetings for work-childcare balance

As part of our efforts to create a workplace where both men and women can balance work and life events, we held an information exchange meeting in March 2024 with 48 participants, including employees on childcare leave and managers. In the panel discussion, two pairs consisting of male employees who had taken childcare leave and their supervisors participated as panelists. They explained the circumstances of taking leave, reporting it to their supervisors, life during leave, and their impressions afterward. The external lecturer discussed the steps such as the benefits of childcare leave, the timing of reporting childbirth, and deciding when to take leave. We aim to create an environment and atmosphere where men and women can naturally take childcare leave and develop a workplace where work and childcare can be balanced.

### Promoting employment of persons with disabilities

GS Yuasa Socie Ltd., a special subsidiary of GS Yuasa, actively employs persons with disabilities. Since 2016, the company has introduced a system to ensure safe and stable employment by designating all employees as regular employees with indefinite-term employment regardless of whether they have a disability or not. We will continue to work to maintain and improve a work environment that is inclusive of the abilities and characteristics of disabled employees.

Employment rate of  
people with disabilities  
(as of April 2024)

**2.64%**

### TOPICS

#### Initiatives to support employment of people with disabilities

At GS Yuasa Socie, we provide nine types of work at the Kyoto headquarters, four types at the Osadano office, and two types at the Shizuoka office, in line with the type and characteristics of the disabilities, ensuring the right person is in the right job. As part of our internal support system, we have four mental health social workers, two certified social workers, one accredited psychologist working full-time, and, two job coaches. Additionally, 18 vocational life counselors for persons with disabilities are assigned to each workplace, creating a detailed support system.



## Enhancement of Work Environments and Occupational Health and Safety

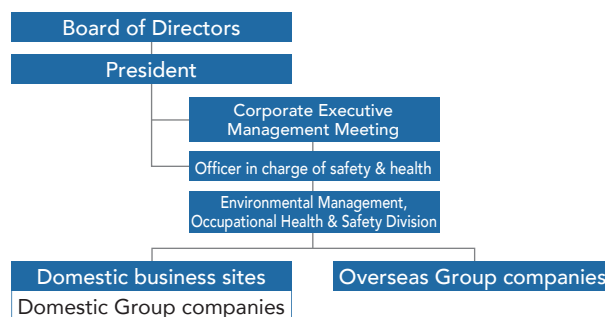
We consider creating a workplace where employees can work comfortably as a critical issue and actively work to improve labor conditions and occupational health and safety. We strive to prevent workplace accidents by identifying safety risks in advance and implementing appropriate measures. We also continuously work on improving the work environment to ensure a healthy and comfortable workplace.

### Promoting occupational health and safety

The GS Yuasa Group believes that securing the health and safety of its workers is the paramount priority in doing business and has established the Group Policy (The Fundamental Health and Safety Policy) for the promotion of company-wide endeavors to build a corporate culture of safety.

Toward realizing that Group Policy, domestic business sites have obtained the certification of their occupational health and safety management systems in compliance with the international standard (ISO 45001), and a majority of the production companies of overseas Group companies have also obtained ISO 45001 certification. Group companies in Japan are currently working to acquire ISO 45001 certification and seek to achieve effective management aimed at Group-wide attainment of the Fundamental Health and Safety Policy.

#### Health and safety organizational structure overview



Our Fundamental Health and Safety Policy is available on our website.

▶ [https://www.gs-yuasa.com/en/csr/working\\_env.php](https://www.gs-yuasa.com/en/csr/working_env.php)



## Health and safety

### Reducing occupational accident risk

At domestic business sites and domestic Group companies, we use risk assessment techniques to identify potential hazard sources by conducting general inspections and take mitigation measures according to the scale of the risk. Similar measures are also taken concerning safety patrol activities conducted under the leadership of the safety and health officer.

If a workplace accident occurs, we share the information with everyone working at our domestic business locations in real time, investigate the cause, and implement measures to prevent recurrence. In workplaces handling hazardous substances, we implement risk reduction measures using chemical risk assessments and regularly monitor the work environment and workers' health as required by law. We are also promoting efforts to reduce the risk of workplace accidents at overseas Group companies through regular safety audits conducted by the Company's safety and health promotion members.

### TOPICS

#### Efforts to raise workers' safety awareness

The GS Yuasa Group conducts activities intended to raise the awareness of safety among all employees who work for the Group directly or indirectly including subcontractors and temp workers in order to maintain and improve safety and health management operations. We also ensure that safety and health activities are well-established and raise their levels by conducting education and training to prevent safety and health risks from occurring. From FY 2023, we have also introduced virtual reality (VR) experience-based training devices as part of our educational initiatives on hazard simulation which allow trainees to actually experience and understand workplace hazards. We are committed to continued efforts to promote health and safety education through hands-on training for hazards (such as falls from working at heights, contact with forklifts, and electric shocks), that could not be experienced in the past with conventional devices.



VR experience-based risk training (Kyoto Plant)

## Work environment

### Work style reform

The Group is striving to ensure the most appropriate work hours through cooperation between labor and management. GS Yuasa has introduced and managed systems to accurately understand and manage work hours (attendance management system and access control system). Based on this data, an expert committee combining labor and management is held monthly, and we check the condition of employees working long hours. Education at the workplace sites to improve awareness of employees and managers also addresses the theme of appropriate management of working hours. In addition, as initiatives aimed at creating a balanced working style, we are promoting improvement activities that contribute to the enhancement of work efficiency and creativity and the optimization of work allocation and taking other measures.

### Health management

The Group considers it essential to create an environment where all employees can perform their duties in a healthy physical and mental state and achieve their maximum performance. We are promoting company-wide health management for all employees and their families based on the health management policy established by our president, who is at the top of our management.

In coordination with initiatives such as workstyle reforms and the promotion of women's success, we analyze data from health checkups and stress checks to identify employee health issues as part of our health-building efforts. For issues that are identified, we adopt measures for promoting health, and formulate plans to resolve the issues after verifying the effectiveness of the measures.

### Wage disparity between male and female workers Period: April 2023 – March 2024

The wage disparity between male and female employees indicates the ratio of women's wages to men's wages. There is no difference in wages between men and women in our personnel system for the same qualifications, rank, or position, and any disparity is due to differences in personnel composition across qualifications, rank, or positions. We will continue to promote efforts to increase the ratio of female managers.

	All workers	Regular workers	Fixed-term workers
GS Yuasa	73.7%	72.7%	78.9%
GS Yuasa Fieldings Ltd.	74.9%	76.1%	104.2%

Note: GS Yuasa wages include base pay, overtime wages, and bonuses; commuting allowances and severance pay are not included.  
GS Yuasa Fieldings wages include base pay, overtime wages, bonuses, and commuting allowances; severance pay is not included.  
Regular workers include employees seconded to other companies and exclude employees seconded from other companies.  
Fixed-term workers include contract employees, re-hired employees, and part-time employees and do not include dispatch (temporary) employees.

## Social — Social Initiatives

### Provision of High-quality Products

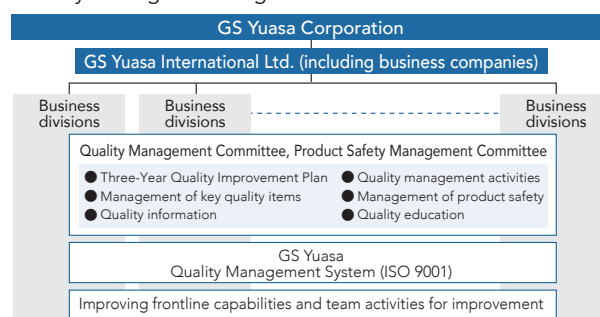
The GS Yuasa Group believes that it is important that we approach manufacturing activities and strive to enhance quality of products and services from the customer’s perspective so that we can remain a manufacturer trusted by customers at all times. We are aware that since the Group’s products store, control, and convert electrical energy, product safety is of paramount importance.

#### Implementation of quality management system

We undertake group-wide activities aimed at improving the quality of products and services provided to customers based on our Quality Policy. To this end, the Group has formulated the GS Yuasa Quality Management System based on the ISO 9001 standard, under the leadership of top management. The aim is to promote a quality management system that crosses business divisions. The quality of our products and services is discussed every month by the Quality Management Committee, which is chaired by the executive officer in charge of quality, to enable us to enhance quality on an ongoing basis.

We are also making utmost efforts to bolster the awareness of quality among employees and to boost their understanding and skills related to quality management through quality-related education courses to all employees and team activities for improvement company-wide, thereby enhancing the quality of our products and services.

#### Quality management organization



Our Quality Policy is available on our website.

► [https://www.gs-yuasa.com/en/csr/quality\\_index.php](https://www.gs-yuasa.com/en/csr/quality_index.php)

## TOPICS

### Quality Management Initiatives

#### Developing human resources in quality management

Since 2017, we have been holding the “*Mono-zukuri* (product creation) expert” education workshops with the aim of developing continuous human resources who can “study *Mono-zukuri* diligently” under the Group’s Quality Policy. At the workshops, we are aiming to develop human resources who will learn control technology required mainly for design development and be capable of implementing such technology. Participants of the workshops are expected to become experts after a one-year training period and act as core members for quality improvement in the workplace by utilizing his/her knowledge and experience.

#### Rounds of plant inspections by top management

We are systematically conducting top management inspections, in which executives visit our domestic factories and branches. The purpose of these inspections is for executives to observe the workplace as it is and engage in dialogue with frontline employees. By focusing on the quality of work, we share activities and challenges related to safety, quality, and the environment, facilitating communication between management and employees. Frontline employees and young managers report on workplace challenges and activities, creating opportunities for exchanging opinions with executives.



Scenes from inspections by top management

#### Initiatives for product safety

We created a company-wide organization centered on the Product Safety Management Committee to undertake measures for ensuring product safety. We promote developments in business divisions after assessing conformity with product safety standards as well as the safety of products as they are used, age and deteriorate. For this reason, we use results of product safety risk assessments and utilize know-how gained from case studies of failures and so on. In addition, we make note of product unsafe events on a daily basis, and provide our customers with appropriate product safety information. In the unlikely event that a product accident which may harm the customer occurs, we implement a system in which we immediately confirm the facts and investigate the cause, and respond to emergencies (prompt and appropriate information provision, first aid measures to prevent the occurrence and spread of harm, measures to prevent recurrence, and so on), as necessary.

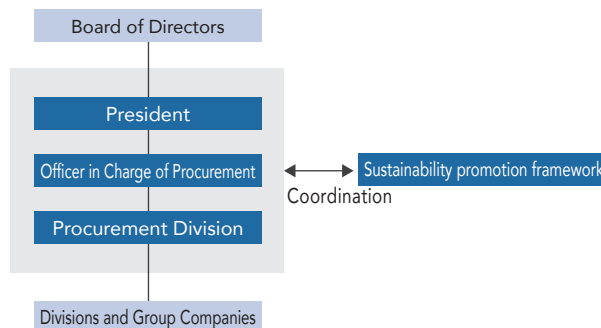
## Responsible Procurement Promotion

The Group advances materials procurement based on awareness of such international social issues as forced labor, child labor, and environmental destruction. Along with quality, performance, pricing, delivery deadlines, and other conventional supply demands, it is also essential to promote procurement activities with the highest priority on CSR elements (including human rights, working conditions, and the global environment). For this, rather than engaging only in in-house CSR activities, we aim to continue implementing responsible procurement that responds to social issues in cooperation with suppliers. We believe that engaging in responsible procurement will enhance the corporate value of both the Group and our suppliers, and enable the realization of mutual prosperity throughout the entire supply chain.

### Implementation of responsible procurement

The Group issued the Responsible Procurement Guidelines in FY2018, which require suppliers to engage with CSR issues. These guidelines aim to reduce risks affecting mutual performance improvement and business continuity by contributing to a sustainable society based on a supplier partnership. We are also working to enforce these guidelines across the global supply chain, raising awareness of CSR issues (such as workers' rights) among suppliers. In new transactions, we select suppliers that agree to the guidelines and conclude contracts that include social standards such as environmental protection, legal compliance, respect for human rights, fair trade, and the exclusion of anti-social forces.

#### Responsible procurement promotion framework



### Responsible procurement survey of suppliers

To realize a sustainable supply chain, we periodically survey our major suppliers concerning their compliance with the requirements in the Responsible Procurement Guidelines. We are working in collaboration with our suppliers to resolve the CSR issues in the supply chain in order to strengthen our business foundation.

Improvement measure completion rate based on supplier CSR surveys (FY2023)

Suppliers of domestic  
business sites

**100%**

Suppliers of overseas  
business sites

**100%**

#### Supplier CSR survey items

Classification	Example question items
Labor	Forced labor, child labor, working hours, wages, inhumane behavior, discrimination, etc.
Health and safety	Occupational safety management, preparedness for emergency situations, industrial health, machinery and equipment, etc.
Environment	Environmental permits, pollution control, hazardous substances, waste, atmospheric emissions, wastewater, etc.
Corporate ethics	Legal compliance, bribery, intellectual property, unfair trade, internal whistleblower systems, information security, etc.
Product safety	Ensuring product safety

### Responsible mineral procurement

The Group believes that addressing social issues (armed conflict, human rights violations, etc.) that may arise during the extraction, transport, and trading of minerals used in our products is crucial in the global mineral supply chain. In our promotion of responsible mineral procurement, we have established a policy that sets out our basic approach based on the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, an international framework for ensuring the responsible procurement of minerals throughout the supply chain.

The responsible mineral procurement policy is published on our website. ▶ [https://www.gs-yuasa.com/en/csr/pdf/rmpp\\_200407e.pdf](https://www.gs-yuasa.com/en/csr/pdf/rmpp_200407e.pdf)

# Governance — Corporate Governance

## Basic Approach

To drive sustainable growth and enhance corporate value over the medium to long term, the Group is committed to establishing an organization and systems that enable fast, efficient responses to a changing business environment. At the same time, our basic policy on corporate governance is to make every effort to thoroughly implement and strengthen compliance and improve the soundness and transparency of management.

Based on this philosophy, GS Yuasa Corporation, a pure holding company, is responsible for formulating management strategies for all of the Group’s businesses, as well as management for the entire Group and oversight of the Group’s business execution. GS Yuasa International Ltd., the Group’s core operating subsidiary, is the key decision-making body for business execution, consolidating and strengthening business execution and enhancing dynamism in the execution of business.

In this manner, functions are divided between GS Yuasa Corporation and GS Yuasa International to enhance and reinforce management structures while establishing governance structures that can increase the transparency and efficiency of management.

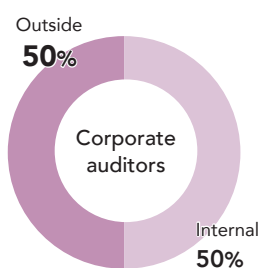
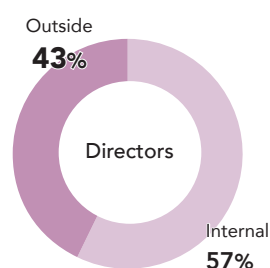
## Changes Made to Strengthen Corporate Governance

After our corporate merger, the Company has worked continuously to strengthen our corporate governance effectively. In particular, our corporate governance has evolved greatly from 2018, after setting up the Nomination and Compensation Committee, bringing in more outside directors, and formulating a skill matrix.

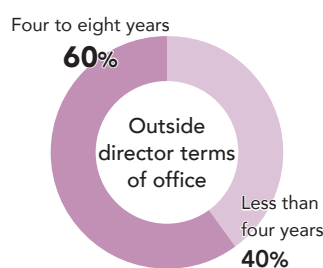
(year)	2000	2010	2020
Clarification of management responsibility		<p><b>2013</b></p> <ul style="list-style-type: none"> <li>Term of directors shortened to one year</li> </ul> <p><b>2017 to 2019</b></p> <ul style="list-style-type: none"> <li>Introduction of performance-linked remuneration stocks</li> <li>Establishment of Nomination and Compensation Committee</li> </ul>	
Increasing diversity and objectivity in management decisions		<p><b>2015 to 2017</b></p> <ul style="list-style-type: none"> <li>First outside director hired (one director)</li> <li>Start of evaluating the effectiveness of the Board of Directors (once a year)</li> <li>Number of outside directors increased to two</li> </ul>	<p><b>2020</b></p> <ul style="list-style-type: none"> <li>Number of outside directors increased to three</li> <li>Appointment of female director</li> </ul> <p><b>2021</b></p> <ul style="list-style-type: none"> <li>Formulation of a skill matrix</li> </ul>
Strengthening internal control	<p><b>2005</b></p> <ul style="list-style-type: none"> <li>Establishment of the Hotline and Reporting Desk</li> </ul>	<p><b>2009</b></p> <ul style="list-style-type: none"> <li>Start of employee compliance questionnaire by the president (once a year)</li> </ul>	<p><b>2020</b></p> <ul style="list-style-type: none"> <li>A new accounting auditor was appointed, as the previous auditor had been in the post for many years</li> </ul> <p><b>2022</b></p> <ul style="list-style-type: none"> <li>Increased the number of direct reports regarding internal audits to the Board of Directors by the Auditing Office</li> </ul>

## Corporate governance structure (FY2023)

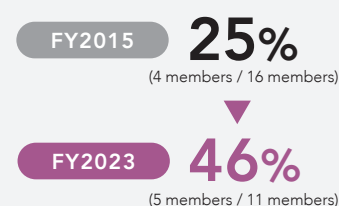
Ratio of outside directors



Outside director terms of office

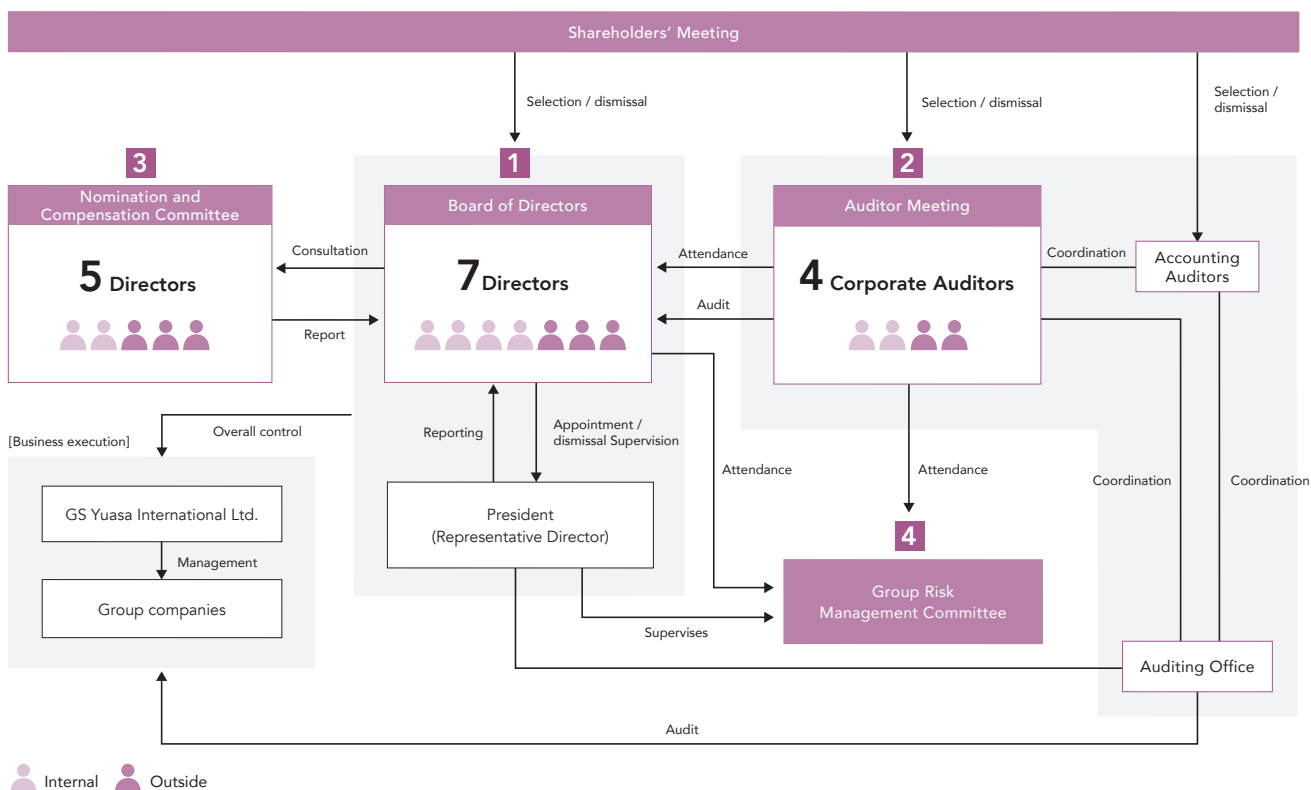


Ratio of outside directors and corporate auditors in the Board of Directors





## Corporate Governance System (As of June 2024)



### 1 Board of Directors

No. of meetings in FY2023: 17

The Board of Directors determines medium- to long-term strategies for the Group including management strategies and medium- to long-term management plans, deliberates on significant matters, confirms progress concerning these matters, and creates systems for reporting the operational status of risk management by the Group, thereby overseeing management of the Group as a whole. The board meets once a month<sup>\*1</sup> in principle.

<sup>\*1</sup> Extraordinary meetings are held, written resolutions are adopted, and reports are made as necessary.

### 2 Auditor Meeting

No. of meetings in FY2023: 14

Corporate auditors conduct appropriate auditing and fulfill a management monitoring function by, among other activities, hearing reports on the business outlook, risk management conditions, and other topics in meetings of the Board of Directors and other important conferences; offering their opinions and suggestions; interviewing directors, employees, and others about the execution of their duties; browsing important decisions, resolutions, and other documents; and investigating asset conditions. The corporate auditors meet once a month in principle.

### 3 Nomination and Compensation Committee

No. of meetings in FY2023: 9

The Nomination and Compensation Committee is an advisory body aimed at strengthening the independence, objectivity, and accountability of the Board of Directors' functions, such as the nomination and remuneration of directors. The committee discusses proposals for nominating new directors and selecting a new corporate president, as well as plans for successors (including human resource development plan) and other matters, and reports to the Board of Directors. The Nomination and Compensation Committee discusses policy for determining director remuneration, the remuneration of individual directors, and other matters and reports to the Board of Directors.

### 4 Group Risk Management Committee

No. of meetings in FY2023: 2

The Group Risk Management Committee promotes the management of risks and countermeasures relating to Group management and to share necessary information. It is chaired by the president, and meetings are attended by directors and corporate auditors, the presidents of major subsidiaries, general managers of business units, and others. The committee meets twice a year in principle.

# Governance — Corporate Governance

## Board of Directors Structure and Their Skill Matrix

Name	Position or Responsibility	Knowledge and Experience Expected by GS Yuasa Corporation								Nomination and Compensation Committee	Attendance at the Board of Directors' Meetings in FY2023	Attendance at the Auditor Meetings in FY2023
		Corporate / Business Management	Financial Accounting	Legal Affairs Risk Management	IT Digitalization	Global	Manufacturing Development	Marketing Sales	ESG			
Osamu Murao	Chairman	●		●			●		●		17 / 17 times	–
Takashi Abe	President Chief Executive Officer (CEO)	●				●		●	●	■	–	–
Masahiro Shibutani	Vice President	●	●			●		●		■	17 / 17 times	–
Hiroaki Matsushima	Director Chief Financial Officer (CFO)	●	●		●				●		17 / 17 times	–
Takayoshi Matsunaga	Director Outside Independent	●				●	●		●	■	17 / 17 times	–
Yoshiko Nonogaki	Director Outside Independent	●				●		●	●	■	17 / 17 times	–
Koji Nitto	Director Outside Independent	●	●		●	●				■	–	–
Masaya Nakagawa	Corporate Auditor (Full-time)	●				●		●			–	10 / 10 times
Yoshiyuki Sanada	Corporate Auditor (Full-time)	●	●						●		–	–
Tsukasa Fujii	Corporate Auditor Outside Independent		●	●					●		14 / 17 times	11 / 14 times
Akira Tsujiuchi	Corporate Auditor Outside Independent		●	●					●		17 / 17 times	13 / 14 times

Notes: 1. Each person is only listed with a maximum of four items that the Company expects of them. The above table is not an exhaustive list of the knowledge and experience of each person.  
2. The auditor Masaya Nakagawa was nominated during the annual Shareholders' Meeting held on June 29, 2023. He has attended all ten of the Auditor Meetings that have taken place since his nomination.

## Policy on the selection of directors and corporate auditors

To enable the Board of Directors to effectively fulfill its duties as the Board of Directors of the holding company, we select, in a well-balanced manner, persons with knowledge, experience, skills, and so on relating to the business of our Group as a whole and persons who can make statements and act from an objective standpoint and a long-term, wide-ranging perspective. In addition, we strive to achieve a composition that can reflect diverse opinions, including gender and international viewpoints. In the selection of candidate directors, the Board of Directors asks the Nomination and Compensation Committee for advice and makes a final decision in the light of its report.

For reasons of selection and activities taken by each of the outside directors, please see the “Corporate Governance” section of our investor relations website.

▶ <https://ir.gs-yuasa.com/en/ir/management/esg/governance/governance.html>

## Provision of information to outside directors

The Company actively shares information with outside directors. In addition to the advance briefings intended to enhance the quality of deliberations at Board of Directors meetings, periodic liaison meetings and other meetings are held with representative directors, business divisions, and management divisions. To facilitate communication with outside directors, we create various opportunities for sharing information including annual briefings by overseas sites, internal databases, and the minutes from meetings of deliberative bodies.

### Main Outside Director Events in FY2023

Main Content	Number of times implemented
Periodic liaison meetings with outside directors, outside corporate auditors, and representative directors	16 times / year
Periodic liaison meetings with business divisions and management divisions	10 times / year
Periodic liaison meetings between outside directors and corporate auditors	4 times / year
Periodic liaison meetings between the president and corporate auditors	4 times / year
Meetings for outside directors to report to the president	2 times / year
Overseas affiliates results briefings	1 time / year

## Main Matters Discussed in Meetings of the Board of Directors

The following describes the main themes and reports discussed during the Board of Directors' meetings held in FY2023. It includes many deliberations and reports regarding business strategies for China and the BEV business as key themes for this fiscal year.

### Main discussion points in FY2023

Matters relating to the Shareholders' Meeting	<ul style="list-style-type: none"> <li>● Decision on convocation and agenda of the Shareholders' Meeting</li> <li>● Approval of business reports, financial documents, etc.</li> <li>● Deciding of director nominations</li> </ul>	Matters relating to management in general	<ul style="list-style-type: none"> <li>● Items in the Mid-Term Management Plan</li> <li>● Matters relating to the Group's business strategies</li> <li>● Matters relating to capital procurement</li> <li>● Matters relating to key business activities</li> </ul>
Matters relating to directors	<ul style="list-style-type: none"> <li>● Selection of president and executive directors</li> <li>● Remuneration and bonuses of directors</li> <li>● Directors serving concurrently at other companies</li> </ul>	Others	<ul style="list-style-type: none"> <li>● Selection of members of the Nomination and Compensation Committee</li> <li>● Implementation of appraisal of the Board of Directors' effectiveness and report</li> <li>● Reports relating to investor relations activities</li> <li>● Verification of cross-shareholdings</li> </ul>

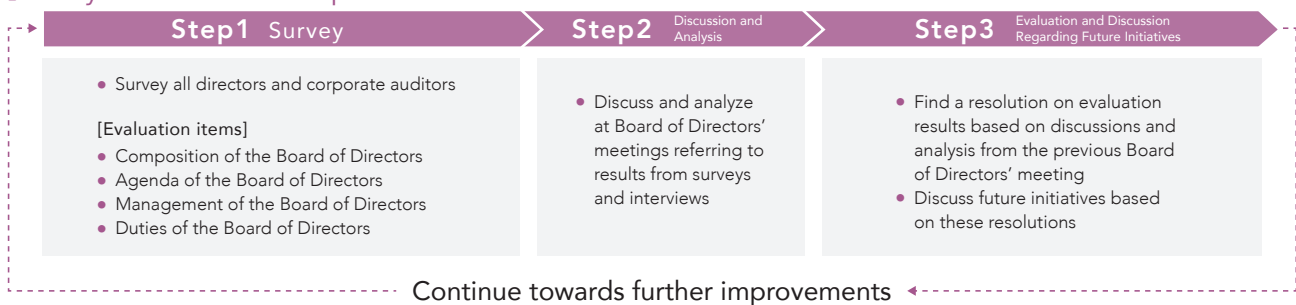
## Main Matters Discussed in the Auditor Meeting

Main matters discussed	<ul style="list-style-type: none"> <li>● Formulation of audit policies and audit plans</li> <li>● Preparation of audit reports</li> <li>● Evaluation of the accounting auditors and agreement on compensation</li> </ul>
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## Evaluating the Effectiveness of the Board of Directors

Once each year, the Company evaluates the effectiveness of its Board of Directors under the leadership of the outside directors and the president with the objectives of confirming whether the current situation is consistent with the ideal status of the Board and the roles it should fulfill, identifying areas for improvement, and further improving operation of the Board. For issues identified in the effectiveness evaluation, we consider and implement improvement measures, and verify the effectiveness during the following year's evaluation. The Company will continue to evaluate the effectiveness of the Board and strive to make further improvements in the future.

### Analysis and evaluation process



### FY2023 effectiveness evaluation results (Evaluation Period: January to December 2023)

Overall Evaluation	Main Opinions
The evaluations were positive for each item including the effectiveness of measures implement in the prior year, and we determined that overall effectiveness has been achieved.	There were opinions calling for further improvements in the deliberation system for important matters and the development of the next generation of human resources.
	Our Response
	We have decided to review the deliberation schedule of key meetings, including the Board of Directors, and to enhance the effectiveness of next-generation talent development by having HR officers from core subsidiaries attend the Nomination and Compensation Committee as needed, ensuring appropriate information sharing and progress monitoring of measures.

## Governance — Messages from Outside Directors

### Expecting faster reform for the future

Outside Director	Takayoshi Matsunaga
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#### I Steady progress through reform

In FY2023, the first year of the Sixth Mid-Term Management Plan, the Company achieved record highs in all profit stages, starting from revenue. Operating profit hovered around 20 billion yen until FY2021, but it rose to 31.5 billion yen in FY2022 and 41.6 billion yen in FY2023, showing steady growth at higher stages.

While the goals of the Second to Fourth Mid-Term Management Plans were not achieved, the Fifth Mid-Term Management Plan was completed amidst the chaos of the pandemic. The Sixth Mid-Term Management Plan's FY2025 goals were achieved early, in FY2023. I take this as a significant leap in the Company's earning power. During this period, business structure reforms or reform of internal systems such as restructuring of unprofitable businesses and the sale of business in China, led to improving management awareness.

In addition to establishing the research and development joint venture Honda-GS Yuasa EV Battery R&D Co., Ltd. with Honda, the Company decided with Honda and Blue Energy to build a new factory for lithium-ion batteries for BEVs in Moriyama City, Shiga Prefecture; these have been major successes among the preparations for the future.

#### I For sustainable improvement in corporate value

It is essential to further enhance the earning power of existing businesses to secure cash flow for proactive investments during the Sixth and Seventh Mid-Term Management Plan periods. The strong results in FY2023 were not by chance but reflect real capabilities, and I hope the Company will raise its sights and aim for higher goals from this elevated profit stage.

I encourage the Company to further enhance business operations focused on return on invested capital (ROIC), alongside improving business competitiveness in QCDS and strengthening comprehensive risk management, to actively drive corporate value improvement.

Strengthening overseas governance and human resources development, which I have been advocating for some time, remain ongoing challenges. Overseas businesses account for half of the Company's sales, but many are joint ventures, making management control difficult. To minimize risks and aim for further business expansion, it is necessary to establish and strengthen monitoring systems.

It is also essential to enhance the training, development, and promotion of local employees, as well as upgrade the skills of overseas executives. Management is about people, and human resources development is a pillar of management. It is important to build an integrated personnel system to develop and evaluate employees and executives, select human resources appropriately, rotate jobs including overseas assignments, and strategically nurture broad-minded individuals.

#### I Expecting further acceleration of transformation

Under former President Murao, the Company steadily progressed in its transformation. I expect President Abe, who has taken over the leadership, to accelerate management processes to keep up with partners and competitors in this rapidly changing business environment and to further promote transformation to resolve management issues. I am committed to fully supporting these efforts.



## Balancing existing businesses and growth businesses to achieve Vision 2035

Outside Director	Yoshiko Nonogaki
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### Driving both existing and growth businesses together

Addressing challenges like carbon neutrality and the creation of a sustainable society is the core mission of GS Yuasa's battery business. It is crucial to generate reliable profits from the automotive lithium-ion battery business, such as hybrid and plug-in hybrid batteries, and to carefully explain the growth story outlined in Vision 2035 in a way that shareholders can understand, while steadily advancing the development and production of lithium-ion batteries for BEVs.

The high-capacity, high-output BEV batteries, which are part of the collaboration with Honda aiming to achieve results, are also planned for expansion into ESS for renewable energy, presenting significant business opportunities. While there is great potential, this is also a large investment for the Company, requiring careful and meticulous progress. We have already spent considerable time discussing this at Board of Directors' meetings before making decisions, and we will continue to monitor progress and provide recommendations as needed. To advance investments in this area steadily, ROIC-based management to enhance the overall efficiency of the business portfolio is crucial.

The Company has a long history and solid foundation in automotive and industrial lead-acid batteries, and these areas maintain high capital efficiency. On the other hand, new businesses such as lithium-ion batteries for BEVs require large investments, and strategies focused on ROIC are necessary. In the future, setting the most appropriate indicators for management will be key, and ensuring that both existing and growth businesses are managed with suitable methods to drive sustainable corporate value is essential.

### Expecting faster business operations

The Board of Directors' operations are highly effective, which I give praise to. A key feature is that the president attends post-survey hearings and listens sincerely to difficult topics, working every year to improve the effectiveness of these evaluations.

However, as I mentioned last year, we need to further accelerate business activities in the face of trends like carbon neutrality, accelerated technological innovation, and rapidly changing competitive environments. President Abe, who has recently taken office, is aware of this issue, but the entire leadership team, not just the president, needs to embrace this transformation in mindset and integrate it into the company culture. I expect specific initiatives to be implemented on the ground to achieve faster business operations and strengthen earning power.

### Supporting the promotion of human capital management

Human capital is an area attracting considerable attention from shareholders and internal and external stakeholders. The Company's corporate culture, shaped by the nature of battery products, emphasizes quality assurance, giving an impression of practicality and honesty, but I also sense strong passion from employees to grow the business. Business challenges in new areas, including digital transformation (DX), are progressing. To further enhance their motivation and unleash their potential, we must foster a diverse next generation of talent that aligns with the management strategy.

Embracing diversity and incorporating different perspectives and experiences into management strengthens a company. The Company is gradually promoting the participation of women, with an increasing number of women in roles of General Managers, Managers, and Assistant Managers. I feel a personal responsibility to lead as a communicator, encouraging the development of women aiming for executive roles. I will continue to support efforts to improve corporate value including strengthening human capital.

# Governance — Messages from Outside Directors

## Supporting advanced management

Outside Director	Koji Nitto	Newly appointed
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### My mission as an outside director

In my previous career at OMRON Corporation, I held roles such as Senior General Manager of Global Strategy HQ and CFO. I believe the role of an outside director is to discuss matters with the executive side to provide insights and guide the Company in the right direction to maximize corporate value. By applying the knowledge I have gained, I hope to contribute to maximizing corporate value by analyzing the Company from various perspectives and offering recommendations.

I see the Company as having a long history and a high market share in areas like lead-acid batteries, creating a very serious and steady corporate culture. This culture is a strength, given the nature of storage batteries, which demand safety and reliability, and the Company's close ties to high-demand industries such as the automotive industry. However, I would like to ensure that the Company does not fall into the common pitfall of optimizing parts at the expense of overall cohesion.

### Toward maximizing corporate value

Profitability and growth expectations are key factors for evaluation by the stock market. In terms of profitability, the Company's ROE exceeds the listed company average of 9.7%, meeting market expectations in a numerical sense.

On the other hand, a PER of around 10x indicates that the market has not yet fully trusted the Company's growth potential, which is why the PBR remains around 1x. It is difficult to expect new investment as a value stock, so the focus will be on how to raise expectations as a growth stock, and whether the Company can become a leader as the industrial structure changes. Specifically, it is essential to clearly outline a scenario for transitioning from the lead-acid battery business to a lithium-ion battery business-centered structure, and to execute strategies steadily. The lithium-ion battery business, particularly for BEVs, faces considerable competition and requires significant investment. Therefore, to make the scenario convincing, managing the portfolio and operations to generate the necessary investment capital is crucial.

First, I intend to carefully observe the Company's business and financial situation, and apply my ROIC management experience to support advanced management.

### Unlocking the great potential

The Company has great potential for expanding profitability and growth, given its refined battery technology, talented personnel, and its strong lead-acid battery business, which generates stable cash. By pursuing overall optimization through lateral collaboration across the Company and optimizing the entire supply chain, I am looking forward to the Company strengthening its unity and maximizing its strengths.

I will provide my knowledge and cooperate to help realize the direction outlined in Vision 2035 and the Sixth Mid-Term Management Plan.

# Governance — Corporate Governance

## Remuneration of Directors

### Basic policy

To continuously enhance our corporate value and strengthen our corporate competitiveness, the remuneration of directors is ranked and structured in consideration of such factors as securing and retaining talented human resources and increasing their motivation to achieve better business performance.

### Determination process and composition of remuneration

The decision on a specific amount of remuneration for directors is delegated to the president by the Board of Directors and the president, upon receiving this delegation, decides the basic remuneration and bonus amounts for each director based on the recommendations of the Nomination and Compensation Committee and within the remuneration limit approved by the Shareholders' Meeting.

The Company also started investigations into linking evaluations of ESG indicators to remuneration systems.

#### (1) Directors

Remuneration consists of fixed basic remuneration, a short-term incentive in the form of a performance-linked annual bonus, and a medium- to long-term incentive in the form of performance-linked share remuneration. Basic remuneration is determined according to the director's position, considering the standards of other listed companies of similar business scale to the Company. Performance-linked remuneration consists of annual bonuses (short-term performance-linked remuneration) and share remuneration (mid- to long-term performance-linked remuneration). Share remuneration is provided through a performance-linked share remuneration plan, under which shares are granted based on the number of points accumulated upon the director's retirement.

#### (2) Corporate auditors

Corporate auditor remuneration is determined by discussion among the corporate auditors within the range of the amount approved by resolution at the first annual Shareholders' Meeting, which was held on June 29, 2005. In view of their role and independence, auditors receive only the fixed basic remuneration.

### Composition of GS Yuasa Corporation's Director Remuneration

Internal Directors	Basic remuneration 70%	Short-term performance-linked remuneration 15%	Mid- to long-term performance-linked remuneration 15%
Outside Directors and Corporate Auditors	Basic remuneration 100%		

Note: The figure is hypothetical with percentages calculated based on results for FY2023 and may change due to variations in consolidated performance and other factors.

### Evaluation Items Regarding Officer Remuneration for Directors

Basic remuneration	<ul style="list-style-type: none"> <li>Standard amount in accordance with the director's position, etc.</li> <li>Levels at listed companies with about the same business scale as the Company and other factors</li> </ul>
Short-term performance-linked remuneration	<ul style="list-style-type: none"> <li>Year-on-year improvement and achievement of targets in consolidated financial performance (net sales, profit attributable to owners of parent, ratio of profit attributable to owners of parent, ROIC)</li> <li>Achievement of individual targets, etc.</li> </ul>
Mid- to long-term performance-linked remuneration	<ul style="list-style-type: none"> <li>Fixed points granted each month according to positions, etc.*</li> <li>Performance-linked points that fluctuate in the range of 0% to 100% depending on the degree of achievement of performance targets Consolidated net sales / Operating profit ratio before amortization of goodwill, etc. / ROIC (return on invested capital), an evaluation of the efficiency of business activities</li> </ul>

\* The granting of fixed points was discontinued in July 2023.

### Total Remuneration Amounts and Directors

Category	Total amount of remuneration, etc. (millions of yen)	Total amount of remuneration, etc. by type (millions of yen)				Number of eligible persons
		Basic remuneration	Performance-linked remuneration		Non-monetary remuneration included in the remuneration to the left	
			Bonus	Share remuneration		
Directors (excluding outside directors)	207	160	29	16	16	4
Corporate auditors (excluding outside corporate auditors)	49	49	—	—	—	3 (including 1 retiree)
Outside directors	43	43	—	—	—	5 (3 current directors and 2 current corporate auditors)

Note: The above figures are the total amount of remuneration, etc. paid to directors by GS Yuasa Corporation and our subsidiaries.

## Governance — Corporate Governance

### Cross-Shareholdings

The Group believes that holding shares other than pure investments, which are expected to maintain medium- to long-term relationships with investees, expand transactions, and generate synergies, will contribute to the Company's sustainable growth through the smooth promotion of business activities and expansion of transactions, as well as contribute to the development of the local economy by maintaining and deepening good relationships with the local community. Therefore, the Group's policy is to hold in principle those shares for which the overall rationality of the holding, including economic rationality, can be confirmed, in addition to the

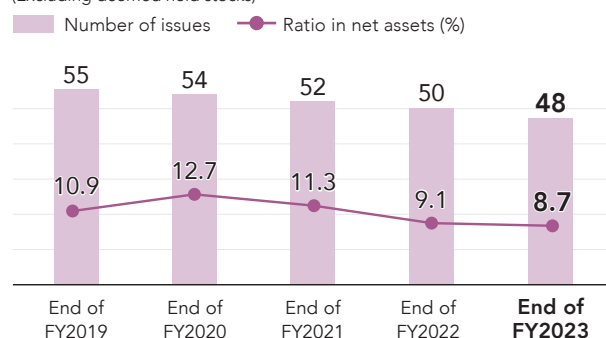
significance of such holdings. The Board of Directors of GS Yuasa Corporation annually verifies the rationality of each individual issue of specified investment shares held, focusing on the following points. In FY2023, the Company sold a portion of its cross-shareholdings in accordance with these policies.

Regarding the voting rights of shares held as cross-shareholdings, the Company exercises voting rights after comprehensively assessing the reasonableness of the proposals of the investment target company from the perspective of enhancing corporate value over the medium to long term.

Qualitative Information	<ul style="list-style-type: none"> <li>● Status of business relationship</li> <li>● Significance of holding other than business relationship</li> <li>● Possibility of future transactions and alliances</li> <li>● Risks of disposing of shares</li> </ul>
Quantitative Information	<ul style="list-style-type: none"> <li>● Most recent transaction volume and profit</li> <li>● Annual amount of dividends received, gains, or losses on valuation of shares</li> </ul>

Number of Cross-Shareholdings (Number of Different Stocks) and the Ratio in Net Assets

(Excluding deemed held stocks)



### Measures to Reinforce Overseas Governance

We are reinforcing collaboration with Group companies to ensure comprehensive control by the Company of the business management aspects of overseas Group companies and to prevent the occurrence of problems in the execution of business. Specifically, we are taking action to gain a timely understanding of conditions through briefing meetings with overseas sites and on-site observations of important sites.

### Working on Officer Training

Since FY2020, we have continuously conducted officer training sessions for all directors and corporate auditors, including outside directors and auditors, as well as all officers of GS Yuasa, the core business company, selecting beneficial themes to help them fulfill their expected roles and responsibilities



appropriately, while also deepening their understanding of the Company's issues and external environment.

Fiscal Year	Officer Training Topics
FY2024	<ul style="list-style-type: none"> <li>■ Roles and responsibilities of management in information security</li> <li>■ Action to implement management that is conscious of cost of capital and stock price</li> </ul>
FY2023	Trends concerning carbon neutrality and the storage battery business
FY2022	Purpose-driven management and implementation of sustainable management

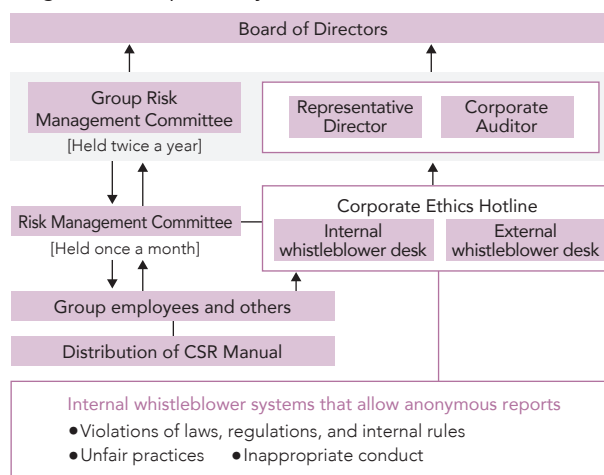


## Compliance

### Basic approach and promotion system

By training our personnel according to our philosophy of "Innovation and Growth" while manifesting our commitment to society and preserving the global environment, we are ensuring that all employees are guided in their behavior focusing on compliance with laws, company regulations, and ethical standards. The Compliance Declaration made by the president states that success must never be achieved through legal and moral infringements and that "establishing rules and structure" and "developing a strong sense of commitment to realize compliance" are essential to becoming a corporate leader in compliance. Based on these guidelines, multifaceted compliance promotion activities are developed at every employee level, and each employee is encouraged to incorporate self-directed and proactive actions to yield an effective improvement in compliance awareness.

Diagram of Compliance Systems



### Permeation of compliance awareness

The CSR Manual which delineates rules for adherence by every corporate Group member is distributed to all employees to facilitate permeation of compliance awareness in the Company. This manual clarifies the Group's CSR Policy. It outlines explicitly the behavioral standards that each employee must follow during business activities. In addition, the manual details how to use the internal whistleblower system, a mechanism that facilitates detection of compliance risks, and introduces an emergency contact system for use in a crisis to realize quick responses to compliance infringements.

### Sustainability workplace meetings

Workplace meetings on compliance were initiated in FY2012 as a means of allowing compliance awareness to permeate to each and every employee, and have been held for 12 consecutive years through FY2023. Since FY2018, the meetings were rebranded as "CSR Workplace Meetings," with topics related to CSR policies, and in FY2022, the name was changed to "Sustainability Workplace Meetings." In FY2023, the meetings were expanded to include all workplaces of GS Yuasa (378 worksites) as well as 21 domestic Group companies. The educational materials used in the meetings are prepared by the division in charge of each topic and include content tailored to the circumstances of the Group. We intend to continue holding these meetings while constantly upgrading the content.

Ratio of implementation of  
Sustainability Workplace Meetings (FY2023)

100%

Scope 378 GS Yuasa worksites and 21 domestic Group companies

#### Sustainability Workplace Meeting Themes (FY2023)

##### Required Themes (Implemented in all departments)

- Contributing to the SDGs through the realization of GS Yuasa Group's Vision
- Climate-related and biodiversity issues and responsibilities surrounding corporations
- Diversity (and the diversity in opinions)

##### Selection of Themes (Choose at Least One)

- Preventing intentional wrongdoing
- Handling confidential information
- Leaning the Subcontracting Act
- Personal information protection
- Security trade controls
- Harassment
- Management of working hours
- Safety and hygiene
- The manufacturing process and product safety
- Promotion of supply-chain CSR activities

# Governance — Corporate Governance

## Compliance

### Corporate ethics hotline

We formulated Corporate Ethics Hotline Regulations and set up a corporate ethics hotline. Accessible both internally and externally, the Corporate Ethics Hotline, an internal whistleblower system, enables employees of the Group and business partners to provide information by telephone, email, or in writing if they become aware of any violation of the law or company regulations, unethical or inappropriate conduct, or risk of such conduct by a Group employee, etc. Reports can be made anonymously. In addition, we ensure that information identifying whistleblowers is managed rigorously and that whistleblowers are protected so that they are not subject to disadvantageous treatment as a result of making a report. To promote awareness of the Corporate Ethics Hotline system among employees of the Company and domestic Group companies, we display posters at key locations in all offices and domestic Group companies.



Corporate Ethics Hotline poster internal bulletin

### Elimination of antisocial forces

The Group clearly disavows contact “with personnel or organizations of organized crime,” in its CSR Policy while its CSR Code of Conduct similarly stipulates “separation from organized crime,” stating a specific policy that, “we will not provide any form of benefit in excess of the normal shareholder’s right to any person or company associated with organized crime” and “we will cut off business or any other relationships with individuals and organizations having an indication of support for organized crime.” This policy and the Code of Conduct have been shared with all Group employees.

## Internal Control System

To strengthen its management foundations, the Group has improved systems and relevant rules for ensuring the maintenance of ethical business practices in accordance with the Companies Act. Such systems include mechanisms to ensure effective auditing, information management, and risk management throughout the Group. To comply with the internal control reporting system required under the Financial Instruments and Exchange Act, we are maintaining an internal control system and financial reporting mechanisms to meet all requirements. Our international subsidiaries and other consolidated Group companies evaluate the status of the improvement and implementation of internal controls. Following external audits, reports on these internal controls are publicly disclosed.

## Risk Management

📍 Risk Information P.98-99

### Basic approach

Risk management is essential for the lasting growth of a company. The GS Yuasa Group believes that the following two points are important as risk management so that crises stemming from the escalation of risks do not occur and exert a serious impact on the Group or on society.

- 1: Risk avoidance** (predicting and understanding risks and adopting appropriate preliminary measures, preventing the escalation of risks (outbreak of crises))
- 2: Risk reduction** (taking effective measures beforehand so that even if a crisis does occur, losses and other damage are kept to a minimum)

Based on this approach, the Group has formulated risk management rules that stipulate the responsibilities of employees and our risk management promotion setup.

### Group Risk Management Committee

The Group Risk Management Committee, headed by the president and consisting of the chairs of departmental Risk Management Committees among others, holds semiannual meetings to promote group-wide risk management and to encourage the sharing of key information related to risk management. In addition to making decisions on measures to promote risk management, the Risk Management Committee confirms that the appropriate risk management measures have been implemented, and the committee chairs report on progress in this area. We also actively exchange opinions and share information on the different styles of risk management and so on.

## Risk management activities

In accordance with our risk management rules, each department uses a risk management sheet and promotes risk management activities.

In the event of the occurrence of a critical incident, measures are taken for early resolution and normalization of operations and efforts are made to strengthen management by identifying root causes, implementing and expanding preventive measures, and confirming their status each month using a risk management sheet.

The risk management sheets produced by the departments are compiled at the divisional level, and the directors in charge of the divisions and corporate auditors verify and assess the status of response through the Risk Management Committee.

The deliberations by the committees are summarized and then fed back to each department and employee as required to enhance the effectiveness of risk management.

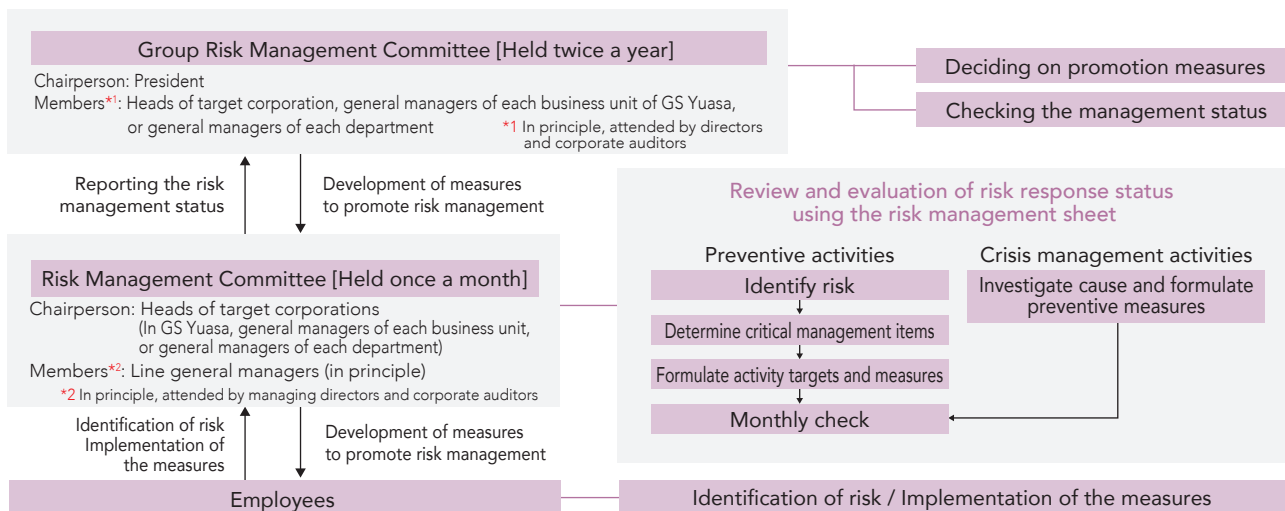
### Outline of risk management activities

<b>Step 1</b>	Identification of risks by departments and employees
<b>Step 2</b>	Determination of risks that need to be intensively managed through risk management activities and determination of preventive measures
<b>Step 3</b>	Monthly confirmation by each department of the status of implementation of related measures

## System for dealing with crises

To prepare for the possibility that a risk materializes, we have established a system that includes an emergency contact network to swiftly implement crisis management. If a serious crisis occurs, members from the Group Risk Management Committee will be appointed to organize a crisis management headquarters, under the president of the Company, to minimize corporate losses, and an effective response will be implemented swiftly and with appropriate care.

### Structure and Functions of Risk Management



## BCP Initiatives

Natural disasters, plant fires, and supply chain disruptions have occurred in recent years, and responding to risk has become critical as an aspect of corporate social responsibility. Accordingly, to promote BCP responses, in FY2021, the Group launched a BCP project led by the Environmental Management, Occupational Health & Safety Division with personnel from other divisions and set up a BCP system in FY2023. (BCP manual preparation, business impact analysis, and the creation of an employee safety confirmation system)

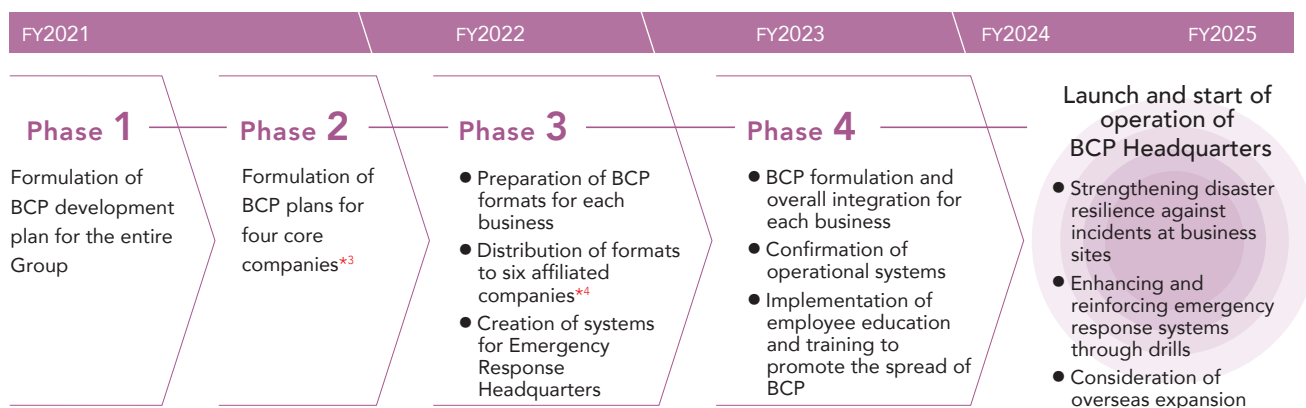
In April 2024, we established a Business Continuity Policy, and to ensure more effective activities, we launched quarterly BCP Promotion Meetings (with Group-wide participation). In June of the same year, we distributed Survival Cards (emergency response guidelines during disasters), summarizing safety and disaster response information to all employees to promote BCP awareness internally. In November, we plan to conduct an Emergency Response Headquarters drill to prepare for quick response in emergencies. Going forward, we plan to implement full-scale BCP operations through the BCP Promotion Meetings and conduct internal education and training for deeper BCP integration, advancing the BCP system across the entire Group.

See here for more details on our Business Continuity Policy ► [https://www.gs-yuasa.com/en/company/pdf/business\\_continuity\\_policy\\_en.pdf](https://www.gs-yuasa.com/en/company/pdf/business_continuity_policy_en.pdf)

# Governance — Corporate Governance

## BCP Initiatives

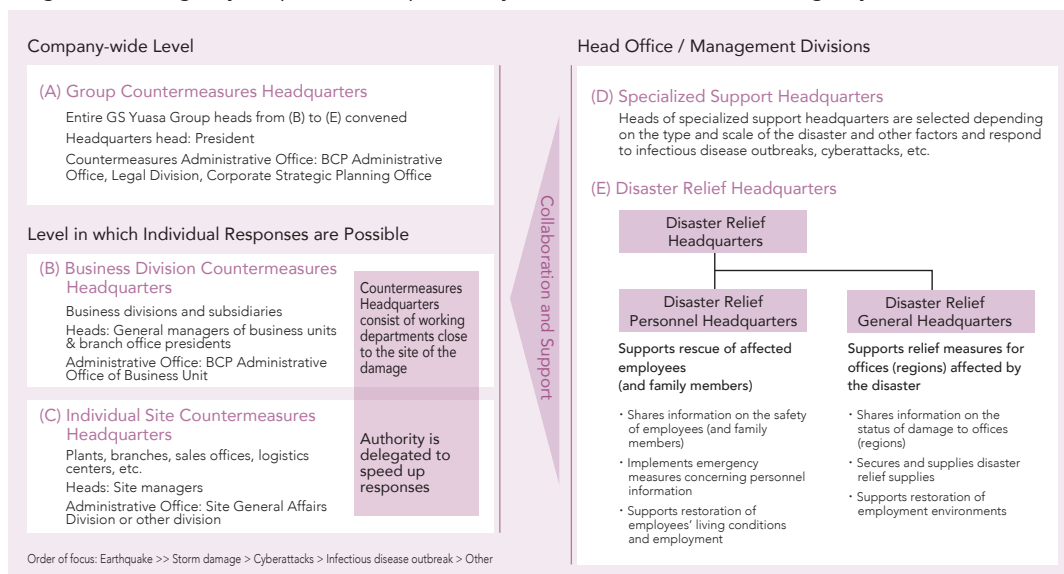
BCP project activity roadmap (conceptual)



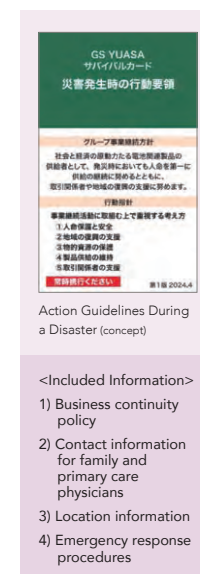
\*3 GS Yuasa International Ltd. / Blue Energy Co., Ltd. / Lithium Energy Japan / GS Yuasa Technology Ltd.

\*4 GS Yuasa Ibaraki Co., Ltd. / GS Yuasa Iwaki Co., Ltd. / GS Yuasa Chemical Co., Ltd. / GS Yuasa Moldings Co., Ltd. / GS Yuasa Energy Co., Ltd. / GS Yuasa Azumino Co., Ltd.

## Diagram of Emergency Response Headquarters Systems in the Event of an Emergency



## Survival Cards



## Information Security

The Group places importance on efforts to ensure information security. In addition to preventing malware infection of endpoints including PCs, we are strengthening our countermeasures by introducing tools that can quickly detect and respond if infection or intrusion is allowed to occur. In addition, through the regular monitoring of communications by an outside security service, the introduction of an illegal connection detection system and other measures, we endeavor to prevent illegal access to our in-house network and forestall damage.

We established Information Security Management Rules applicable to the entire Group and promote awareness-raising activities so that our employees follow our Procedures for the Management of Information System Usage. To prevent the outflow of confidential information, we conduct the encryption of personal computer data taken outside the company, the distribution of an information security handbook, the implementation of e-learning, distribution of email newsletters on information security, and so on. Furthermore,

based on domestic security standards, we conduct surveys of security measures in overseas Group companies and give guidance to address vulnerabilities.

#### Internal Initiatives Relating to Information Security (FY2023)

	Details	Number of times implemented		Details	Number of times implemented
Education and training	e-learning	1 time	Awareness-raising activities	Distribution of columns on information security in internal reports	4 times
	Targeted attack email training (implemented only in some divisions)	1 time		Distribution of awareness-raising information in email newsletters	12 times

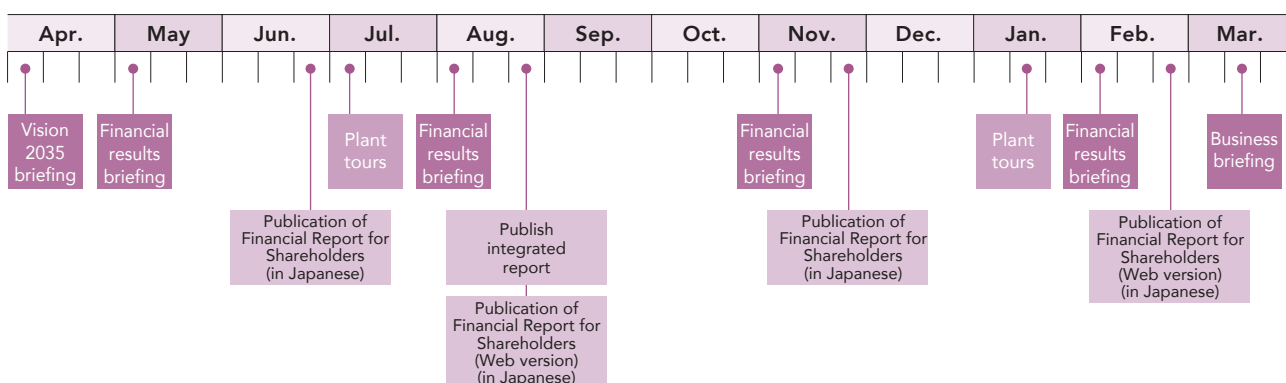
## Communication with Stakeholders

We endeavor to communicate with shareholders, investors, and other stakeholders through various channels.

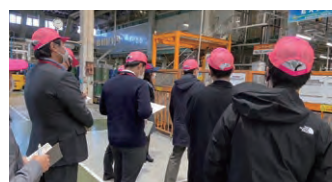
As investor relations activities, in addition to quarterly financial results briefings for institutional investors and analysts, we regularly participate in conferences sponsored by securities companies, individual meetings, briefings for individual investors, and other events. We also actively hold events such as study meetings, briefings, and plant tours to deepen understanding of our business. Furthermore, we make use of investor relations websites to actively transmit information in a timely manner. Opinions gathered through IR activities are regularly shared with the management team, reported to the Board of Directors biannually, and reported at the Executive Briefing quarterly, with efforts made to reflect these in management and business activities.

As a means of disseminating information internally, we provide video presentations of financial results by the director responsible for investor relations to managers on a half-year basis, distribute financial results in internal reports, regularly publish an investor relations column on the PR portal site, and implement in-house training programs to disseminate investor relations information.

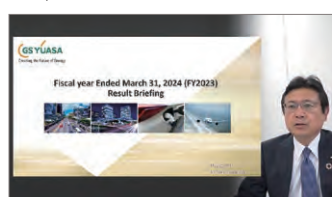
#### Record of Main IR activities (FY2023)



Activity content		Frequency
Individual meetings	Japan	200
	Overseas	57
	Total	257
Overseas roadshows		31(conducted online)
Conferences		2 times
Small meetings		4 times
Plant tours		2 times
Long-term vision and Mid-Term Management Plan briefing		1 time
Business briefing		1 time



At a plant tour for individual investors and analysts



Video of financial results briefing



Investor relations website



# Governance — Directors and Auditors (As of June 29, 2024)



## Directors

### 01 Osamu Murao Chairman

Apr. 1982 Joined Japan Storage Battery Co., Ltd. (currently GS Yuasa International Ltd.)  
Apr. 2010 General Manager, Industrial Battery Production Division, Industrial Batteries & Power Supplies Business Unit, GS Yuasa International Ltd.  
Jun. 2011 Officer, GS Yuasa International Ltd.  
Jun. 2012 Director of the Company  
Director, GS Yuasa International Ltd.  
Director, GS Yuasa Technology Ltd.  
Jun. 2015 President of the Company  
Chief Executive Officer (CEO) of the Company  
President, GS Yuasa International Ltd.  
Jun. 2024 Chairman of the Company (current position)  
Chairman, GS Yuasa International Ltd. (current position)

### 02 Takashi Abe President and Representative Director

Apr. 1989 Joined Japan Storage Battery Co., Ltd. (currently GS Yuasa International Ltd.)  
Mar. 2003 President, GS Battery U.S.A. Inc.  
Apr. 2010 General Manager, Corporate Strategic Planning Office, GS Yuasa International Ltd.  
Jun. 2016 Corporate Officer, GS Yuasa International Ltd.  
Oct. 2016 Director and Vice President, GS Yuasa Energy Co., Ltd.  
Apr. 2018 Deputy Business Unit Manager of Industrial Batteries and Power Supplies Unit, GS Yuasa International Ltd.  
Division Manager of Overseas Sales Division, Industrial Batteries and Power Supplies Unit, GS Yuasa International Ltd.  
Apr. 2022 Director of GS Yuasa International Ltd.  
Division Manager of Power Supply System Sales Division, Industrial Batteries and Power Supplies Unit, GS Yuasa International Ltd.  
Apr. 2023 Business Unit Manager of Automotive Batteries Business Unit, GS Yuasa International Ltd.  
Jun. 2024 President of the Company (current position)  
Chief Executive Officer (CEO) of the Company (current position)  
President, GS Yuasa International Ltd. (current position)

### 03 Masahiro Shibutani Vice President and Representative Director

Apr. 1984 Joined Yuasa Battery Co., Ltd. (currently GS Yuasa International Ltd.)  
Jan. 2006 General Manager, Finance and Accounting Division of the Company  
Apr. 2007 Director, GS Yuasa Accounting Service Ltd. (currently GS Yuasa International Ltd.)  
Apr. 2010 President, Yuasa Business (Tianjin) Co. Ltd.  
Apr. 2012 General Manager, Corporate Office of the Company  
General Manager, Internal Control Office of the Company  
Jun. 2014 Officer, GS Yuasa International Ltd.  
Corporate Auditor, GS Yuasa Battery Ltd.  
Jun. 2016 Corporate Officer, GS Yuasa International Ltd.  
Deputy Business Unit Manager of Automotive Battery Business Unit, GS Yuasa International Ltd.  
Jun. 2019 Senior Officer, GS Yuasa International Ltd.  
Division Manager of Planning Division, Automotive Battery Business Unit, GS Yuasa International Ltd.  
Apr. 2020 Director, GS Yuasa International Ltd.  
Business Unit Manager of Automotive Battery Business Unit, GS Yuasa International Ltd.  
Apr. 2021 Managing Director, GS Yuasa International Ltd.  
Jun. 2021 Managing Director of the Company  
Jun. 2022 Senior Managing Director of the Company  
Senior Managing Director, GS Yuasa International Ltd.  
Jun. 2023 Vice President of the Company (current position)  
Vice President, GS Yuasa International Ltd. (current position)

### 04 Hiroaki Matsushima Director and CFO

Apr. 1989 Joined Yuasa Battery Co., Ltd. (currently GS Yuasa International Ltd.)  
Apr. 2015 General Manager, Corporate Office of the Company  
Jun. 2016 General Manager, Finance and Accounting Division, GS Yuasa International Ltd. (current position)  
Director, GS Yuasa Accounting Service Ltd. (currently GS Yuasa International Ltd.)  
Corporate Auditor, GS Yuasa Fieldings Ltd.  
Jun. 2017 Officer, GS Yuasa International Ltd.  
Jun. 2018 President, GS Yuasa Accounting Service Ltd. (currently GS Yuasa International Ltd.)  
Apr. 2020 Head of Corporate Office of the Company (current position)  
Apr. 2021 Director, GS Yuasa International Ltd. (current position)  
Jun. 2022 Director of the Company (current position)  
Chief Financial Officer (CFO) of the Company (current position)

### 05 Takayoshi Matsunaga Outside Director

Apr. 1975 Joined Sekisui Chemical Co., Ltd.  
Jun. 2002 Director and Senior Vice President of High Performance Plastics Company, Sekisui Chemical Co., Ltd.  
Apr. 2004 Director responsible for IT-Related Business Unit, High Performance Plastics Company, Sekisui Chemical Co., Ltd.  
Jun. 2004 Managing Director responsible for IT Business Unit, High Performance Plastics Company, Sekisui Chemical Co., Ltd.  
Apr. 2005 Senior Managing Director and President of High Performance Plastics Company, Sekisui Chemical Co., Ltd.  
Apr. 2008 Senior Managing Director, Senior Managing Officer, and President of High Performance Plastics Company, Sekisui Chemical Co., Ltd.  
Jun. 2008 Director, Senior Managing Officer and President of High Performance Plastics Company, Sekisui Chemical Co., Ltd.  
Mar. 2014 Director responsible for matters designated by the president, Sekisui Chemical Co., Ltd.  
Jun. 2014 Audit & Supervisory Board Member, Sekisui Chemical Co., Ltd.  
Jun. 2018 Outside Audit & Supervisory Board Member, Sekisui Jushi Corporation  
Jun. 2018 Outside Director of the Company (current position)

### 06 Yoshiko Nonogaki Outside Director

Apr. 1980 Joined Sony Corporation (currently Sony Group Corporation)  
Sep. 1992 President and Representative Director, Sony Poland  
Jul. 1994 General Manager of Sales and Marketing Department, Recording Media and Energy Company, Sony Corporation (currently Sony Group Corporation)  
Apr. 1999 General Manager of Planning and Marketing Department, Personal IT Network Company, Sony Corporation  
Apr. 2006 General Manager of Business Planning Department, Business and Professional Solution Group, Sony Corporation  
Apr. 2009 Senior General Manager of Planning and Marketing Division, Business and Professional Solution Group, Sony Corporation  
Apr. 2013 Director of Global Diversity, Personnel HQ, Sony Corporation  
Jun. 2015 Outside Director, Jolly-Pasta Co., Ltd.  
Jun. 2019 Outside Director, Nifco Inc. (current position)  
Jun. 2020 Outside Director of the Company (current position)  
Jun. 2021 Outside Director, SATO Holdings Corporation (current position)



## 07 Koji Nitto

Outside Director

- Apr. 1983 Joined OMRON TATEISI ELECTRONICS CO. (currently OMRON Corporation)
- Mar. 2011 Senior General Manager of Global Resource Management HQ of OMRON Corporation
- Jun. 2011 Executive Officer, OMRON Corporation
- Mar. 2013 Senior General Manager of Global SCM and IT Innovation HQ, OMRON Corporation
- Apr. 2013 Managing Executive Officer, OMRON Corporation
- Mar. 2014 Senior General Manager of Global Strategy HQ, OMRON Corporation
- Apr. 2014 Senior Managing Executive Officer, OMRON Corporation
- Jun. 2014 Director and Senior Managing Executive Officer, OMRON Corporation
- Apr. 2017 Director, Senior Managing Executive Officer and Chief Financial Officer (CFO), OMRON Corporation
- Jun. 2023 Outside Director, Wacoal Holdings Corporation (current position)
- Jun. 2024 Outside Director, T&D Holdings Inc. (current position)
- Outside Director of the Company (current position)

- Apr. 2018 General Manager of Technical Strategic Planning Office, Global Technical Center, GS Yuasa International Ltd.
- Jun. 2019 Director, GS Yuasa International Ltd.
- Deputy Business Unit Manager of Automotive Battery Business Unit, GS Yuasa International Ltd.
- Jun. 2023 Full-time Corporate Auditor of the Company (current position)
- Full-time Corporate Auditor, GS Yuasa International Ltd. (current position)
- Corporate Auditor, Lithium Energy Japan (current position)
- Corporate Auditor, Blue Energy Co., Ltd. (current position)
- Corporate Auditor, GS Yuasa Fieldings Ltd. (current position)
- Corporate Auditor, Honda · GS Yuasa EV Battery R&D Co., Ltd. (current position)

## 09 Yoshiyuki Sanada

Corporate Auditor (Full-time)

- Apr. 1985 Joined Japan Storage Battery Co., Ltd. (currently GS Yuasa International Ltd.)
- Jun. 2004 Director, GS Yuasa Accounting Service Ltd. (currently GS Yuasa International Ltd.)
- Oct. 2005 Director, GS Yuasa Business Support Ltd. (currently GS Yuasa International Ltd.)
- Jun. 2006 General Manager, Finance and Accounting Division of the Company
- Oct. 2008 General Manager, Internal Control Office of the Company
- Apr. 2010 General Manager of Corporate Office of the Company
- Mar. 2011 Director of Lithium Energy Japan
- Apr. 2012 General Manager of Business Planning Department, Automotive Battery Business Unit of GS Yuasa International Ltd.
- General Manager of Technical Strategic Planning Office, Global Technical Headquarters of GS Yuasa International Ltd.
- Jul. 2014 General Manager of Corporate Office of the Company
- General Manager of Corporate Strategic Planning Office of GS Yuasa International Ltd.
- Jun. 2016 Officer of the Company
- Apr. 2020 Manager of the Secretarial Office of the Company
- Jun. 2024 Full-time Corporate Auditor of the Company (current position)
- Full-time Corporate Auditor, GS Yuasa International Ltd. (current position)
- Corporate Auditor, GS Yuasa Technology Ltd. (current position)
- Corporate Auditor, GS Yuasa Battery Ltd. (current position)
- Corporate Auditor, GS Yuasa Energy Co., Ltd. (current position)

## 10 Tsukasa Fujii

Outside Corporate Auditor (Part-time)

- Apr. 1986 Registered as an attorney at law; Joined Keiichi Uehara Law Office
- Apr. 1991 Established Tatsuno, Ozaki & Fujii Law Office, Partner Attorney of the office (current position)
- Apr. 2007 Part-time lecturer of Kansai Gakuin University Law School
- Sep. 2014 Chairman of Hirakata City Building Examination Committee (current position)
- Jan. 2017 Member of Committee of Experts of Osaka District Court (related to non-contentious landlord-tenant matters; current position)
- Jun. 2017 Corporate Auditor of the Company (current position)
- Apr. 2020 Director, Osaka Bar Association
- Jun. 2022 Outside Corporate Auditor, Teijin Frontier Co., Ltd.

## 11 Akira Tsujiuchi

Outside Corporate Auditor (Part-time)

- Feb. 1978 Joined Tohmatsu Aoki & Co. (currently Deloitte Touche Tohmatsu LLC)
- Mar. 1982 Registered as a certified public accountant
- Jun. 1998 Partner, Tohmatsu & Co. (currently Deloitte Touche Tohmatsu LLC)
- Jun. 2019 Outside Director (Audit & Supervisory Committee Member), Estic Corporation
- Jul. 2019 Head of Tsujiuchi Accounting Office (current position)
- Jan. 2020 Outside Director, Gakujo Co., Ltd. (current position)
- Jun. 2020 Outside Corporate Auditor, Sekisui Jushi Corporation (current position)
- Jun. 2021 Corporate Auditor of the Company (current position)
- Jun. 2022 Director, The Japanese Institute of Certified Public Accountants Kinki Chapter (current position)

## Corporate Auditors

### 08 Masaya Nakagawa

Corporate Auditor (Full-time)

- Apr. 1987 Joined Japan Storage Battery Co., Ltd. (currently GS Yuasa International Ltd.)
- Jul. 2008 President of GS Battery Vietnam Co., Ltd.
- Apr. 2015 Deputy Division Manager of Planning Division, International Business Unit of GS Yuasa International Ltd.
- General Manager of Technical Strategic Planning Office, Global Technical Headquarters, GS Yuasa International Ltd.
- Aug. 2015 Division Manager of Planning Division, International Business Unit, GS Yuasa International Ltd.
- General Manager of Strategy Planning Department, Planning Division, International Business Unit, GS Yuasa International Ltd.
- Jun. 2016 Officer, GS Yuasa International Ltd.
- General Manager of Quality Management Department, Business Development Division, International Business Unit, GS Yuasa International Ltd.
- Apr. 2017 Division Manager of Planning Division, Automotive Battery Business Unit, GS Yuasa International Ltd.
- General Manager of Strategy Planning Department, Planning Division, Automotive Battery Business Unit, GS Yuasa International Ltd.



# Risk Information

Our Group identifies various risks related to business and their importance, continuing steady and proactive management with a medium- to long-term perspective.

● Risk Management P.92–93

Mega trend toward 2050		Impact on the Company
<p>Economic and social transformation due to resource and environmental constraints</p> <p>Transition to a digital economy through the Fourth Industrial Revolution</p> <p>Increased importance of resilience</p> <p>Slowdown in global population growth rate</p> <p>Rising geopolitical risks</p>	Raw material markets fluctuations	The fluctuation in lead market prices may not immediately reflect in product prices, affecting performance.
	Intensification of price competition	If the competitive environment intensifies with domestic competitors and low-cost overseas suppliers, profitability may decline, causing asset impairment risk that affects performance.
	Exchange rate fluctuations	<ul style="list-style-type: none"> <li>• Sales, costs, and assets in each region, such as Japan, Asia, North America, and Europe, are denominated in local currencies and converted to yen for consolidated financial statements. Exchange rates may affect the conversion value.</li> <li>• If the currency value in regions where our Group operates increases, production and procurement costs will rise, and long-term currency fluctuations could impact planned procurement, manufacturing, distribution, and sales activities and affect performance.</li> </ul>
	Risks related to international activities and overseas expansion	<ol style="list-style-type: none"> <li>1) Unforeseen changes to laws or regulations</li> <li>2) Difficulty in hiring and keeping human resources</li> <li>3) The possibility that inadequate technology infrastructure will affect Group manufacturing and other activities, or lower the reputation of our products among customers</li> <li>4) Social disturbances caused by terrorism or war</li> </ol>
	M&A	Significant changes in the business environment mean that the acquired business does not proceed as initially planned and investment funds cannot be recovered, or if goodwill impairment losses occur, they will impact performance.
	Climate change	If extremely challenging situations arise in adapting to environmental regulations or unforeseen events occur, this could lead to higher-than-expected environmental response costs, facility damage from natural disasters like wind and flood damage, and restrictions on business activities, which could impact performance.
	Disasters and accidents	It poses a risk if unexpected events occur, such as natural disasters (earthquakes, wind and flood damage, heavy snow, etc.) or accidents like fires, explosions, and damage at our Group's business sites.
	Interest rate fluctuations	Rising interest rates increasing financing costs
	Lawsuits and other legal proceedings	There is a risk that business partners or third parties could initiate lawsuits or other legal actions or that regulatory authorities could take legal action as part of conducting business.
	Economic conditions	An economic downturn in major markets such as Japan, Asia, North America, and Europe and the resulting decline in demand could impact performance.
	Market environment	If the Turkish lira continues to depreciate due to ongoing inflation in the Republic of Turkey, a significant foreign exchange loss could occur, potentially impacting financial performance.
	Supply chains	If supply chains are disrupted in each country and region, it could delay the procurement of components or sales, impacting performance.
	Information security	If information is leaked due to improper handling of information equipment or if information is leaked or tampered with due to cyber-attacks from outside, it could lead to a suspension of business activities.
	Product quality	If defects occur in our Group's products or services, our Group could be liable for damages caused by the defects, and substantial countermeasure costs could arise.
	Development and production of batteries for BEVs	There is no guarantee of mass production beginning in FY2027, and it could be influenced by trends in the BEV market and the competitive landscape, affecting our Group's financial condition and performance.

(Likelihood of occurrence of risks)

◎: At any time in the next fiscal term   ○: Some possibility of occurrence in the next fiscal term   △: Awareness of the likelihood of occurrence is necessary

Likelihood of occurrence of risks	Countermeasures	Related initiatives
◎	<ul style="list-style-type: none"> <li>Optimization of the overall production system aimed at cost reduction</li> <li>Establishment of an optimal supply system</li> </ul>	Message from the President <a href="#">P.06-11</a> Message from the CFO <a href="#">P.30-33</a> Business Outlook <a href="#">P.42-55</a>
◎	<ul style="list-style-type: none"> <li>Cost reduction and strengthening of sales power</li> </ul>	
◎	<ul style="list-style-type: none"> <li>Implementation of currency hedging transactions</li> </ul>	
○	<ul style="list-style-type: none"> <li>Strengthening collaboration within the Group to build a system for timely supply of products and services that meet global needs</li> </ul>	Business Outlook <a href="#">P.42-55</a>
△	<ul style="list-style-type: none"> <li>Monthly performance monitoring</li> </ul>	Message from the CFO <a href="#">P.30-33</a>
It is difficult to make a complete forecast	<ul style="list-style-type: none"> <li>Reducing CO<sub>2</sub> emissions by promoting the use of renewable energy with storage battery technology</li> <li>Promotion of climate-related information disclosure, such as TCFD</li> </ul>	Response to Climate Change (TCFD) <a href="#">P.66-69</a> Governance (BCP Initiatives) <a href="#">P.93-94</a>
◎	<ul style="list-style-type: none"> <li>Formulation of manuals for responding to earthquakes, water disasters, and heavy snow</li> <li>Thorough fire management and disaster management</li> <li>Strengthening BCP (Business Continuity Plan)</li> </ul>	Governance (BCP Initiatives) <a href="#">P.93-94</a>
○	<ul style="list-style-type: none"> <li>Interest-bearing debt is expected to increase for growth investment enhancement. However, efforts are made to balance growth and financial discipline by keeping the debt repayment period within three years.</li> </ul>	Message from the CFO <a href="#">P.30-33</a> Sixth Mid-Term Management Plan (FY2023-2025) <a href="#">P.36-39</a>
○	<ul style="list-style-type: none"> <li>Continuously conducting surveys on the rights and patents of other companies</li> <li>Strengthening information sharing within the Company</li> </ul>	Intellectual Property <a href="#">P.58-59</a>
○	<ul style="list-style-type: none"> <li>Conducting business operations based on a quality-focused basic stance</li> <li>Building a business foundation for enhancing corporate value and sustainable growth in the future under the corporate philosophy of "Innovation and Growth."</li> </ul>	GS Yuasa's DNA <a href="#">P.12-13</a> Value Creation Process <a href="#">P.18-19</a> Business Overview and Market Environment Social (Provision of High-quality Products) <a href="#">P.40-41</a> <a href="#">P.80</a>
○	<ul style="list-style-type: none"> <li>Strengthening information sharing between headquarters and each site</li> </ul>	Business Outlook and Market Environment <a href="#">P.40-41</a> Business Outlook <a href="#">P.42-55</a>
◎	<ul style="list-style-type: none"> <li>Strengthening communication between headquarters and each site</li> <li>Optimizing the overall production system</li> <li>Establishment of an optimal supply system</li> </ul>	Business Outlook <a href="#">P.42-55</a> Social (Responsible Procurement Promotion) <a href="#">P.81</a>
◎	<ul style="list-style-type: none"> <li>Prevention of malware infection at endpoints</li> <li>Building an information security system capable of quickly detecting and responding to incidents</li> <li>Constant monitoring of communications</li> <li>Prevention of unauthorized access through an unauthorized connection detection system</li> <li>Conducting awareness and education activities to encourage employees to comply with internal regulations</li> <li>For overseas Group companies, survey and guide based on domestic standards for security measures</li> </ul>	Governance (Information Security) <a href="#">P.94-95</a>
○	<ul style="list-style-type: none"> <li>Establishing the GS Yuasa Quality Management System based on ISO 9001, promoting a cross-functional quality management system led by top management</li> </ul>	Social (Provision of High-quality Products) <a href="#">P.80</a>
○	<ul style="list-style-type: none"> <li>Promoting the development of competitive lithium-ion batteries for BEVs by leveraging the knowledge cultivated with lithium-ion batteries for HEVs, PHEVs, and EVs at Honda GS Yuasa EV Battery R&amp;D Co., Ltd</li> <li>Aiming for early production line operation and expansion of production capacity for BEV batteries by utilizing joint investment by our Group and Honda Motor Co., Ltd. and government subsidies</li> </ul>	Vision 2035 <a href="#">P.20-25</a> Automotive Lithium-ion Batteries <a href="#">P.50-53</a>

# 11-Year Key Consolidated Financial Data

Notes: 1. Operating profit ratio, ROE, and total payout ratio are calculated as follows: Operating profit / Total assets.  
 2. The Company implemented a five-to-one share split in FY2017.  
 3. The "automotive batteries (overseas)" segment operating profit for FY2017 are indicated for the "automotive batteries (overseas)" segment.  
 4. Some consolidated subsidiaries in the "automotive batteries (overseas)" segment are modified segments.  
 5. ROIC is calculated as follows: Operating profit / Invested capital.  
 6. Some consolidated subsidiaries in the "industrial batteries and power supplies" segment are modified segments.

(Millions of yen)	FY2013 (Year ended March 31, 2014)	FY2014 (Year ended March 31, 2015)	FY2015 (Year ended March 31, 2016)	FY2016 (Year ended March 31, 2017)
<b>For the fiscal year information</b>				
Net sales	¥ 347,995	¥ 369,760	¥ 365,610	¥ 359,605
Automotive batteries (Japan)	56,905	51,747	50,986	67,598
Automotive batteries (Overseas)	164,252	183,759	191,402	170,613
Industrial batteries and power supplies	79,242	79,822	74,804	72,765
Automotive lithium-ion batteries	32,501	45,181	38,312	39,305
Specialized batteries and others	15,094	9,248	10,104	9,323
Operating profit	18,197	20,914	21,909	23,106
Operating profit before amortization of goodwill	—	—	—	24,185
Automotive batteries (Japan)	3,310	2,397	3,291	5,676
Automotive batteries (Overseas)	8,996	10,786	11,358	10,460
Industrial batteries and power supplies	12,199	8,657	8,061	8,701
Automotive lithium-ion batteries	(7,243)	(2,626)	(565)	45
Specialized batteries and others	936	1,698	(235)	(699)
Ordinary profit	20,333	22,357	21,416	22,545
Profit attributable to owners of parent	9,982	10,043	9,030	12,229
Profit attributable to owners of parent before amortization of goodwill	—	—	—	13,699
Capital investment	18,570	11,008	12,955	19,909
Depreciation expenses	12,939	15,715	15,309	15,241
Research and development expenses	6,495	6,725	6,996	9,533
Cash flows from operating activities	19,704	19,729	30,215	34,846
Cash flows from investing activities	(9,786)	(14,519)	(17,311)	(32,912)
Free cash flow	9,918	5,210	12,904	1,934
Cash flows from financing activities	589	(5,798)	(9,685)	(3,715)
<b>At year-end information</b>				
Total assets	¥ 340,462	¥ 359,522	¥ 346,523	¥ 370,508
Cash and cash equivalents	23,392	25,708	27,788	24,673
Total net assets	154,702	182,187	177,790	188,155
Total debt	80,134	82,166	73,608	74,257
Total equity before noncontrolling interests	139,454	161,386	153,723	161,722
Number of employees	13,609	14,506	14,415	14,710
<b>Per share data</b>				
Basic earnings per share (yen)	¥ 120.91	¥ 121.66	¥ 109.39	¥ 148.14
Net assets per share (yen)	1,689.12	1,954.89	1,862.16	1,959.14
Cash dividends per share applicable to the year (yen)	40	50	50	50
<b>Financial indices</b>				
Operating profit ratio (%)	5.2	5.7	6.0	6.7
ROE (Return on Equity) (%)	7.5	6.7	5.7	8.7
ROIC (Return on Invested Capital) (%)	8.7	9.3	9.8	11.1
Equity ratio (%)	41.0	44.9	44.4	43.6
Ratio of interest-bearing debt to cash flow (years)	4.2	4.3	2.5	2.2
Treasury shares purchase amount (purchase amount for next fiscal year) (100 million yen)	—	—	—	10.0
Total payout ratio (%)	33.1	41.1	45.7	37.4
Overseas sales ratio (%)	48.5	52.4	55.5	51.1

▶ Please refer to our "Annual Securities Report" for our financial information.  
[https://ir.gs-yuasa.com/en/ir/news/news823944813813333366/main/0/link/yo\\_ho\\_e\\_2024.pdf](https://ir.gs-yuasa.com/en/ir/news/news823944813813333366/main/0/link/yo_ho_e_2024.pdf)



but ratio refer to profit before amortization of goodwill (operating profit and profit) after FY2016.

consolidation of ordinary shares on October 1, 2018, and consequently, per-share indicators from prior to the consolidation have been calculated as if the share consolidation were implemented.

ment previously included a portion of transaction amounts for industrial batteries handled overseas, but as of FY2018, the segment was changed to "industrial batteries and power supplies." Net sales and or the reporting segments after the change.

tomotive batteries (overseas)" segment were transferred to the "industrial batteries and power supplies" segment in FY2019. In conjunction with this change, figures for FY2018 were restated according to the

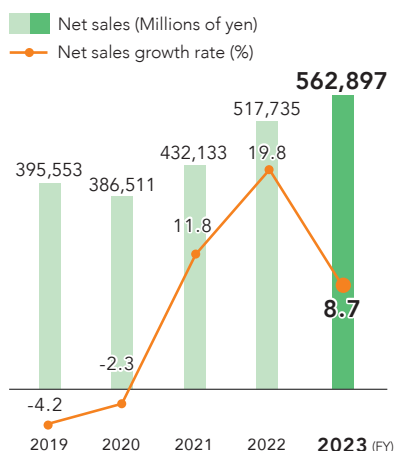
profit before amortization of goodwill / Invested capital (fixed assets [excl. goodwill amortization] + working capital). Invested capital is the average of amount at beginning and end of term.

Industrial Batteries and Power Supplies" segment were transferred to the "Specialized Batteries and Others" segment from FY2023. In conjunction with this change, figures for FY2022 were restated according to the

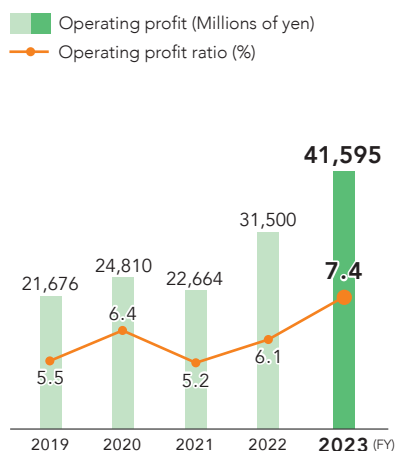
	FY2017 (Year ended March 31, 2018)	FY2018 (Year ended March 31, 2019)	FY2019 (Year ended March 31, 2020)	FY2020 (Year ended March 31, 2021)	FY2021 (Year ended March 31, 2022)	FY2022 (Year ended March 31, 2023)	FY2023 (Year ended March 31, 2024)
	¥ 410,951	¥ 413,089	¥ 395,553	¥ 386,511	¥ 432,133	¥ 517,735	¥ 562,897
	89,240	91,460	88,059	83,639	81,494	87,802	94,047
	185,574	177,052	162,138	165,296	186,743	247,329	252,863
	74,237	80,042	84,566	84,037	99,465	97,611	109,668
	44,784	45,585	42,264	35,950	47,637	65,355	84,787
	17,113	18,947	18,525	17,587	16,791	19,636	21,531
	21,920	22,654	21,676	24,810	22,664	31,500	41,595
	24,076	25,066	23,935	27,069	23,853	32,074	42,229
	6,143	7,766	6,976	8,669	5,878	6,547	8,071
	8,960	9,926	9,187	12,225	9,965	13,345	15,119
	7,364	7,827	9,157	6,890	5,775	8,549	13,182
	1,320	300	(1,708)	(852)	1,654	1,986	2,649
	287	(754)	322	136	579	1,646	3,207
	21,387	24,728	23,109	27,279	24,684	24,213	43,981
	11,449	13,524	13,674	11,455	8,468	13,925	32,064
	13,894	15,974	15,925	13,538	9,498	14,435	32,634
	15,223	21,461	18,220	23,159	28,575	32,800	49,355
	16,506	16,115	15,979	16,210	18,207	20,954	22,799
	11,170	9,868	9,517	11,201	12,383	12,622	14,002
	21,934	31,493	33,119	35,817	12,879	28,330	63,180
	(20,810)	(17,570)	(20,690)	(19,327)	(30,204)	(26,567)	(46,192)
	1,124	13,923	12,429	16,490	(17,325)	1,763	16,988
	(6,702)	(11,706)	(10,245)	(7,018)	5,203	8,826	3,480
	¥ 389,216	¥ 384,243	¥ 385,416	¥ 431,913	¥ 480,763	¥ 540,906	¥ 656,663
	19,776	23,408	24,748	35,807	25,845	36,027	60,307
	205,638	207,708	205,318	234,570	249,938	270,890	373,880
	75,153	66,940	64,548	65,420	82,478	103,675	76,159
	175,775	178,320	176,336	202,245	215,233	230,677	329,991
	14,585	14,217	13,542	13,305	13,571	14,317	12,892
	¥ 138.90	¥ 164.74	¥ 168.23	¥ 141.91	¥ 105.23	¥ 173.11	¥ 369.74
	2,138.45	2,179.03	2,173.37	2,509.08	2,675.70	2,867.23	3,289.95
	50	50	50	50	50	50	70
	5.9	6.1	6.1	7.0	5.5	6.2	7.5
	8.2	9.0	9.0	7.2	4.6	6.5	11.6
	10.9	11.3	10.9	12.0	9.7	11.4	13.7
	45.2	46.4	45.8	46.8	44.8	42.6	50.3
	3.5	2.2	2.2	2.0	7.0	4.0	1.4
	9.2	13.8	15.0	—	—	—	—
	36.3	34.3	34.9	29.8	42.4	27.9	20.6
	49.9	49.4	46.2	46.9	47.4	52.7	50.0

# Financial Highlights

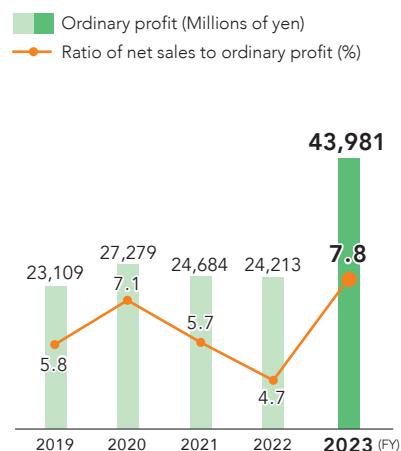
## Net sales / Net sales growth rate



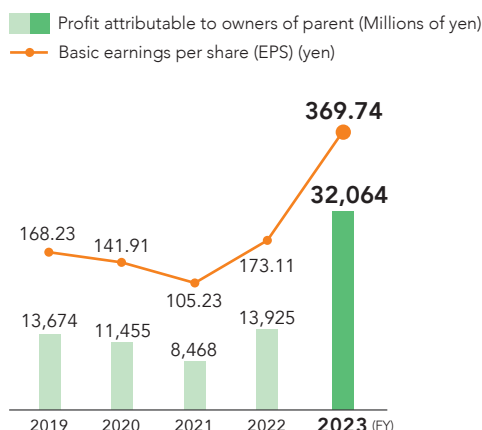
## Operating profit / Operating profit ratio



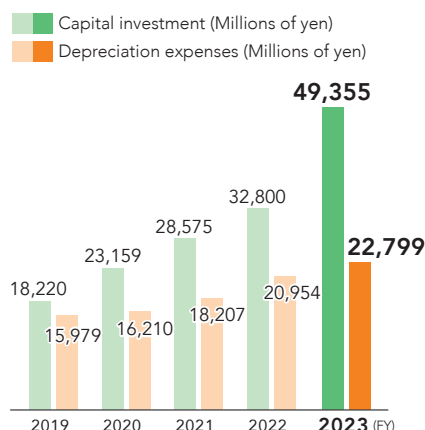
## Ordinary profit / Ratio of net sales to ordinary profit



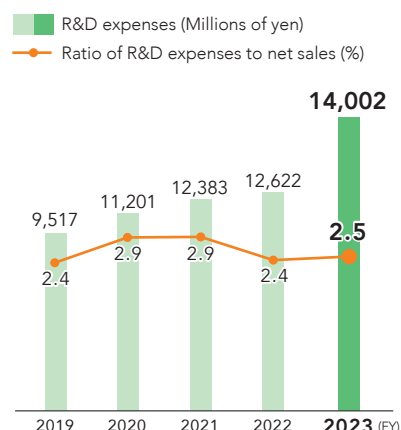
## Profit attributable to owners of parent / Basic earnings per share (EPS)



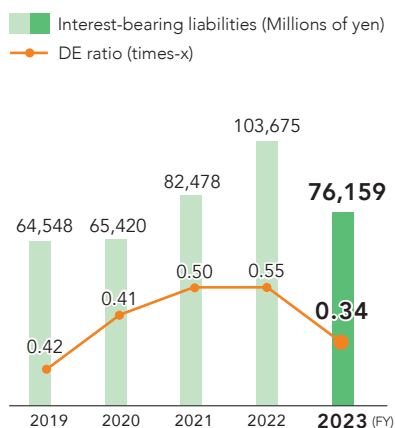
## Capital investment / Depreciation expenses



## R&D expenses / Ratio of R&D expenses to net sales

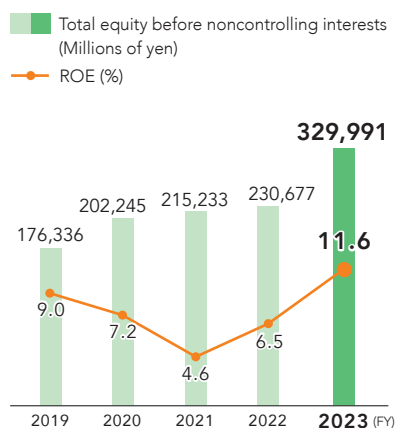


## Interest-bearing liabilities / DE ratio\*1

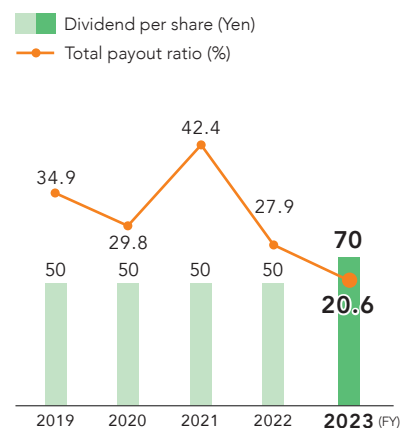


\*1 Calculated by: (Interest-bearing debt + Lease obligations) / Shareholders' equity

## Total equity before noncontrolling interests / ROE



## Dividend per share / Total payout ratio

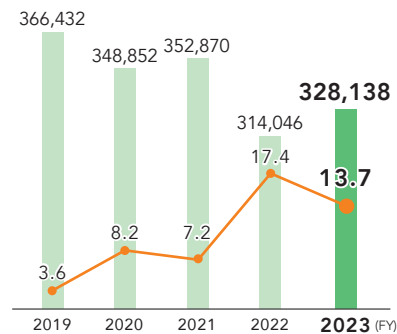


► Please refer to our "Annual Securities Report" for our financial information.  
[https://ir.gs-yuasa.com/en/ir/news/news823944813813333366/main/0/link/yo\\_ho\\_e\\_2024.pdf](https://ir.gs-yuasa.com/en/ir/news/news823944813813333366/main/0/link/yo_ho_e_2024.pdf)

# Non-Financial Highlights

## CO<sub>2</sub> emissions / Ratio of CO<sub>2</sub> emission reductions

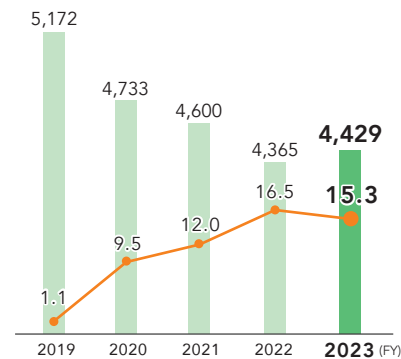
CO<sub>2</sub> emissions (t-CO<sub>2</sub>) (Scope 1 & 2)  
Ratio of reduction of CO<sub>2</sub> emissions  
(compared with FY2018) (%) (Scope 1 & 2)



Note: Figures for past years have been revised in line with the scope review for FY2023.

## Water consumption / Ratio of water consumption reductions

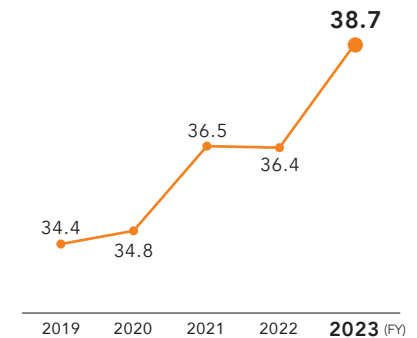
Water consumption (1,000 m<sup>3</sup>)  
Ratio of water consumption reductions  
(compared with FY2018) (%)



Note: Figures for past years have been revised in line with the scope review for FY2023.

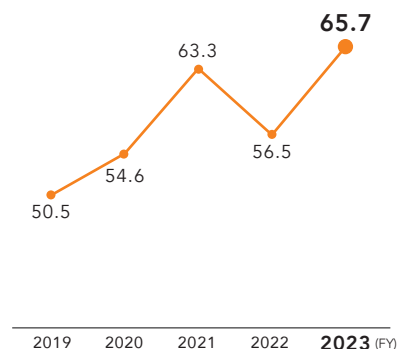
## Sales ratio of environmentally considered products

Sales ratio of environmentally  
considered products (%)



## Ratio of recycled lead used as lead raw materials in lead-acid batteries

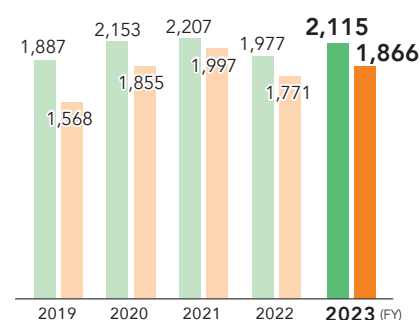
Ratio of recycled lead used (%)



Note: Figures for past years have been revised in line with the scope review for FY2023.

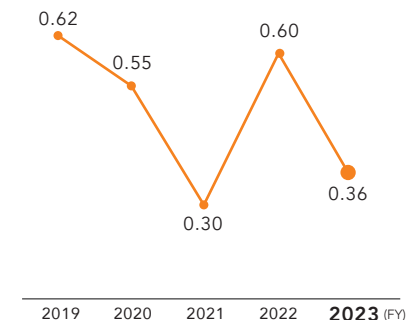
## Number of patents held (in Japan and overseas)

Number of patents held in Japan  
Number of patents held overseas



## Frequency of work-related injuries (Missed work frequency rate<sup>\*2</sup>)

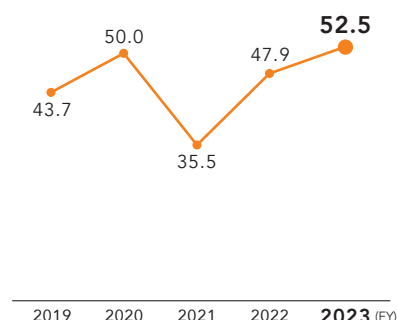
Frequency of work-related injuries  
(Missed work frequency rate)



<sup>\*2</sup> Missed work frequency rate is the number of people missing work per 1,000,000 work hours

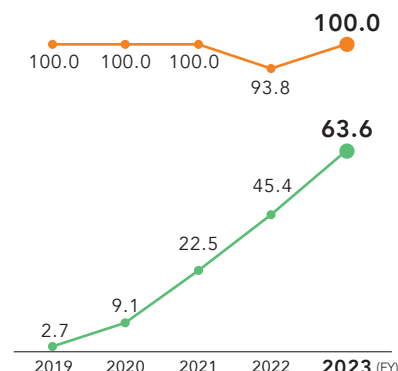
## Percentage of mid-career employees among newly hired employees

Percentage of mid-career employees  
among newly hired employees (%)



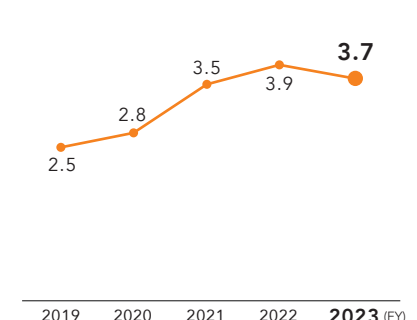
## Rate of taking childcare leave

Male (%) Female (%)



## Percentage of women in managerial positions

Percentage of women  
in managerial positions (%)



# External Evaluation

## >> Incorporation into ESG Indexes

### ■ FTSE 4Good Index Series

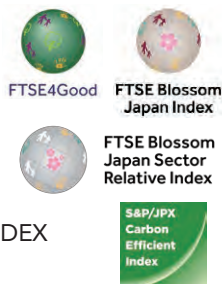
### ■ FTSE Blossom Japan Index\*1

### ■ FTSE Blossom Japan Sector Relative Index

### ■ S&P/JPX CARBON EFFICIENT INDEX

### ■ MSCI Nihonkabu ESG Select Leaders Index\*2

2024 CONSTITUENT MSCI Japan ESG Select Leaders Index



## >> IR Related

■ Broadband Security, Inc.  
Gomez IR Site Ranking 2023  
Outstanding Company:  
Silver Prize for four consecutive years  
(December 2023)



■ Nikko Investor Relations Co., Ltd.  
FY2023 All Japanese Listed Companies' Website Ranking  
■ All Markets Ranking  
Three consecutive years for AAA Website  
(December 2023)



■ Sector Ranking (Electronic Appliances)  
First time awarded AA Website  
(December 2023)



■ Daiwa Investor Relations Co., Ltd.  
The 2023 Internet IR Award  
Commendation Award for four consecutive years  
(December 2023)



■ Nikko Research Center, Inc.  
Integrated Report Award 2023  
First time awarded the Best Practice Award

## >> Product Related

■ The 2021 Commendation for Science and Technology presented by the Minister of Education, Culture, Sports, Science and Technology Award for Science and Technology (Development Category)  
The development of lithium-ion batteries for use in space and technologies to facilitate operation of those batteries

■ National Research and Development Agency Japan Aerospace Exploration Agency (JAXA)  
Meritorious Service Award for Safety and Mission Assurance in Aerospace\*3

## >> CSR and Sustainability Related

### ■ Toyo Keizai CSR Ranking

Utilization of human resources	Environment	Corporate Governance	Sociability
AAA	AAA	AA	AA

(Five ratings: AAA, AA, A, B and C)  
(As of September 2024)

■ Sustainalytics ESG Risk Ratings  
Low Risk (as of July 2023)



■ DBJ (Development Bank of Japan) Employees' Health Management Rating  
Highest rank  
"particularly excellent in terms of initiatives for employees' health"  
(2018)



■ Kurumin Mark  
(Ministry of Health, Labour and Welfare)  
Platinum Kurumin  
"high-level initiatives undertaken to support childcare"  
(June 2020)



■ CDP  
A- (A minus) (climate change program)  
(Eight ratings: A, A-, B, B-, C, C-, D, D-)  
(As of the end of March 2024)



■ Broadband Security, Inc.  
Gomez ESG Site Ranking 2023  
Outstanding Company  
(August 2023)



\*1 FTSE Russell (the trading name of FTSE International Limited and Frank Russell Company) confirms that GS Yuasa Corporation has been independently assessed according to the index criteria, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series, FTSE Blossom Japan Index, and FTSE Blossom Japan Sector Relative Index. FTSE Russell (the trading name of FTSE International Limited and Frank Russell Company) confirms that GS Yuasa Corporation has been independently assessed according to the index criteria, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series, FTSE Blossom Japan Index, and FTSE Blossom Japan Sector Relative Index.

\*2 The inclusion of GS Yuasa Corporation in any MSCI Index, and the use of MSCI logos, trademarks, service marks, or index names herein, do not constitute support, endorsement, or promotion of GS Yuasa Corporation by MSCI or any of its affiliates. The MSCI Indexes are the exclusive property of MSCI. The MSCI Index names and logos are trademarks or service marks of MSCI and / or its affiliates.

\*3 Received by GS Yuasa Technology Ltd. \*4 Received jointly by GS Yuasa International Ltd. and Blue Energy Co., Ltd. \*5 Received by Blue Energy Co., Ltd.

# Corporate and Stock Information (As of March 31, 2024)

## >> Company Overview

<b>Corporate Name</b>	GS Yuasa Corporation	<b>Domestic Consolidated Subsidiaries</b>	21 companies
<b>Head Office</b>	1, Inobanba-cho, Nishinosho, Kisshoin, Minami-ku, Kyoto 601-8520, Japan	<b>Overseas Consolidated Subsidiaries</b>	29 companies
<b>Tokyo Office</b>	1-7-13, Shiba-koen, Minato-ku, Tokyo 105-0011, Japan	<b>Listed Securities Exchange</b>	Tokyo Stock Exchange Prime Market
<b>Establishment</b>	April 1, 2004	<b>Number of Shareholders Issued</b>	100,446,442
<b>Capital Stock</b>	¥52.8 billion	<b>Number of Shareholders</b>	41,822 (including shareholders holding fractional units of shares)
<b>Employees</b>	Group (Consolidated): 12,892		

## >> Group Companies

### JAPAN

GS Yuasa International Ltd.	Honda・GS Yuasa EV Battery R&D Co., Ltd.	GS Yuasa Socie Ltd.	GS Yuasa Iwaki Co., Ltd
GS Yuasa Battery Ltd.	GS Yuasa Fieldings Ltd.	GS Yuasa Chemical Co., Ltd.	GS Yuasa Moldings Co., Ltd.
GS Yuasa Energy Co., Ltd.	Hokkaido GS Yuasa Service Co., Ltd.	GS Yuasa Ibaraki Co., Ltd.	GS Yuasa Azumino Co., Ltd.
GS Yuasa Technology Ltd.	GS Yuasa Innovation Co., Ltd.	GS Yuasa Environmental Science Laboratory Co., LTD.	
Blue Energy Co., Ltd.	GS Yuasa Lighting Service Co., Ltd.	GS Yuasa Membrane Co., Ltd.	

### TAIWAN

GS Battery Taiwan Co., Ltd.  
Taiwan Yuasa Battery Co., Ltd.

### THAILAND

GS Yuasa Asia Technical Center Ltd.  
Siam GS Battery Co., Ltd.  
Siam GS Sales Co., Ltd.  
Yuasa Battery (Thailand) Pub. Co., Ltd.  
GS Yuasa Siam Industry Ltd.  
GS Yuasa Siam Sales Ltd.

### VIETNAM

GS Battery Vietnam Co., Ltd.

### MALAYSIA

GS Yuasa Battery Malaysia Sdn. Bhd.  
Yuasa Power Systems (Malaysia) Sdn. Bhd.

### CHINA

Tianjin GS Battery Co., Ltd.  
Yuasa Battery (Shunde) Co., Ltd.  
Yuasa Battery (Guangdong) Co., Ltd.  
GS Battery (China) Co., Ltd.  
Shanghai GS Toptiger Motive Power Co., Ltd.

### INDONESIA

PT. Yuasa Battery Indonesia  
PT. Trimitra Baterai Prakasa  
PT. GS Battery  
PT. Yuasa Industrial Battery Indonesia

### MYANMAR

Siam GS Battery Myanmar Limited

### INDIA

Tata AutoComp GY Batteries Private Limited

### AUSTRALIA

Century Yuasa Batteries Pty Ltd.

### NEW ZEALAND

Century Yuasa Batteries (NZ) Ltd.

### PAKISTAN

Atlas Battery Ltd.

### U.S.

Yuasa Battery, Inc.  
GS Yuasa Energy Solutions, Inc.  
GS Yuasa Lithium Power, Inc.

### FRANCE

GS Yuasa Battery France SAS

### UK

GS Yuasa Battery Manufacturing UK Ltd.  
GS Yuasa Battery Sales UK Limited

### GERMANY

GS Yuasa Battery Germany GmbH.

### HUNGARY

GS Yuasa Hungary Ltd.

### TURKEY

İnci GS Yuasa Akü Sanayi ve Ticaret Anonim Şirketi

### ITALY

GS Yuasa Battery Italy S.R.L.

### SPAIN

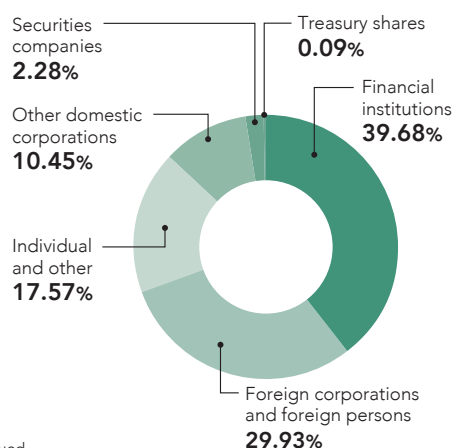
GS Yuasa Battery Iberia SA

## >> Principal Shareholders

Name	Number of Shares Held	Investment ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	14,912,900	14.86
Custody Bank of Japan, Ltd. (Trust Account)	4,981,540	4.96
Honda Motor Co., Ltd.	4,915,750	4.90
Meiji Yasuda Life Insurance Company	2,800,000	2.79
GOLDMAN SACHS INTERNATIONAL	2,452,075	2.44
Toyota Motor Corporation	2,236,080	2.23
BNP PARIBAS NEW YORK BRANCH - PRIME BROKERAGE CLEARANCE ACCOUNT	1,936,714	1.93
MUFG Bank, Ltd.	1,865,467	1.86
Nippon Life Insurance Company	1,789,133	1.78
The Bank of Kyoto, Ltd.	1,548,069	1.54

\* Calculated based on the number of shares (100,351,160) after deducting treasury shares from the number of shares issued.

## >> Shareholdings by Type of Shareholder







## GS Yuasa Corporation

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