



Creating the Future of Energy

GS Yuasa Report 2022

GS Yuasa Corporation

# GS Yuasa Report 2022

For the fiscal year ended March 31, 2022



GS Yuasa Corporation

Head Office  
1, Inobanba-cho, Nishinosho, Kisshoin, Minami-ku, Kyoto  
601-8520, Japan  
English website: [www.gs-yuasa.com/en/](http://www.gs-yuasa.com/en/)



# GS Yuasa Report 2022

## Contents

### 1 GS Yuasa's Value Creation

- 3 Corporate Philosophy and Significance of Existence
- 5 Contributing to Society Through Energy Devices
- 7 Strengthening of Post-Integration Business Foundations
- 9 Business Development in Response to the World's Needs
- 11 Value Creation Process
- 13 Opportunities and Risks
- 15 Underpinnings of Value Creation
- 17 Growth Driven by Solving Social Issues

### 2 Message from Management

- 19 Message from the President
- 25 Message from the Director in Charge of Finance
- 29 About ROIC Management

### 3 Medium- to Long-Term Strategies and Performance

- 31 Long-Term Vision and Fifth Mid-Term Management Plan
- 35 GY 2030 Long-Term Greenhouse Gas Target
- 37 Response to Climate Change (TCFD)
- 41 Feature:  
—Tackling the Challenges of the Growing Renewable Energy Market—
- 43 Business Portfolio
  - 43 Business Structure
  - 45 Key Financial Indices by Business Segment
  - 47 Automotive Batteries
  - 53 Industrial Batteries and Power Supplies
  - 57 Automotive Lithium-ion Batteries
  - 61 Specialized Batteries and Others
- 63 Research and Development:  
—Initiatives for Next-Generation Batteries—

### 4 ESG

- 65 CSR management
- 66 Materiality (Key CSR Issues) and Identification Process
- 67 Targets and Results Concerning Material Issues
- 71 Environment
- 75 Social
- 81 Governance
  - 81 Directors and Auditors
  - 83 Messages from Outside Directors
  - 87 Corporate Governance

### 5 Financial / Corporate Data

- 101 11-Year Consolidated Financial Highlights
- 103 Financial Analysis
- 105 Financial Section
- 167 Corporate Information
- 168 External Evaluation
- 169 Stock and Investor Information
- 170 Overall Picture of Information Disclosure



This section carries a message from the president focusing on the significance of the GS Yuasa Group's existence based on our corporate philosophy of "Innovation and Growth." It also outlines our growth over the years, our social contribution through business, our present business, and our global development. Regarding the value creation process, after showing the overall picture, a detailed explanation of the principal constituent factors is given on each page.

This section features the president's thoughts, in consideration of the market environment, on such matters as GS Yuasa's contribution to the solution of social issues and strategy toward long-term growth. It also presents the thoughts of the director in charge of finance on financial conditions and strategy, as well as an ongoing report on the current status of ROIC management.

In this section, a detailed explanation is given of such matters as our medium- to long-term strategy integrating financial and nonfinancial (ESG) factors and our response to climate change. There is also a special feature on our response to the expansion of renewable energy market, which has been attracting much attention recently.

This section outlines our materiality-related results and evaluation in detail, as well as our ESG initiatives and disclosed data.

In addition to long-term financial trend data and a financial analysis of the fiscal 2021, this section presents basic information for understanding our company.

## Scope of this report

#### Preparation of this report

This report has been issued to familiarize our stakeholders including shareholders and investors with the management policies and business strategies of the GS Yuasa Group. In this report, we explain the path toward value creation pursued by our Group with a focus on our business models and medium- to long-term policies and strategies in the hope that readers can deepen their understanding of these topics.

#### Period and content covered

Results for fiscal 2021 (April 1, 2021–March 31, 2022)

#### 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 2022

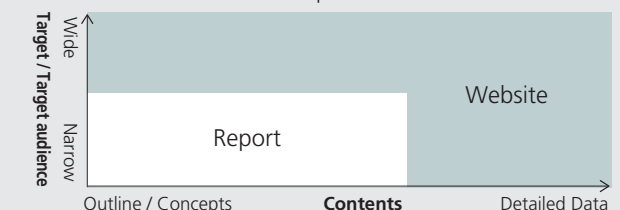
#### Referenced guidelines, etc.

- 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.





Corporate Philosophy

# Innovation and Growth

We are committed to people, society and the global environment through innovation and growth of our employees and business entities.

Management Vision

We are committed to delivering security and comfort to our customers around the globe through advanced technologies developed in the field of stored energy solutions.

Management Policy

1. GS Yuasa will become the "First call" company based on our "Customer first" policy.
2. GS Yuasa considers "Quality" and "Safety" as most important, and supplies environmentally conscious products all over the world.
3. GS Yuasa will comply with all laws and operate using clear and fair management.

Corporate Slogan

## Creating the Future of Energy

The commitment instilled in this slogan:

We pledge to pioneer new modes of futuristic energy (storage batteries), engineered to address the constantly changing needs of the times.

## Our worth lies in creating value that benefits society through innovation

Our Company comprises two parents—Japan Storage Battery Co., Ltd. and Yuasa Storage Battery Co., Ltd. Since the beginning of the 20th century, we have created products that solve social issues in response to the needs of the times, including backup batteries and power supplies to support a variety of public infrastructure and lead-acid batteries for automobiles and motorcycles. The spirit of invention and challenge of the founders of both companies lives on today in the DNA of the GS Yuasa Group.

The storage batteries we create today play an important role in public infrastructure that supports our daily lives and industry. And as achieving carbon neutrality becomes a crucial social issue on a global scale, our Company's products, which function to store energy and supply it when needed, are playing an increasingly important role in this regard.

Going forward, we will continue to contribute to the realization of a sustainable society by creating innovative value through energy management that contributes to people, society and the global environment, and by continuing to grow sustainably.



President and Representative Director



Early automotive lead-acid batteries from the former Japan Storage Battery and the former Yuasa Corporation






# Contributing to Society Through Energy Devices

In our century-long history we have released original high-quality products one after the other. Inheriting this spirit of constantly pursuing innovation and growth, we will contribute even more to the future society.

**Specialized Batteries and Others**


**1919**  
Manufacture of lead-acid batteries for submarines



**Industrial Batteries and Power Supplies**

Contributing to the development of public infrastructure in Japan


**1920s**  
Expanded demand for auxiliary power for buildings and public infrastructure



**Automotive Batteries**

Contributing to the diffusion of motorcycles


**1954**  
Marketing of small and light storage batteries for motorcycles



**Specialized Batteries and Others**

Supporting the evolution of mobile phones

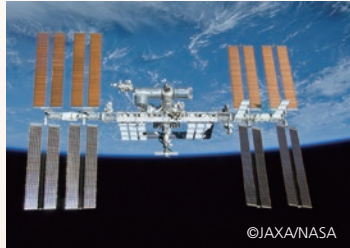
**1993**  
Development of a small prismatic lithium-ion batteries



**Specialized Batteries and Others**

Supporting the progress of space development projects


**2016**  
Installation of lithium-ion batteries on the International Space Station



**Automotive Batteries**

Contributing to the diffusion of radios in ordinary households


**1926**  
Supply of storage batteries for radios



**Industrial Batteries and Power Supplies**

Contributing to the realization of decarbonized society


**2021**  
Delivery of a world-class storage battery facility for wind power generation



**Automotive Batteries**

Assisting the electric vehicles (EVs) boom


**1972**  
Development of a high-performance and long-life lead-acid batteries



**Industrial Batteries and Power Supplies**

Contributing to the promotion of clean energy


**2000s**  
Successive marketing of renewable energy storage systems



**Automotive Lithium-ion Batteries**

Ushering in a new EV era


**2009**  
Supply of lithium-ion batteries for the i-MiEV, the world's first mass-produced EV



**Industrial Batteries and Power Supplies**

Contributing to an energy-saving society


**2017**  
Installation of lithium-ion batteries in port automatic guided vehicles (AGVs)



**Automotive Batteries**

Contributing to the automobile industry's development in Japan


**1919**  
Start of automotive lead-acid batteries production

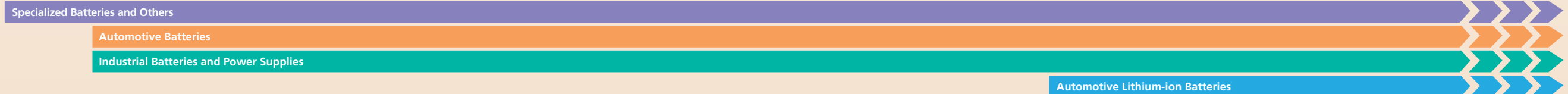


**Automotive Batteries**

Supplying the new means of mobility

**1930**  
Supply of lead-acid batteries for the first electric bus produced in Japan





## 1910 1950 1990 2000 2010 2020

**History of GS (Japan Storage Battery)**

**1917** Establishment of Japan Storage Battery Co., Ltd.

**1920** Invention of reactive lead oxide production method by Genzo Shimadzu

**1938** Start of alkaline batteries production

**1966** Establishment of first overseas site in Thailand (Siam GS Battery Co., Ltd.)

**1993** Development of prismatic lithium-ion batteries

**1918** Establishment of Yuasa Storage Battery Co., Ltd.

**1920** Start of automotive lead-acid batteries production

**1941** Start of alkaline batteries production

**1963** Establishment of first overseas site (Yuasa Battery (Thailand) Pub. Co., Ltd.)

**1998** Marketing of ultra-thin lithium-ion polymer secondary batteries



**2004**  
Corporate merger  
Establishment of GS Yuasa Corporation

**History of GS Yuasa Corporation**

**2007** Establishment of a joint venture company, Lithium Energy Japan Ltd., with Mitsubishi Corporation and Mitsubishi Motors Corporation

**2009** Establishment of a joint venture company, Blue Energy Co., Ltd., with Honda Motor Co., Ltd.

**2016** Transfer of lead-acid batteries business from Panasonic Corporation (currently GS Yuasa Energy Co., Ltd.)

**2019** Start of operation of the plant for automotive 12V lithium-ion batteries in Hungary

**2021** Transfer of infrastructure business from Sanken Electric Co., Ltd. (currently GS Yuasa Infrastructure Systems Co., Ltd.)

**2022** Start of operation of second plant for Blue Energy Co., Ltd.



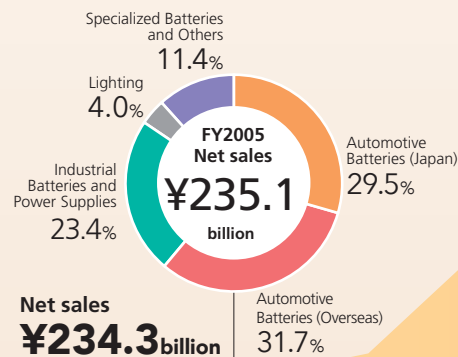
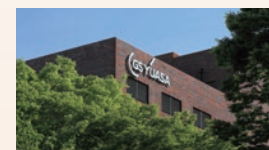
# Strengthening of Post-Integration Business Foundations

Since the corporate merger, we have strengthened our business foundations while conducting planned capital investment and coordinating and cooperating with other companies. Going forward, we will continue to grow as an energy device company.

**Trends in net sales**  
**Trends in operating profit ratio**  
 Net sales of the former Japan Storage Battery Co., Ltd.  
 Net sales of the former Yuasa Corporation

## 2004

Corporate merger  
 Establishment of GS Yuasa Corporation



Net sales  
**¥234.3 billion**

Operating profit ratio  
**0.4%**

## 2007

Establishment of a joint venture company, Lithium Energy Japan Ltd., with Mitsubishi Corporation and Mitsubishi Motors Corporation



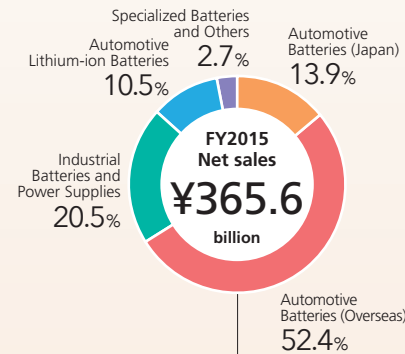
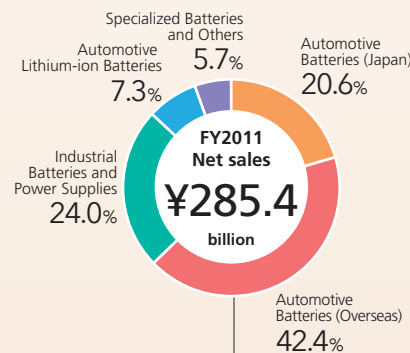
## 2009

Establishment of a joint venture company, Blue Energy Co., Ltd., with Honda Motor Co., Ltd.



## 2013

Siam GS Battery Co., Ltd., a joint venture in Thailand, turned into a consolidated subsidiary



## 2014

Establishment of GS Yuasa Asia Technical Center Ltd. in Thailand



## 2021

Transfer of infrastructure business from Sanken Electric Co., Ltd. (now GS Yuasa Infrastructure Systems Co., Ltd.)



## 2016

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



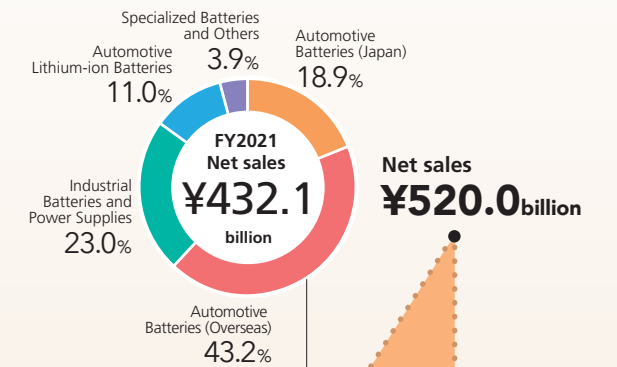
## 2019

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



## 2022

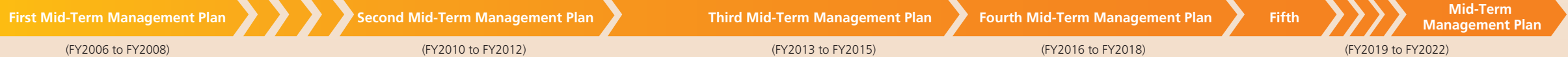
İnci GS Yuasa Akü Sanayi ve Ticaret Anonim Şirketi, a joint venture in Turkey, turned into a consolidated subsidiary



Net sales  
**¥520.0 billion**

Operating profit ratio (before amortization of goodwill)  
**5.6%**

2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 (FY Forecast)



Notes: 1. Fiscal 2009 was set aside as a stand-alone fiscal plan based on the impact of a serious recession in the global economy.  
 2. "Lighting" net sales was included in the "specialized batteries and others" segment from fiscal 2010 to fiscal 2013 and the "industrial batteries and power supplies" segment after fiscal 2014.  
 3. "Automotive lithium-ion batteries" net sales up to fiscal 2010 were included in the "specialized batteries and others" segment.

4. In fiscal 2019 some consolidated subsidiaries in the "automotive batteries (overseas)" segment were shifted to the "industrial batteries and power supplies" segment.  
 5. Operating profit ratio refers to operating profit before amortization of goodwill after fiscal 2016.  
 6. The Fifth Mid-Term Management Plan originally covered the period from fiscal 2019 to fiscal 2021. Due to the impact of the COVID-19 pandemic, however, we have excluded fiscal 2020 as a single-fiscal-year plan and changed the fifth plan to a four-year plan ending in fiscal 2022.



# Business Development in Response to the World's Needs

We develop, manufacture, and supply regions around the world with batteries and other products for automobiles and motorcycles, industrial vehicles, and public infrastructure in response to the changing needs of the times.

Number of overseas sites (As of July 2022)

37 sites in 19 countries

Number of Group employees (As of March 31, 2022)

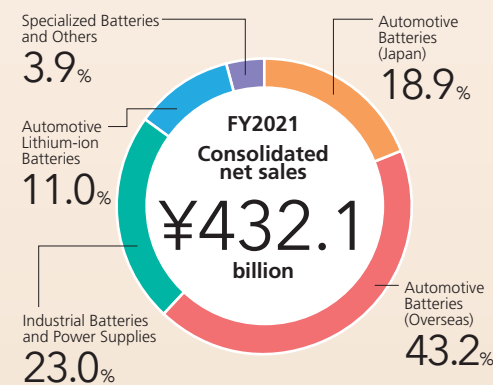
13,571

### Global expansion

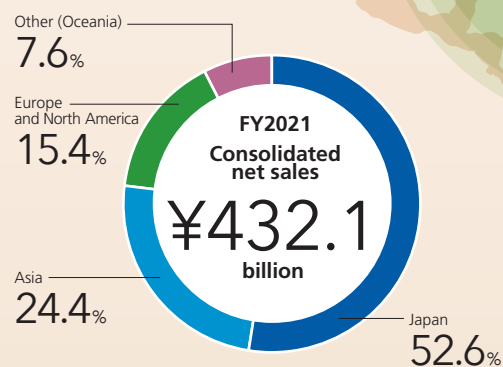
- Head office
- Manufacturing
- Manufacturing & Sales
- Sales
- Development

### Composition of net sales

By business



By region



### Main businesses and products

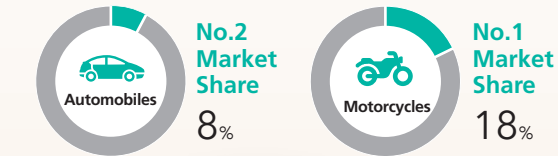
#### Three-brand development globally

Japan Storage Battery (GS) and Yuasa Corporation began advancing business overseas in the 1960s and has established many joint ventures with local partner companies. Since the "GS" and "YUASA" brands both enjoy a high degree of recognition, we engage in product deployment suited to the characteristics and needs of each region by means of three brands (these two plus the "GS YUASA" brand).

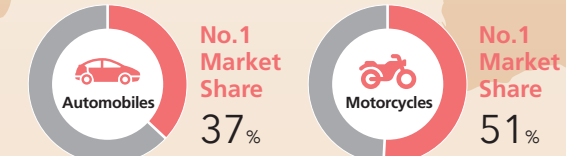


Automotive Batteries (Japan)	Automotive Batteries (overseas)	Industrial Batteries and Power Supplies	Automotive Lithium-ion Batteries	Specialized Batteries and Others
<ul style="list-style-type: none"> <li>Lead-acid batteries</li> </ul>	<ul style="list-style-type: none"> <li>Lead-acid Batteries</li> </ul>	<ul style="list-style-type: none"> <li>Lead-acid batteries</li> <li>Lithium-ion batteries</li> <li>Backup batteries and power supplies</li> <li>ESS<sup>*2</sup></li> </ul>	<ul style="list-style-type: none"> <li>Lithium-ion Batteries</li> </ul>	<ul style="list-style-type: none"> <li>Lead-acid Batteries</li> <li>Lithium-ion Batteries</li> <li>Specialized Batteries</li> </ul>
<ul style="list-style-type: none"> <li>Automobiles (No.1 domestic share)</li> <li>Motorcycles (No.1 domestic share)</li> </ul>	<ul style="list-style-type: none"> <li>Automobiles (No.2 global share)</li> <li>Motorcycles (No.1 global share)</li> </ul>	<ul style="list-style-type: none"> <li>Backup batteries (No.1 domestic share)</li> <li>Forklifts (No.1 domestic share)</li> <li>Renewable energy</li> <li>Automobiles</li> <li>ESS<sup>*2</sup></li> </ul>	<ul style="list-style-type: none"> <li>Automobiles</li> </ul>	<ul style="list-style-type: none"> <li>Submarines</li> <li>Manned research submersibles</li> <li>Aircraft</li> <li>Rockets</li> <li>Satellites</li> <li>Other special applications</li> </ul>

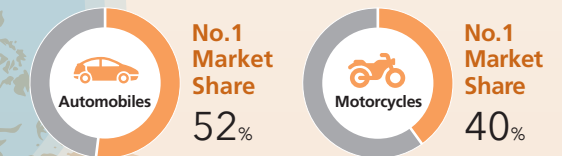
### Lead-acid battery market shares<sup>\*1</sup> (global)



### Lead-acid battery market shares<sup>\*1</sup> (ASEAN)



### Lead-acid battery market shares<sup>\*1</sup> (Japan)



Oceania  
Other (Oceania)

\*1 Based on company research in FY2021

\*2 Energy Storage System



# Value Creation Process

In accordance with its corporate philosophy, the Group continuously tackles the challenges of creating cutting-edge technologies to drive the future. We will achieve sustained growth by contributing to solutions to various social issues.

## Social issues closely related to the Group

- Accelerating moves toward the realization of carbon neutrality
- Increasing importance of public infrastructure
- Increasing climate change risks
- Expanding importance of BCP response

### Opportunities

→ pp.13, 41-42

- Diffusion of eco-friendly vehicles
- Expansion of renewable energy
- Increase in demand for public infrastructure

### Risks

→ p.14

- Raw material restrictions and price rise
- Changes in the market environment
- Changes in the supply chain
- Sustainability of human resources

## Philosophy Innovation and Growth

We are committed to people, society, and the global environment through innovation and growth of our employees and business entities.

### Mid-Term Management Plan → pp.31-34

We aim to achieve sustainable business growth and contribute to the sustainable development of society

Establish business processes that incorporate CSR issues into our business strategy

### Business portfolio → pp.43-62

Automotive Batteries (Japan, Overseas)



Industrial Batteries and Power Supplies



Automotive Lithium-ion Batteries



Specialized Batteries and Others



Lead-acid Batteries Business  
Strengthen profitability, expand sales

Lithium-ion Batteries Business  
Upfront investment for growth

### Response to Key ESG Issues → pp.65-80, 87-99

**E Environment**  
Contribute to sustainability of the global environment

- Developing and popularizing environmentally considered products
- Promoting environmental protection

**S Social**  
Respect for human rights and contribution to society

- Respect for individuality
- Respect for diversity
- Provision of high-quality products
- Human resources development
- Enhancement of work environments and occupational health and safety
- Responsible procurement promotion

**G Governance**  
Promotion of fair, transparent, and swift group-wide governance

- Thoroughly fulfilling our CSR and ensuring compliance
- Respect and protection of intellectual property
- Strict management of confidential information

### Underpinnings of Value Creation → pp.15-16

A stable financial foundation bolstered by the Group's mainstay lead-acid batteries business

Solid strengths for developing technologies and cultivating markets built on an outstanding track record and customer trust

Advanced technological capabilities bolstering the lithium-ion batteries business

Strong brand power and competitiveness supported by business partnerships

A workforce that upholds and passes down technologies rooted in sound understanding of the Company's corporate philosophy

CSR ingrained in the corporate culture

## Growth driven by solving social issues

→ p.17

- Maximization of profit  
→ **¥23.9 billion**  
(fiscal 2021 Operating profit before amortization of goodwill)
- Maximization of returns to shareholders through efficient use of assets  
→ Dividend payout ratio  
**47.5%**  
(fiscal 2021)
- Innovation and new business creation supported by enhanced technological capabilities
- Growth of employees, maintaining and expansion of employment  
→ **13,571**  
(as of March 31, 2022)
- Building stable supply systems through strengthened bonds with suppliers

Long-term vision

→ p.31

An energy device company committed to the constant creation of new value

Investment and return of management resources




# Opportunities and Risks

By accurately reading social and market trends and at the same time identifying the various risks associated with our business and their degree of importance, we will continue to conduct sound and positive management from a medium- to long-term perspective.

## Opportunities

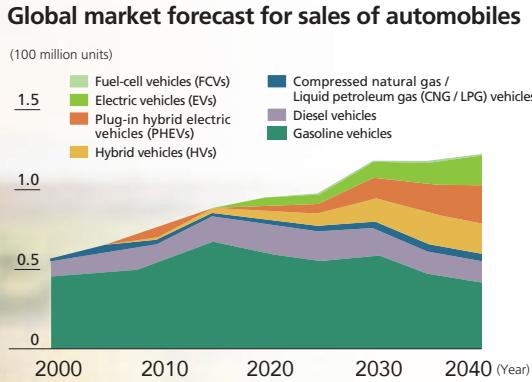
### 1 Diffusion of eco-friendly cars



As environmental regulations advance in countries around the world, HEVs and EVs are becoming increasingly common. The Company supplies lithium-ion batteries for HEVs and automotive batteries for vehicles with start-stop systems (ISS: idling stop systems), primarily to Japanese automakers, playing an important role in the shift to **eco-friendly vehicles and the electrification of automobiles**.


#### Global market forecast for sales of automobiles

(100 million units)



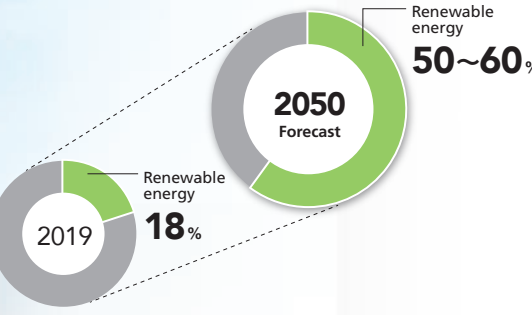
Source: International Energy Agency, Energy Technology Perspectives 2017

### 2 Expanding renewable energy




Worldwide energy demand has been increasing in recent years, and it is necessary to expand the use of renewable energy. The **introduction of storage batteries and power supply systems is essential** for the effective use of energy from solar and wind power generation, and expectations are high for our products.

#### Ratio of renewable energy in Japan's annual power generation



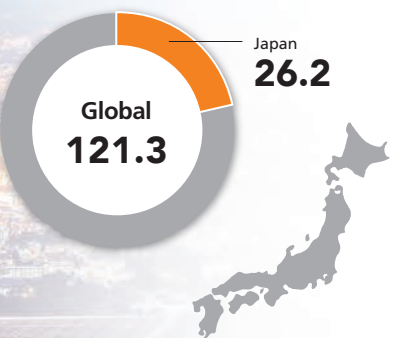
Source: Agency for Natural Resources and Energy, "Green Growth Strategy Through Achieving Carbon Neutrality in 2050"

### 3 Increase in demand for public infrastructure



If the supply of electricity were cut off, the activities of modern society would instantly come to a halt. Therefore, **batteries and power-source devices for backup power supplies in times of disaster** are becoming increasingly important. Our Group's products are safeguarding society's basic infrastructure from various disasters and contributing to business continuity in office buildings and plants.

#### Amount of direct damage from major natural disasters worldwide since 2019 (US\$1 billion)



Note: Created based on, White Paper on Disaster Management in Japan 2020

## Risks

### 1 Raw material restrictions and price rise



The global spread of **regulations on lead usage** in the EU, and the rise in prices and supply shortages of rare metals such as lithium could affect our Group's production activities.


#### RoHS directive: 10 restricted substances



#### Responses

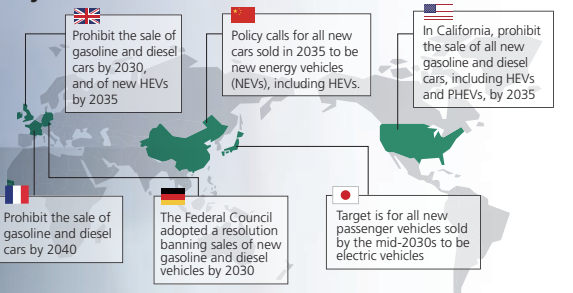
- Development and manufacture of 12V lithium-ion batteries
- Research and development of next-generation batteries without rare metals
- Shifted raw material prices to sales prices

### 2 Changes in the market environment



It is necessary for us to implement strategies that accurately grasp **changes in the market**, such as the rapid rise of eco-friendly vehicles in the automobile industry, the emergence of alternative batteries, the drift of young people away from cars, and the diffusion of car-sharing services.

#### Measures for achieving carbon neutrality by countries around the world



- UK:** Prohibit the sale of gasoline and diesel cars by 2030, and of new HEVs by 2035
- China:** Policy calls for all new cars sold in 2035 to be new energy vehicles (NEVs), including HEVs.
- USA:** In California, prohibit the sale of all new gasoline and diesel cars, including HEVs and PHEVs, by 2035
- France:** Prohibit the sale of gasoline and diesel cars by 2040
- Germany:** The Federal Council adopted a resolution banning sales of new gasoline and diesel vehicles by 2030
- Japan:** Target is for all new passenger vehicles sold by the mid-2030s to be electric vehicles

#### Responses

- Reinforced research and development on lithium-ion batteries for EVs

### 3 Supply-chain fluctuations



Products which are our mainstays are easily impacted by the market conditions of raw material and customers. Cobalt that is used in some of our products is also a kind of conflict mineral. Proper supply-chain management and the ensuring of stable supply and demand are essential.



#### Responses

- Stabilized supply chains through multiple purchasing
- Responsible procurement promotion

### 4 Retention of human resources



In Japan, **the decline of the working-age population** is emerging as a common risk for companies. To strengthen our corporate competitiveness, it is important to provide employees with workplace environments in which our diverse workforce can display their abilities.

#### Trends in working-age population in Japan



#### Responses

- Reinforced human resource development and recruiting
- Established work environments that facilitate work by diverse human resources

Note: Created based on the Ministry of Health, Labour and Welfare, Annual Health, Labour and Welfare Report 2020



# Underpinnings of Value Creation

The Group has continued to polish our development capabilities and production technologies and meet people's expectations through sincere business activities that create original value in the market. Taking full advantage of the strengths we have cultivated, we will put our philosophy of "Innovation and Growth" into practice for our employees and business entities and contribute to people, society, and the global environment.

## 1 A stable financial foundation bolstered by the Group's mainstay lead-acid batteries business

Our wide range of lead-acid batteries for starting automobiles support the Group's financial foundation. In addition to those for new automobiles, profit is obtained continuously through demand for replacement with vehicle maintenance and inspections as the focus. In addition, stable earnings can also be expected for lead-acid batteries for industrial use and for forklifts, which support public infrastructure.

- Sales of lead-acid batteries increased about **1.5 times** in 10 years

Year	Sales (FY)
2012	1.0x
2021	1.5x

## 2 Solid strengths for developing technologies and cultivating markets built on an outstanding track record and customer trust

By using the relationships we have developed with Japanese automakers, we have established a global network of business sites. We continue to conduct development and production in demand areas as a partner to our customers. Going forward, we will use our site in Turkey, which became a consolidated subsidiary in 2022, to reinforce sales to the Middle and Near East, Europe, northern Africa, and other regions. We will also develop products and markets according to local needs including GS Yuasa Asia Technical Center Ltd. in Thailand.

- Number of global sites (As of July 2022)

Category	Count
Countries	19
Sites	37

## 3 Advanced technological capabilities bolstering the lithium-ion batteries business

As a pioneering manufacturer of automotive lithium-ion batteries that supplied the lithium-ion batteries for the world's first mass-produced EVs and HEVs, we focus on cutting-edge technology and product development, and our products are used in the models of many Japanese automakers. We are maintaining our competitiveness in global markets while making efforts toward a full-scale entry into the BEV market by reinforcing partnerships with Japanese automakers.

- Toyota Motor Corporation Technology & Development Award\* received (2021) Lithium-ion battery for hybrid vehicles "EHW4S"
- \*Received jointly by GS Yuasa International Ltd. and Blue Energy Co., Ltd.
- Patents registered in Japan (As of March 31, 2022)

"Harrier" Toyota Motor Corporation

Category	Count
Patents registered in Japan	1,945

## 4 Strong brand power and competitiveness supported by business partnerships

The Group's lead-acid batteries maintain a high market share in both the automobile and motorcycle battery markets. Since every vehicle including electric vehicles contains a lead acid battery, we believe that demand for automobile and motorcycle lead acid batteries will be maintained. We are also maintaining our leading share of the domestic market for backup applications and forklifts.

- Global market share (FY2021)
- Domestic market share (FY2021)

Market	Share
Global Market Share (FY2021)	Automobiles: No.2, Motorcycles: No.1
Domestic Market Share (FY2021)	Automobiles: No.1, Motorcycles: No.1

## 5 A workforce that upholds and passes down technologies rooted in sound understanding of the Company's corporate philosophy

We promote integrated management as a Group and implement "Innovation and Growth" imbued with our inventor and challenge spirit on a daily basis. The Group's manufacturing technologies are upheld and passed down through various activities including "Monozukuri (product creation) expert" education workshops and case presentations of team activities to drive kaizen (improvement).

- Number of Group employees (As of March 31, 2022)

Category	Count
Number of Group employees	13,571

## 6 CSR ingrained in the corporate culture

Workplace meetings on CSR in each workplace have been held every year since fiscal 2012 with the aim of embedding an awareness of CSR and spreading awareness of compliance in our business activities.

- Ratio of implementation of workplace meetings on CSR (FY2021)
- Ratio of workplaces where employees felt that workplace meetings on CSR are meaningful (FY2021)

Category	Percentage
Ratio of implementation of workplace meetings on CSR (FY2021)	100%
Ratio of workplaces where employees felt that workplace meetings on CSR are meaningful (FY2021)	96%

Target All GS Yuasa workplaces: 380 / Group companies in Japan: 21



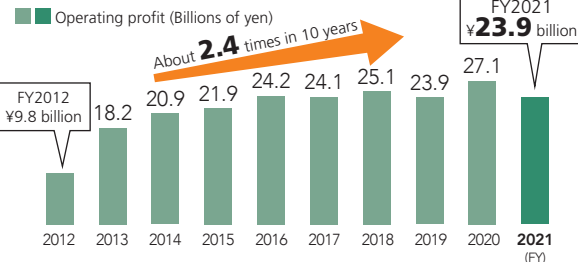
# Growth Driven by Solving Social Issues

The Group has achieved steady results solving social issues. We will continue growing in the future so we can contribute to people, society, and the global environment.

## 1 Maximization of profits

Operating profit has increased by about 2.4 times compared to 10 years ago.

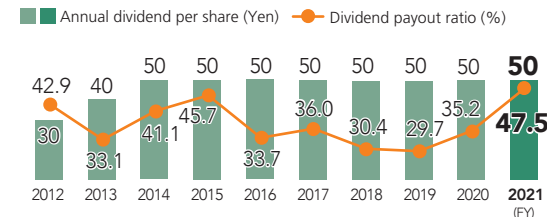
### Changes in operating profit in 10 years



## 2 Maximization of returns to shareholders through efficient use of assets

We have positioned the return of profits to shareholders as an important management issue. In fiscal 2021, dividends were 50 yen per share for a payout ratio of 47.5%.

### Changes in annual dividend per share and payout ratio in 10 years



## 3 Innovation and new business creation supported by enhanced technological capabilities

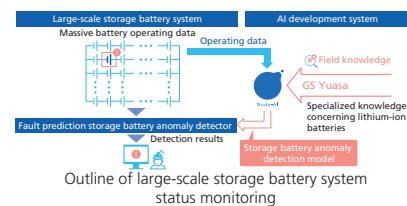
### Contributing to the spread of eco-friendly vehicles

The Group's automotive lithium-ion batteries have been adopted by numerous Japanese automakers, contributing to the spread of hybrid electric vehicles (HEVs) and other eco-friendly vehicles.



### Utilizing AI and IoT technology

By developing AI that can forecast failures in large-scale storage battery systems and through other measures, we are contributing to the spread of renewable energy.



### Developing next-generation batteries

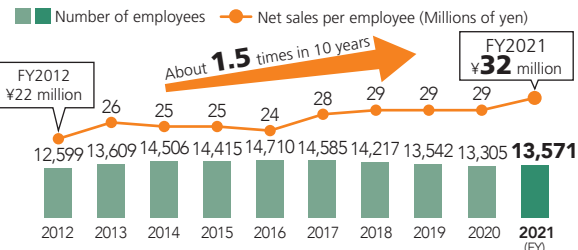
In order to achieve the early practical application of next-generation batteries such as all-solid-state batteries, we have established a specialized division at the R&D Center and are engaged in our own research and development.



## 4 Growth of employees, maintaining and expansion of employment

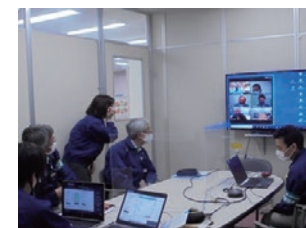
Net sales by per employee has increased by about 1.5 times compared to 10 years ago.

### Changes in the number of employees and net sales per employee in 10 Years



## 5 Building stable supply systems through strengthened bonds with suppliers

The Group sees all suppliers as important business partners. We take various measures to reinforce our business foundations including providing support for improvement to achieve mutual development with suppliers, supporting quality control and health and safety management, and providing training and guidance on compliance and CSR.



A quality improvement course for suppliers



## 2 Message from Management

Message from the President ..... 19  
 Message from the Director in Charge of Finance ..... 25  
 About ROIC Management ..... 29

Note: 1 Operating profit ratio refers to operating profit before amortization of goodwill after fiscal 2016.  
 2 The Company implemented a five-to-one 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.



# Top Message

## Creating new value for energy devices and contributing to realizing a sustainable society



**Osamu Murao**

President and  
Representative Director,  
GS Yuasa Corporation

### Our worth and values

#### Contributing to society through sustainable business

In the more than a century since our founding, the GS Yuasa Group has continued to offer society new value through a diverse range of products built around storage batteries. Looking back at that history, we have grown by creating products that solved the social issues of the time. These include power supplies for communication equipment that supported the development of wireless communications at the beginning of the 20th century; auxiliary power supplies that played a role in the dawn of industrialization in Japan when power generation facilities were as yet incomplete; and lead-acid batteries that accelerated motorization in the postwar era.

This spirit is still alive and well in the DNA of the Group. For example, the batteries we have developed have demonstrated reliable performance even in harsh environments such as the deep sea and outer space. I believe that our ability to create one-of-a-kind products other companies cannot imitate has been honed through our continuous challenging of the cutting edge. As a result, the Group's technologies and products support people's lives and industry in a variety of fields, including storage batteries for automobiles and motorcycles, emergency power supplies for public infrastructure, and energy storage systems for wind and solar power plants.

Our business has a strong affinity with sustainability, and I believe that our social mission and responsibility will become even greater as solving the problems of climate change and energy resources becomes an issue for all of humanity. We recognize that the role of storage batteries as energy devices that store energy and supply it when needed will become increasingly important, and we hope to meet those expectations.

My understanding is that our corporate philosophy of "Innovation and Growth," established at the time of our 2004 corporate merger, means creating new value that contributes to society, thereby achieving sustainable growth ourselves. For the Group to generate new value and build the second and third pillars of our business, it is essential for us to have both advanced technological capabilities and expertise, as well as a flexible approach that keeps us listening to our customers and the market and allows us to continue reforming ourselves. In my discussions, I keep in mind what brings joy to the customer, and the idea that, to create new value, it is important to always approach things from the perspective of the recipient of that value.

For the Company to contribute to society in the years to come, it is important that we innovate further in those technologies we have developed for storing and using electricity, and that we implement and operate those

technologies as part of the public infrastructure. I believe that creating a society in which all people can feel joy will lead to the realization of a sustainable society. For us, this will mean expanding our vision from the development, manufacturing, and sales of energy devices, to energy management that allows society as a whole to make full use of those devices, and beyond that to energy resource recycling.

#### Uniting to enhance management quality

There is something else that is important when talking about "Innovation and Growth." I believe that as a manufacturing company, it is crucial that we maintain and improve quality in order to gain the trust of our customers and society and grow over the long term. We aim to improve not only the quality of our products, but the quality of our management overall through Total Quality Management (TQM).

This is why, since my appointment as president in 2015, I have called for management with quality at its core, and have held regular quality management meetings, improvement case study presentations, and key quality problem case study presentations. We have shared the experience and expertise of those on the front lines with the entire company, including overseas, and have emphasized opportunities and approaches for learning from our mistakes.

For example, when we first started holding our improvement case study presentations, most of the presentations were given by quality-related departments and engineering and manufacturing departments. Now, however, the sales, human resources, and financial departments are also participating, and efforts in pursuit of quality are leading to business process improvements across the entire company.

In recent years, the unified efforts of the development, production, sales, and administrative departments have begun to bear fruit, and the incidence of complaints in the market and the in-process defect loss rate have both been steadily decreasing. Further, not only has product quality improved, but I sense that management quality overall—including business processes—has been enhanced, something that I have been aiming for.

### Toward medium- to long-term growth

#### Completing the Fifth Mid-Term Management Plan

In fiscal 2022, the final year of the current Mid-Term



Management Plan, we forecast consolidated net sales of 520.0 billion yen, a record high 29.0 billion yen in operating profit before amortization of goodwill, and profit attributable to owners of parent of 12.0 billion yen. In the automotive lithium-ion batteries business, a growth segment, we will expand production capacity to meet demand for lithium-ion batteries for hybrid electric vehicles (HEVs) by starting operation of Blue Energy Co., Ltd. second plant. In the industrial battery and power supply business, we will further enhance synergies with GS Yuasa Infrastructure Systems Co., Ltd., a new addition to the Group in 2021.

In the automotive batteries business, we will utilize our base in Turkey, which became a consolidated subsidiary in May 2022, to expand business by strengthening our production and sales structures for Europe, the Middle and Near East, and North Africa.

By steadily advancing these measures, we will achieve the performance targets set out in the Fifth Mid-Term Management Plan.

### Carbon neutrality as an inflection point for our times

Over the past few years, the movement toward carbon neutrality has accelerated on a global scale. Particularly in Europe, China, and Japan, there has been a marked movement toward the electrification of automobiles and the introduction of renewable energy. This trend is, without

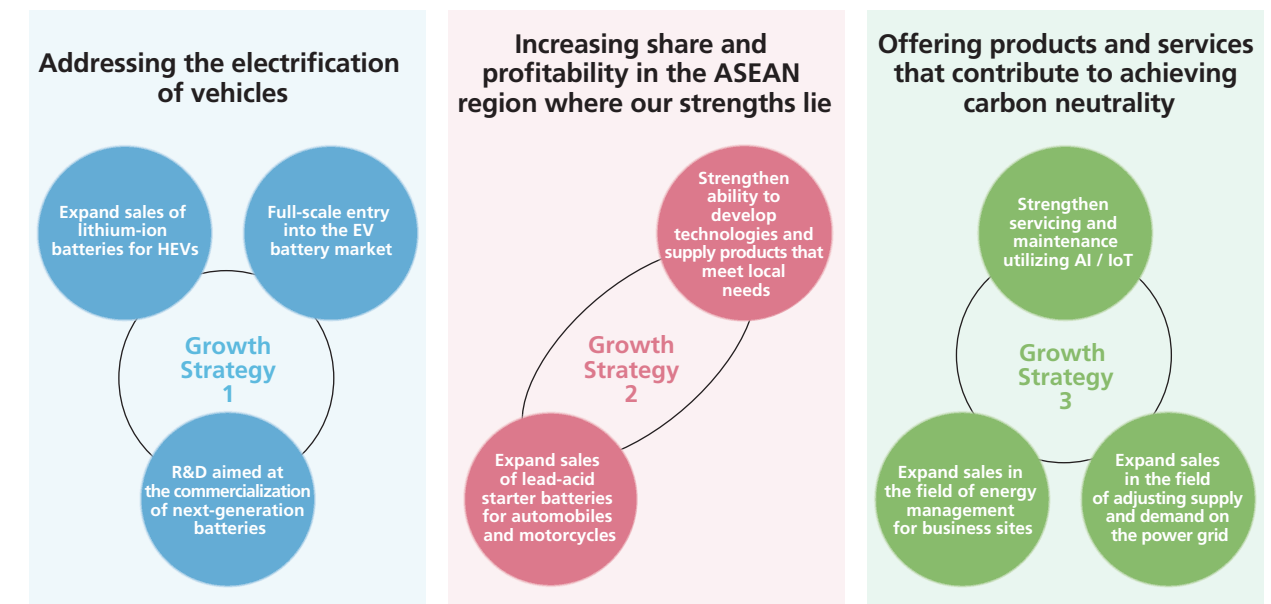
a doubt, an opportunity for our business, with its strong affinity with sustainability, and a tailwind that will drive growth. At the same time, we realize that there are risks, including increased costs for reducing environmental impact through the deployment of energy-saving equipment, as well as a gradual decline in demand for automotive lead-acid starter batteries, which to date have been our mainstay business.

In this context, I see this trend toward carbon neutrality as an inflection point for our times. Our policy is thus to enhance the earning power of each of our businesses while carefully assessing both opportunities and risks in this rapidly changing market environment. As we work toward medium- to long-term growth, we will be pursuing growth strategies in the following three major fields.

#### 1. Addressing the electrification of vehicles

Our first growth strategy will be to address the electrification of automobiles. We will focus on expanding sales of lithium-ion batteries for HEVs and research and development in electric vehicle (EV) batteries and next-generation batteries in anticipation of the growth of the market for EVs. Based on a variety of surveys, we predict that HEVs will be the mainstream of electrification through the mid-2030s, and that EVs will come into the mainstream after that, though there will be differences in terms of timing and region. To date, we have worked to boost our automotive lithium-ion batteries business under our policy of concentrating resources on HEVs during the term of our Fifth Mid-Term Management Plan. As a result, we have

#### Growth strategies in three fields for medium- to long-term growth



achieved steady growth, including a return to profitability in fiscal 2021. Going forward, we expect to expand our annual production capacity of lithium-ion batteries for HEVs to 70 million cells in the latter half of the 2020s to steadily meet demand from new car manufacturers.

Additionally, we will allocate resources to EV batteries, a sector that is expected to expand in anticipation of future market changes. In April 2022, an organization specializing in the development of lithium-ion batteries for EVs was set up within the Lithium-ion Batteries Business Unit to accelerate R&D in this area. We are accelerating R&D in high-performance, high-safety, and high-quality EV batteries for delivery in the next few years, making the most of the technologies and platforms we have developed to date and directly incorporating the requirements of new car manufacturers. At the same time, we will also engage in R&D into practical application of next-generation batteries with a view to the future.

#### 2. Increasing share and profitability in the ASEAN region where our strength lies

Our second growth strategy will be in the overseas lead-acid battery market, where we will focus on expanding sales in the ASEAN region. Although the electrification of automobiles is advancing, gasoline-powered vehicles are expected to remain the norm in emerging countries for the foreseeable future, particularly in the ASEAN region, as motorization progresses with economic growth and the number of vehicles owned increases. For the time being, we will continue our strategy in emerging markets, focusing primarily on lead-acid starter batteries for automobiles and motorcycles.

In emerging markets, the issue is how well we can maintain and improve our advantage. The Group has been

expanding its business in Asia since the 1960s in alignment with the overseas expansion of Japanese automakers and has increased its market share. Today, in addition to 15 manufacturing and sales sites in the ASEAN region, we have also established a technical center in Thailand for technical development so that we can quickly identify regional needs and reflect them in our products. Leveraging the relationships we have cultivated with Japanese automakers, we will further strengthen our sales force and bring to market high-value-added products such as batteries for vehicles with start-and-stop systems (ISS: idling stop systems) that allow us to differentiate, leading to improved profitability. Taking advantage our global information network, one of our strengths, we will direct our resources to areas of positive investment efficiency.

#### 3. Offering products and services that contribute to achieving carbon neutrality

Our third growth strategy is to meet the growing demand for storage batteries, which are essential to achieving carbon neutrality. Following the Japanese government's "Declaration of Carbon Neutrality by 2050," renewable energy is being introduced throughout Japan, and demand for storage batteries, which are indispensable for adjusting supply and demand on the power grid, is expected to grow in line with this trend. Companies are also beginning to install storage batteries as a means of managing energy at their business sites to achieve carbon neutrality. The main products of the industrial battery and power supply business are backup batteries and power supply units. However, to further expand our business in the areas of adjusting supply and demand on the power grid and energy management at business sites, we will utilize the lithium-ion battery technology





and expertise acquired through the development and production of automotive batteries to develop even more competitive products in this field going forward.

In addition, since storage batteries for backup use and for adjusting supply and demand on power grids are part of the power infrastructure, appropriate selection and installation as well as an emphasis on maintenance operations are important in ensuring stable operation and optimal control. We will thus be strengthening our business in creating services that will allow products to be used sustainably. We aim to establish a business model that generates continuous revenue by suggesting preventive maintenance and appropriate upgrades using AI, IoT, and other digital technologies once products are delivered.

Strengthen the management platform

Encourage ESG initiatives and use of digital technologies

E: Environment

To achieve sustainable corporate growth, it is important that we strengthen our business foundations through non-financial initiatives as well as, at the same time, through growth strategies in each business.

The Company recognizes that reducing the environmental burden of our business activities is an important social responsibility. In May 2021, we announced the "GY 2030 Long-Term Greenhouse Gas Target." As one of the initiatives aimed at achieving that target, in November 2021 we switched all of the electricity used at GS Yuasa's Kyoto Plant to substantially renewable energy sources. Further, in fiscal 2022 we introduced an Internal Carbon Pricing System (ICP System). By converting CO<sub>2</sub> emissions associated with the deployment of equipment into cost equivalents and adding them to our investment decisions, we will promote low-carbon investments, including the introduction of energy-saving equipment and renewable energy, while also identifying the impact of CO<sub>2</sub> reductions. The Company is committed to achieving carbon neutrality through our efforts to reduce CO<sub>2</sub> emissions in our operations.

S: Society

We will also focus our efforts on strengthening human capital. We seek "autonomous-minded human resources", people who can think for themselves, act on their own initiative, and deliver results. We believe that new value is created only when employees at each site practice "Innovation and Growth," innovating business processes unbound by conventional methods and practices, developing new technologies, entering new markets, and so on.

To advance the development and success of these kinds of human resources, we are working to create a workplace environment and put in place programs that allow for diverse, flexible work styles. In particular, we believe that work style reforms will eventually lead to the creation of varied types of corporate value. We would like to make further progress in creating an environment that encourages flexible work styles, for example remote work utilizing digital technology.

To keep pace with the rapidly changing business environment, diversity and inclusion in all phases of corporate activity is a top priority. In the area of empowering women, in particular, we will expand opportunities for women to play an active role by simultaneously supporting both "career development" and "work-life balance", working to increase the percentage of women in management and leadership positions.

We speak of "work-life balance," but I would like to continue to promote the development of an environment in which "life" takes priority, and we can refer to it as "life-work balance."

G: Governance

While the results of assessments show that, in general, we are able to ensure the effectiveness of our Board of Directors—a key governance theme—we continue to improve on issues singled out each year, primarily based on recommendations from our outside directors. At executive study sessions for those at the corporate officer, officer level and above, discussions are held about how "Innovation and Growth" can contribute to the environment in which the Company currently operates. We believe that another important issue in strengthening our ESG initiatives going forward is to consider a compensation system that is linked to ESG indicators.

In fiscal 2021, we launched a company-wide Business Continuity Plan (BCP) project in response the recent increase in supply chain disruptions and natural disasters. We are moving ahead to diversify risk across multiple locations, taking into account both production efficiency issues and the impact on our customers.

Use of digital technology that contributes to business transformation and value creation

Another area of emphasis as we strengthen our business foundation is the advancement of digital transformation (DX). We are promoting the use of AI, IoT, and other digital technologies in various operations, including the introduction of a battery demand forecasting system, an energy management project to optimize energy usage in factories, and a project to improve productivity through the digital transformation of the R&D department. In addition, employees are provided DX training to improve their basic knowledge, and ideas are solicited from



those on the front lines as part of the effort to achieve DX.

That said, even the use of cutting-edge digital technology is meaningless unless it leads to business model innovation and new value creation. We intend to continue making proactive use of digital technology to bring about change, both internally and externally, while keeping a close eye on these issues.

To our stakeholders

Striving to practice "ambidextrous management" with an eye to the future

I have recently come to realize, once again, the importance and the difficulty of "ambidextrous management." For a company to continue creating new value for society, it is important that it "digs deep" to refine the competitiveness of its existing businesses, while at the same time engaging in an ongoing "search" so that it can expand into new business opportunities. In our case, new business opportunities include, for example, batteries to succeed lithium-ion technology and energy management, as well as resource recycling.

Funding needed to explore these new areas must be generated by existing businesses. That said, existing businesses must also "dig deep." It is important that, with the understanding of our stakeholders, we strike

a balance between how much of our management resources—including earnings from existing businesses—we invest in new areas, and how much is allocated to strengthening and expanding existing businesses.

There are no fixed rules in this process, and not all seeds we sow will bear fruit, no matter how certain we are. While there have been many innovations over the course of the GS Yuasa Group's 100-plus-year history, there have, naturally, also been failures. It is because our predecessors continued to take on new business challenges, nourished by their failures, that the Group is what it is today. We will continue to take on the challenge of new business, feeding off the failures we have experienced in order to succeed.

I believe it is my mission as the top management leader to clearly articulate what the Company values and what we hope to accomplish, and by doing so, to strike a chord with our stakeholders. Going forward, we will continue to listen sincerely to and engage in an ongoing dialogue with our stakeholders as we take on the challenge of creating value toward the realization of a prosperous society. I ask for your continued understanding and support in that effort.

August 2022

President and Representative Director, GS Yuasa Corporation



# CFO Message

## Striving for optimal allocation of capital from a medium- to long-term perspective while aiming to increase corporate value

### The CFO's Mission

#### Emphasizing compassion along with a calm perspective

I assumed the role of Chief Financial Officer (CFO) in June 2022. I joined Yuasa Corporation prior to the corporate merger, and was first assigned to the Information Systems Division, where I developed a view of the Company as a whole through its systems. For about the next 20 years, I was involved in practical work, primarily in accounting, finance, taxes, and other areas. When I was seconded to one of our Group companies, I

was also involved in our cutting-edge storage battery business, including a joint project with a major trading company. I hope to make use of those varied experiences in my work as CFO going forward.

The basic mission of the CFO is to support the sustainable growth of the company from a finance viewpoint. Maintaining a long-term perspective, I hope to steadily enact capital policies and financial strategies that help enhance our corporate value and lead to our contributing to society through "Innovation and Growth."

As the chief financial officer working to optimize the allocation of management resources, one must maintain a dispassionate view in identifying risks and

opportunities, and be able to clearly indicate when no means no. That said, I also emphasize compassion. At our kickoff meetings at the start of each term, I always tell my employees that I want them to have compassion. This means more than simply being kind—it means using one's imagination to put oneself in the other person's shoes. The Financial Division is not involved in directly generating profits, or in making products. This is why it is even more important that we understand the growth strategies of each business unit, and that we listen to feedback from those working on the front lines of development, production, and sales. We need to implement the most appropriate financial policies only once we have imagined what they are struggling with and how they feel. I myself hope to be a CFO who maintains his composure but nevertheless always remembers to have compassion.

### Financial results and financial condition

#### Ensuring completion of a solid foundation and addressing the final fiscal year of the Mid-Term Management Plan

Although the business environment in fiscal 2021 was made difficult by the ongoing global COVID-19 pandemic, the Group's consolidated net sales reached a record high of 432.1 billion yen, thanks in part to significant sales growth in the automotive lithium-ion batteries business as well as increased sales of lead-acid batteries in overseas markets. Operating profit was 22.7 billion yen, a decrease due to the significant impact of soaring raw material prices and rising logistics and labor costs, mostly overseas. Given this context, we consider it very significant that our automotive lithium-ion batteries business, which is positioned as a strategic field, has turned profitable and has entered a growth phase.

In terms of cash flow, operating cash flow decreased from 35.8 billion yen in the previous fiscal year to 12.9 billion yen due to an increase in inventories and trade receivables. Meanwhile, investing cash flow increased by more than 10 billion yen from the previous fiscal year to a negative 30.2 billion yen, mainly due to capital investment to increase production of automotive lithium-ion batteries. As a result, free cash flow in fiscal 2021 was a negative 17.3 billion yen, a significant drop from the previous fiscal year, and the Company used cash and cash equivalents as well as borrowing to pay dividends and other expenses.

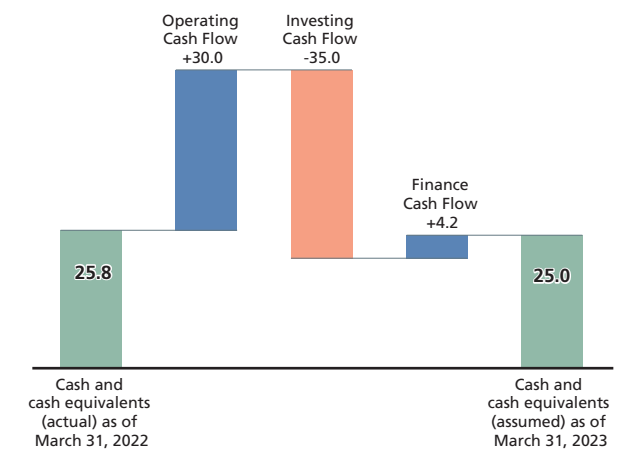
That said, this deterioration in cash flow is temporary, and is due to the significant impact of supply chain

disruptions during the COVID-19 pandemic. We hope to return conditions to normal as quickly as possible by increasing profits in each business and by working to monitor and optimize inventories.

In addition, the Cost Management Department has been working to make costs in Japan and overseas more visible. To promote cost reductions going forward, we have launched a Value Engineering (VE) initiative, and will work to raise awareness in development and on the manufacturing front lines.

Although the business environment is expected to remain challenging in fiscal 2022, we foresee achieving our sales and profit targets by steadily implementing our growth strategies for each business. We plan for capital investment and R&D expenses of 32.0 billion yen and 13.0 billion yen, respectively, even higher than in fiscal 2021. Interest-bearing debt is expected to increase to around 90.0 billion yen, but we expect to be able to maintain an equity ratio of 42% or higher, an indicator of financial soundness.

Statement of assumed cash flows (Fiscal 2022)  
(Billions of yen)



### Capital efficiency

#### Further spreading ROIC management

Bringing a medium- to long-term perspective to improving capital efficiency is one of the CFO's key missions. To generate returns that exceed the cost of capital, we have introduced return on invested capital (ROIC) as a key performance indicator (KPI), and are working to boost earning power by enhancing asset efficiency in each business unit throughout the Group.

Partly as a result of repeated executive training



**Hiroaki Matsushima**

Director and  
Chief Financial Officer,  
GS Yuasa Corporation



programs held to spread the concept of ROIC management, there has been considerable progress in raising awareness of capital efficiency at the senior management level. Meanwhile, we are gradually working to inculcate understanding among mid-level and frontline employees through in-house education and training programs, but it can be difficult for them to constantly be aware of capital costs in the course of their day-to-day work.

We have thus begun efforts to establish ROIC throughout the organization through collaboration with Total Quality Management (TQM) activities, which have been routinely conducted in each department of the Company for some time now. We will link these TQM improvement efforts with ROIC, allowing employees to see how achieving specific items is tied to an equivalent improvement in ROIC values, and creating a virtuous cycle in which efforts by employees in each department to put these issues into practice lead to improved ROIC.

**Investment and Risk Management**

**Managing risk while maintaining proactive growth investments**

**Two committees ensure the validity of investment decisions**

Further increasing our ability to earn as a Company will require continued growth investments under the Sixth Mid-Term Management Plan, scheduled to start in fiscal 2023. To ensure the validity of investment decisions, in addition to the existing Capital Investment Committee, in fiscal 2021 we established the Business Assessment Committee, a new internal review body.

The Capital Investment Committee, comprising primarily executives from the development and manufacturing divisions, meets once a month, as a rule, to examine the appropriateness of capital investment proposals of 100 million yen or more submitted by the business divisions. The committee deliberates and considers each proposed deal in terms of the validity of its objectives, the recoverability of the amount to be invested, and the operational status and investment impact of past capital investments. Recently, investment decisions are also incorporating assessments of environmental factors such as reductions in CO<sub>2</sub> emissions.

The Business Assessment Committee is led by the Corporate Strategic Planning Office and comprises members with diverse expertise and skills from the Legal Affairs and Technology Development divisions and others, in addition to the Financial Division. The Committee also

meets monthly to discuss investment deals other than capital investments, including mergers and acquisitions, and also examines the rationality, suitability, and recoverability of other large deals. We also perform solid risk checks from a variety of perspectives, validating issues and problems involved in the compliance and technical aspects of aggressive growth investing.

**Introducing an Internal Carbon Pricing Scheme to drive more active low-carbon investments**

In addition to finance, I am also in charge of the CSR Division. Customers and investors also consider non-financial initiatives important from the perspective of increasing corporate value, and I consider it my mission to inform stakeholders about the Company's activities in this area.

In particular, we recognize that carbon neutrality, which has become a major global trend, is a tremendous growth opportunity for our business. At the same time, we also recognize that we need to be aware of the risks involved, including the increased costs required in reducing CO<sub>2</sub> emissions in our business activities. Since announcing its endorsement of the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in fiscal 2019, the Group has conducted studies on climate change risks for its domestic and overseas sites, with input from experts. In May 2022, the Group made a number of new disclosures, including "Risks and Opportunities in Climate Change."

Additionally, under the "GY 2030 Long-Term Greenhouse Gas Target", announced in May 2021, we have set out a target of reducing greenhouse gas emissions from our Group's business activities by 30% or more by fiscal 2030 from fiscal 2018 levels. Since achieving this target will require low-carbon investments, including the deployment of energy-saving equipment and renewable energy, an Internal Carbon Pricing Scheme (ICP scheme) was introduced in fiscal 2022. Going forward, we will advance a variety of CO<sub>2</sub> reduction methods in each of our businesses with the goal of achieving this target.

**Simultaneously promoting investments in human capital and in DX**

We are also emphasizing human capital as the Company's greatest management resource. It goes without saying that making solid investments in human resources—including hiring and training outstanding personnel and creating a comfortable working environment—and linking those investments to high returns is fundamental to corporate management.

Looking into the future, however, the declining birthrate and aging population are expected to make it increasingly difficult to secure all types of human

resources. We thus recognize the extreme importance of simultaneously securing and training a diverse workforce and streamlining operations using advanced IoT and digital technologies, or what is known as a digital transformation (DX). This is not simply a matter of replacing analog tasks with digital ones. Digital technology needs to be solidly incorporated in each individual's work in order to achieve efficiency and reforms in an innovative yet grounded manner.

**Shareholder returns**

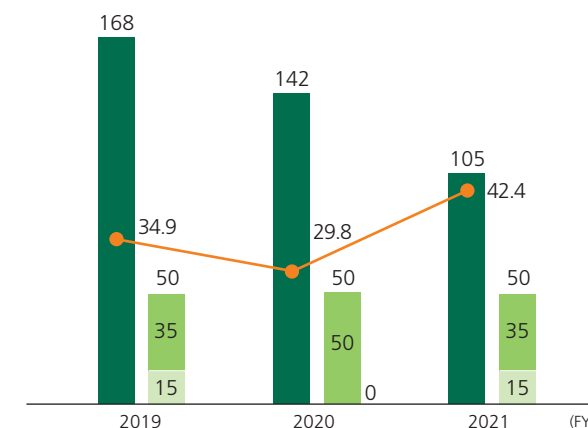
**Continuing stable shareholder returns by further expanding earnings**

We have positioned the return of profits to shareholders as an important management issue. As a general policy, we determine the level of returns based on comprehensive consideration of consolidated earnings results, internal reserves used for future growth, our financial standing, and other factors, and aim for a total payout ratio of 30% or more. Note that in the interests of our shareholders, the total payout ratio is calculated based on profit before amortization of goodwill.

Although profit declined in fiscal 2021, from the perspective of providing stable dividends, we instituted a dividend of 50 yen per share, the same amount as in the previous fiscal year. Note that for fiscal 2022, we plan to pay an interim dividend of 15 yen per share and a fiscal year-end dividend of 35 yen per share, for a full-year dividend of 50 yen, assuming we achieve

**Indicators per share**

Basic earnings per share (EPS) (Yen) Interim dividend (Yen)  
Year-end dividend (Yen) Total payout ratio (%)



our profit forecast.

More than 15 years after the corporate merger, our financial situation has improved dramatically and our business has become more profitable. That said, we also recognize the need to further improve our earning ability. Going forward, we will continue striving to expand earnings and maximize corporate value from a medium- to long-term perspective while improving capital efficiency. We ask for the continued understanding and support of all of our stakeholders in this effort.

August 2022

Director and Chief Financial Officer, GS Yuasa Corporation



# About ROIC Management

## Review of Fiscal 2021

Beginning in fiscal 2019, the Group set out improving capital efficiency as one financial policy under its Fifth Mid-Term Management Plan. As part of that policy, we are aiming to improve return on invested capital (ROIC), established as a key performance indicator (KPI).

In fiscal 2021 ROIC remained roughly flat. Our operating profit ratio to net sales declined, primarily as a result of the impact of rise in raw material prices in spite of an increase in sales of lithium-ion batteries for HEVs and lead-acid batteries in the "automotive batteries (overseas)" segment. As a result, Company-wide ROIC dropped from 12.0% in the previous fiscal year to 9.7%.

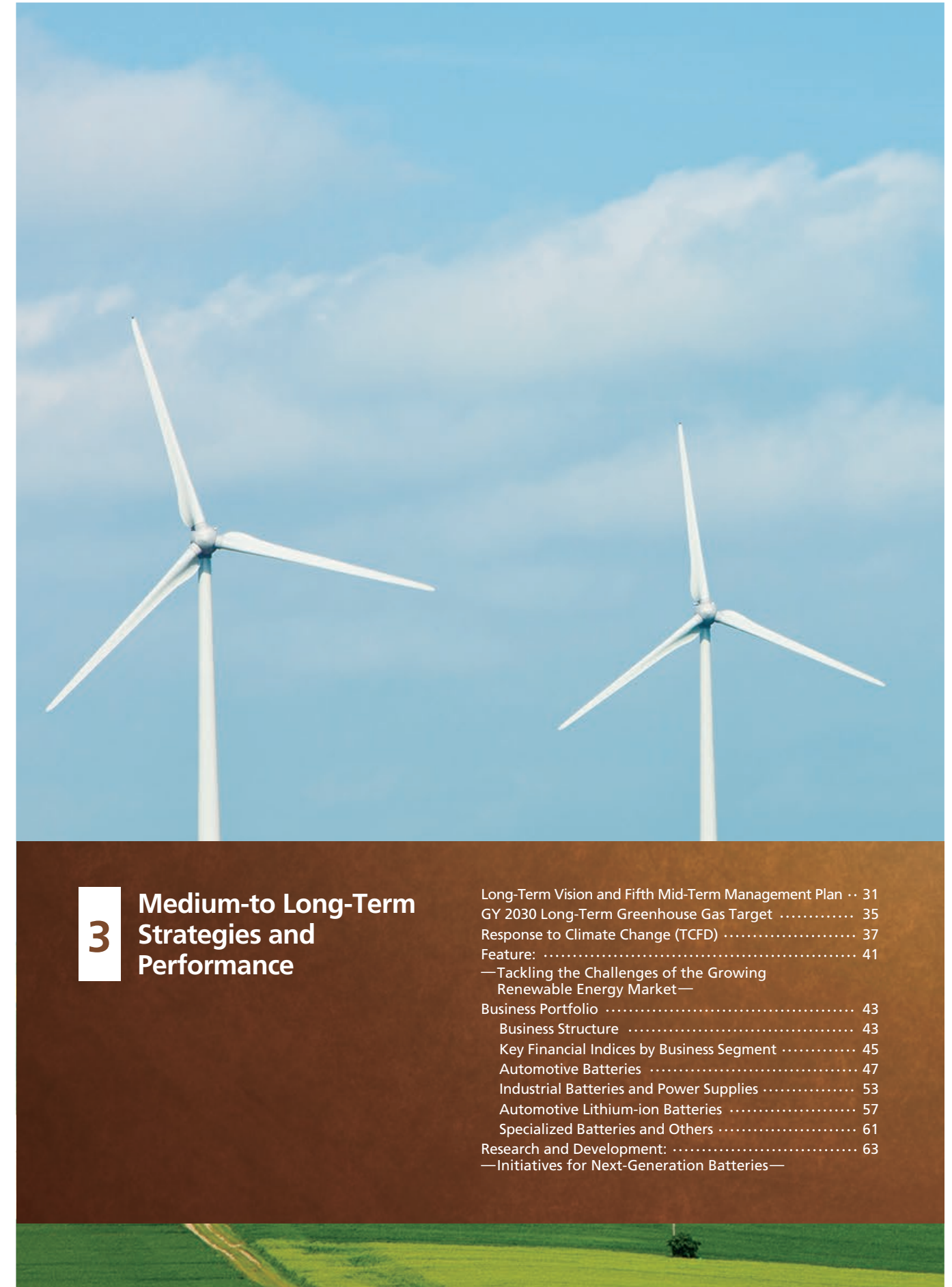
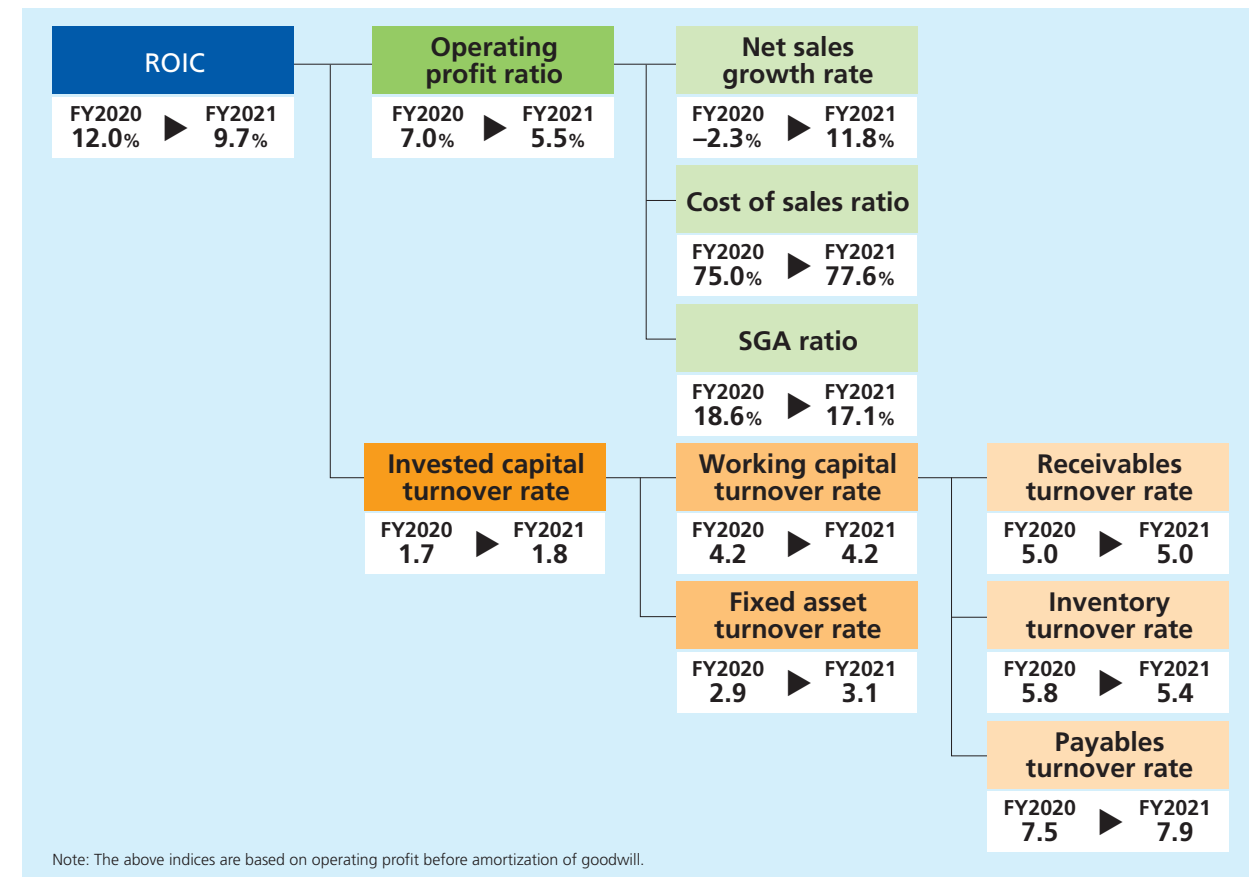
By business sector, in the automotive batteries business, ROIC declined due to large-scale capital investment and an increase in inventories due to the impact of production cuts by automakers. In the industrial batteries and power supplies business, ROIC declined as profitability deteriorated due to the inability to sufficiently pass on soaring raw material prices to selling prices, and a drop in the operation rate due to longer delivery times for parts and materials. In the automotive lithium-ion batteries business, we evaluate and manage

ROIC based on medium- to long-term trends rather than a single-fiscal-year comparison, given that there is significant upfront investment in growth sectors and variations from year to year.

## Efforts to spread awareness of ROIC management

We are working on activities to spread awareness through various measures at each level. In addition to holding several study sessions for management so far, we regularly transmit information via our in-house email publications. We are also working to transfer these concepts to management-class and frontline employees through TQM activities. Since 2021 we have called for improvement activities to be linked to ROIC when formulating departmental annual plans, and this has been incorporated even in establishing issues for employees. As a result, our employees are becoming aware of how improvements through TQM activities impact ROIC. Going forward, we will endeavor to further expand in-house education by continuing these initiatives.

## ROIC Tree



## 3 Medium-to Long-Term Strategies and Performance

- Long-Term Vision and Fifth Mid-Term Management Plan ... 31
- GY 2030 Long-Term Greenhouse Gas Target ..... 35
- Response to Climate Change (TCFD) ..... 37
- Feature: ..... 41
- Tackling the Challenges of the Growing Renewable Energy Market—
- Business Portfolio ..... 43
- Business Structure ..... 43
- Key Financial Indices by Business Segment ..... 45
- Automotive Batteries ..... 47
- Industrial Batteries and Power Supplies ..... 53
- Automotive Lithium-ion Batteries ..... 57
- Specialized Batteries and Others ..... 61
- Research and Development: ..... 63
- Initiatives for Next-Generation Batteries—



# Long-Term Vision and Fifth Mid-Term Management Plan (FY2019 – 2022) – Financial

**Long-Term Vision** Become an energy device company that continually creates new value

## Mid-Term Management Policy

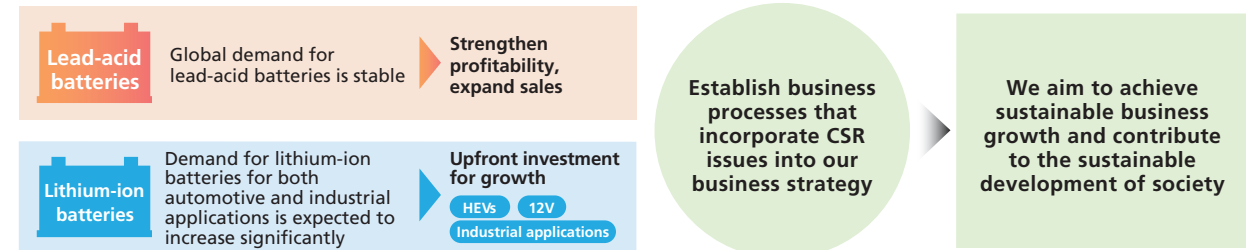
Based on the *Mono-Koto Zukuri* (product and service creation) concept, GS Yuasa will engage in strategic activities that lead to sustainable growth of both the lead-acid battery and lithium-ion battery businesses through creation of new value.

## Mid-term management targets

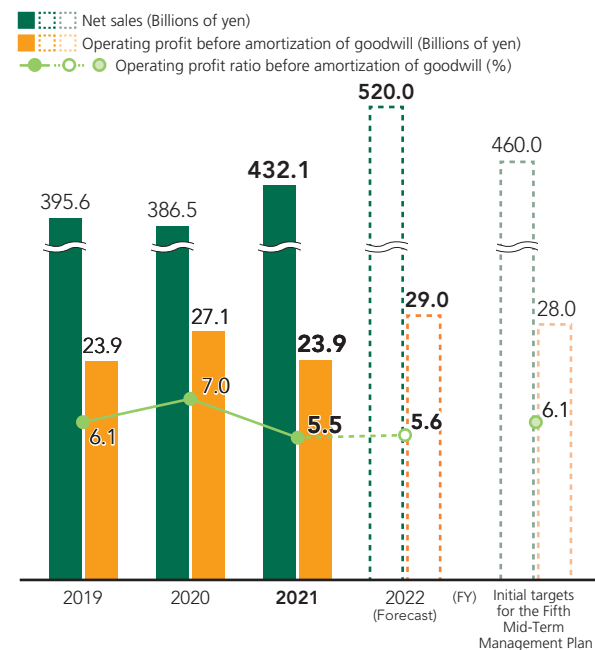
Net sales	460.0 billion yen or more	Interest-bearing debt to cash flow ratio*2	Less than 3 years
Operating profit before amortization of goodwill	28.0 billion yen or more	Equity ratio	Maintain at 45% or more
ROE (return on equity)	8% or more	Domestic lead price quote	300,000 yen / t
Total payout ratio*1	30% or more	LME	2,100 US\$ / t
		Exchange rate	110 yen / US\$

Note: The above indices are based on profit before amortization of goodwill (operating profit and profit).  
 \*1 The total payout ratio is before amortization of goodwill  
 \*2 Interest-bearing debts (including lease obligations) / Operating cash flow

## Key points



## Progress in mid-term management targets



Note: The Fifth Mid-Term Management Plan originally covered the period from fiscal 2019 to fiscal 2021. Due to the impact of the COVID-19 pandemic, however, we have excluded fiscal 2020 as a single-fiscal-year plan and changed the fifth plan to a four-year plan ending in fiscal 2022.

## Factors for differences between the initial forecast for fiscal 2022 and the Fifth Mid-Term Management Plan target

	Mid-term management targets	Initial forecast for fiscal 2022*3
Net sales	460.0 billion yen or more	520.0 billion yen
Operating profit before amortization of goodwill	28.0 billion yen or more	29.0 billion yen

- Factors for increase in sales and profit**
  - Launch of second plant for Blue Energy Co., Ltd.
  - Acquisition of the social infrastructure business of Sanken Electric Co., Ltd.
  - Convert our site in Turkey into a consolidated subsidiary
- Factors for decrease in sales and increase in profit**
  - Delivery completion of lithium-ion batteries for a large-scale wind power generation project (FY2020-2021)

## Changes in the market environment

	Mid-term management targets	Initial forecast for fiscal 2022*3
Domestic lead price quote	300,000 yen / t	341,000 yen / t
LME	2,100 US\$ / t	2,300 US\$ / t
Exchange rate	110 yen / US\$	120 yen / US\$

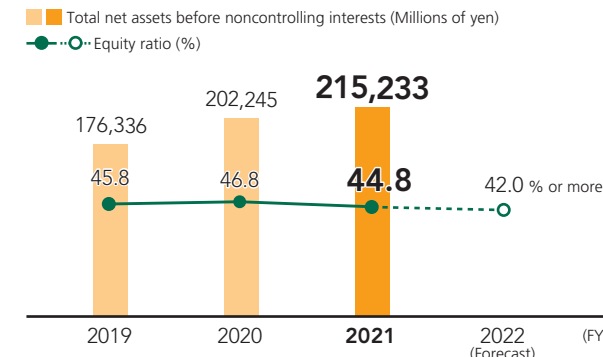
## Future outlook

As for the results for fiscal 2022, the final fiscal year of the plan, we expect to achieve our initial targets for both net sales and profit. The forecast net sales of 520.0 billion yen and operating profit before amortization of goodwill of 29.0 billion yen are expected to be the highest ever.

\*3 The initial forecast for fiscal 2022 is as of the announcement in May 2022.

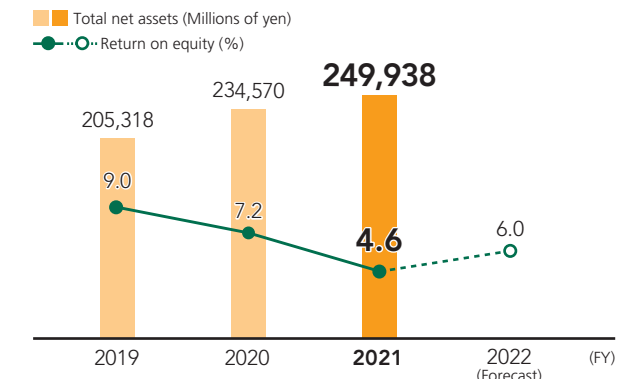
## Key financial highlights

### Total net assets before noncontrolling interests and equity ratio



Although total net assets before noncontrolling interests increased year-on-year due to, among other things, an increase in foreign currency translation adjustment caused by the depreciation of the yen, the equity ratio declined due to an increase in total assets caused by a significant increase in inventories.

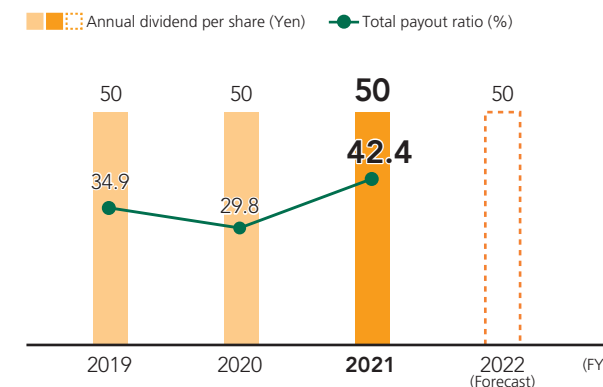
### Total net assets and return on equity (ROE)\*\*4



Due to a decline in the equity ratio and a decrease in profit, ROE declined year-on-year.

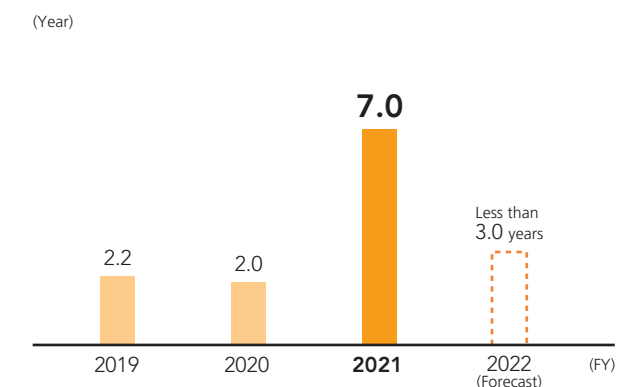
\*4 ROE has been calculated based on profit before amortization of goodwill.

### Annual dividend per share and total payout ratio



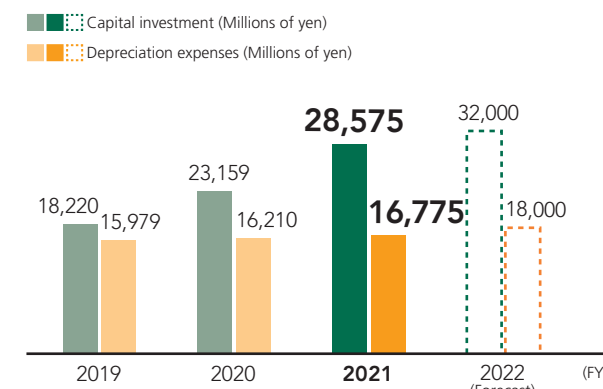
We have maintained a dividend of 50 yen per share, the same amount as the previous fiscal year, and the total payout ratio has increased compared to the previous fiscal year.

### Interest-bearing debt to cash flow ratio



The operating cash flow remained at +12.9 billion yen due to an increase in inventories and sales receivables, and the interest-bearing debt to cash flow ratio worsened year-on-year.

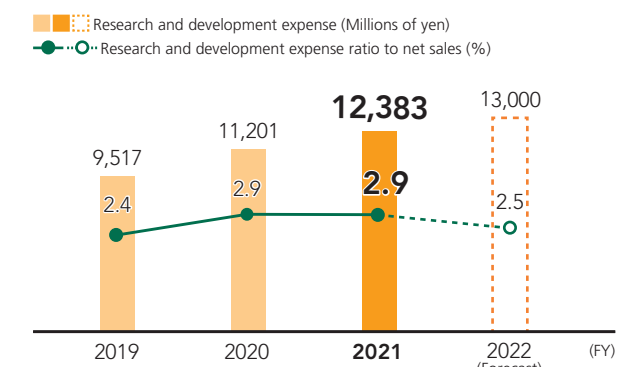
### Capital investment / Depreciation expenses\*\*5



Investment associated with the construction of Blue Energy's second plant increased substantially, resulting in an increase in capital investment compared to the previous fiscal year.

\*5 Aggregate only the amount of depreciation expenses related to tangible fixed assets as depreciation expenses.

### Research and development expense / Research and development expense ratio



Due to an increase in research and development expenses for automotive lithium-ion batteries, the research and development expenses increased by 1.2 billion yen year-on-year, and the research and development expense ratio to net sales was on par with the previous fiscal year.



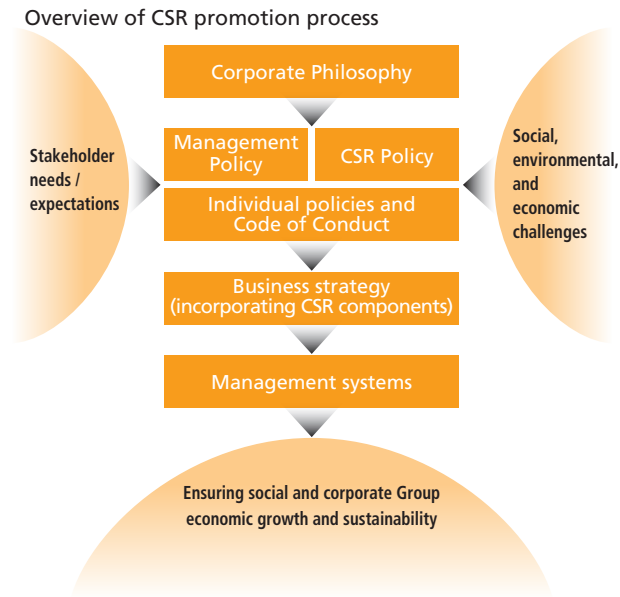
# Long-Term Vision and Fifth Mid-Term Management Plan (FY2019 – 2022) – Non-Financial

## Incorporating materiality (key CSR issues) into Group business strategy

To reflect CSR issues in our business strategy, the GS Yuasa Group analyzes and assesses the impact on business and the impact of our business on society and then clarifies the Group's materiality for items that need to be addressed. Regarding the specified materiality, as necessary we have set targets relating to our business strategy and, to achieve those targets, we have formulated concrete activity plans, the "materiality response plans," and key performance indicators (KPIs) to gauge progress in achieving the goals.

When incorporating materiality into business strategy, the CSR Committee formulates plans that will lead to enhanced stakeholder satisfaction through the strengthening of our corporate infrastructure and enhancement of corporate value.

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



### About the ESG bulletin in this report

The GS Yuasa Group has incorporated the materiality response plans in its business strategy and set the ESG targets shown below in its Fifth Mid-Term Management Plan. This report presents an overview of materiality items that are closely related to the Mid-Term Management Plan. Information about relevant details and other activities will be disclosed on the company's website.

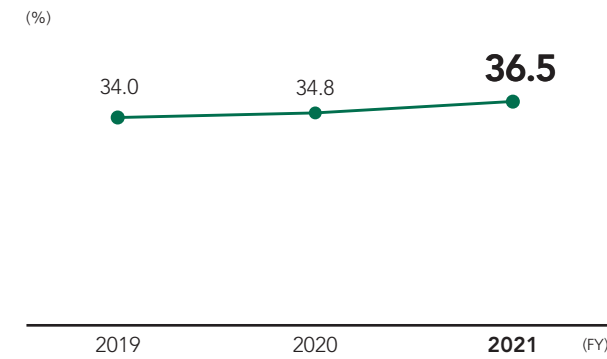
▶ <https://www.gs-yuasa.com/en/csr/>

## ESG targets included in the Fifth Mid-Term Management Plan and progress

Category	CSR issues for sustainable growth	Main plan details and targets	Corresponding material issues	Page describing activity status
E	<b>Environment</b> Contribute to sustainability of the global environment			
	<ul style="list-style-type: none"> <li>Development and global sales of environmentally considered products</li> <li>Reduction of environmental burden of business activities</li> </ul>	<ul style="list-style-type: none"> <li>Group-wide CO<sub>2</sub> emission reduction target: <b>6.0%</b> or more / 3 years</li> <li>Group-wide water use reduction target: <b>8.0%</b> or more / 3 years</li> <li>Ratio of environmentally considered products to overall sales: <b>35.0%</b> or more</li> </ul>	Developing and popularizing environmentally considered products	P.71
			<ul style="list-style-type: none"> <li>Promoting environmental protection</li> <li>Contribution to realization of low-carbon society</li> <li>Promotion of effective use of water resources</li> </ul>	P.73 P.74
S	<b>Social</b> Respect for human rights and contribution to society			
	<ul style="list-style-type: none"> <li>Respect for human rights</li> <li>Enhancement of productivity and motivation through human resources development</li> <li>Enhancement of work environments and occupational health and safety</li> <li>Products and information sharing that is reassuring to consumers</li> <li>Contribution to the addressing of societal issues with CSR procurement and reduction of procurement risks</li> </ul>	<ul style="list-style-type: none"> <li>Enhance human rights education and human rights risk management</li> <li>Nurture autonomous-minded human resources and establish groundwork for utilizing diverse human resources</li> <li>Promote measures to improve work-life balance</li> <li>Achieve group-wide quality improvement</li> </ul>	Respect for individuality	P.76
			Human resources development	P.77
			Enhancement of work environments and occupational health and safety	P.78
Provision of high-quality products			P.79	
G	<b>Governance</b> Promotion of fair, transparent, and swift group-wide governance			
	<ul style="list-style-type: none"> <li>Respect for international norms and compliance with laws of respective countries</li> <li>Protection of intellectual property</li> <li>Thorough management of confidential information</li> <li>Swift and appropriate management decision-making</li> </ul>	<ul style="list-style-type: none"> <li>Promote compliance education, preparation of legal information</li> <li>Contribute to elimination of counterfeit goods and bolster patent infringement prevention activities</li> <li>Management that is mindful of the corporate governance code</li> </ul>	Thoroughly fulfilling our CSR and ensuring compliance	P.96
			Respect and Protection for intellectual property	P.98
Strict management of confidential information			P.99	

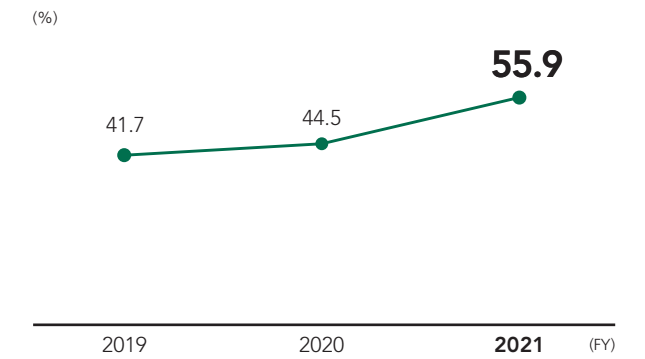
## Key non-financial highlights

### Percentage of environmentally considered products in total sales of all products (global)



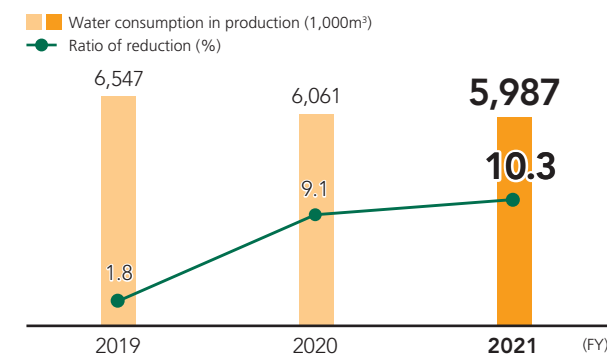
We were able to steadily increase sales following recovery from the impact of the COVID-19 pandemic.

### Ratio of recycled lead used as lead raw material in lead-acid batteries



The ratio increased substantially due to a rise in the use of recycled lead in some overseas Group companies in China, Turkey, Indonesia, and Thailand.

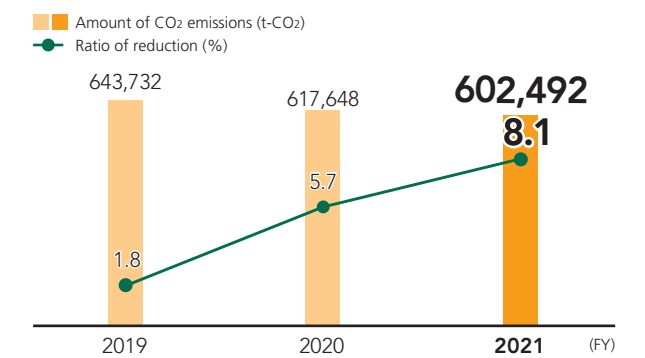
### Water consumption in production and ratio of reduction\*1 (global)



The ratio of reduction increased as Group companies in both Japan and overseas continuously promoted the use of recycled water.

\*1 Compared with FY2018

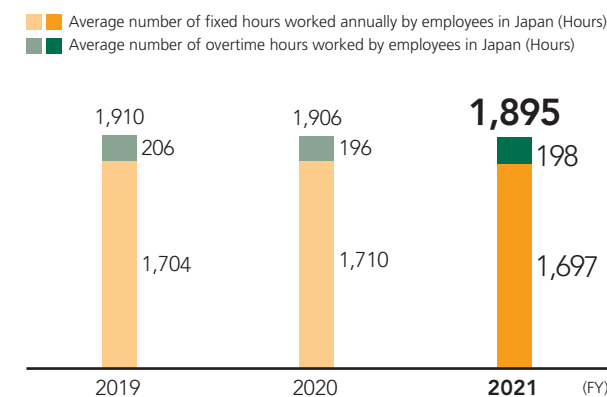
### CO<sub>2</sub> emissions and ratio of reduction\*2 (global)



The ratio of reduction increased as a result of the promotion of Group-wide activities following the launch of the Energy Saving and Renewable Energy Project in fiscal 2021.

\*2 Compared with FY2018

### Annual working hours\*3 (Japan)

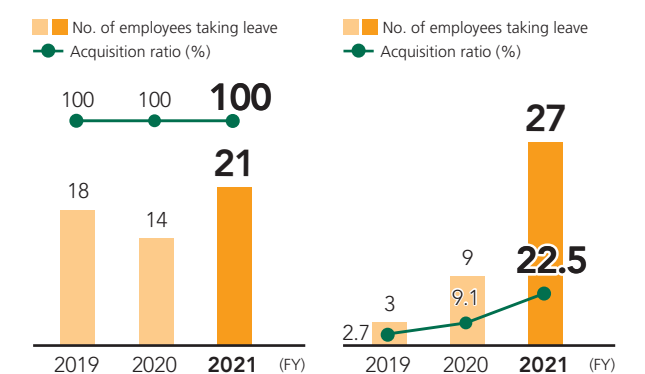


Monitoring of overtime by ordinary employees showed that there were no instances of excessive working hours in violation of labor agreements and that appropriate working-hours management was being implemented.

\*3 Employees do not include personnel on leave or those transferred to workplaces overseas.

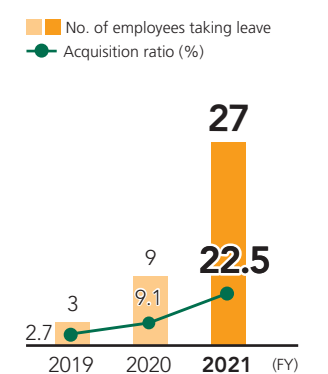
Period: January – December  
 Annual working hours = Average number of fixed hours worked annually by employees in Japan + Average number of overtime hours worked by employees in Japan

### Women's rate of taking childcare leave



We have actively provided information to employees, both men and women, to make use of childcare leave system, for example by conducting the Information Exchange Meetings for Work-childcare Balance. As a result, the rate of taking childcare leave for men increased substantially.

### Men's rate of taking childcare leave





# GY 2030 Long-Term Greenhouse Gas Target

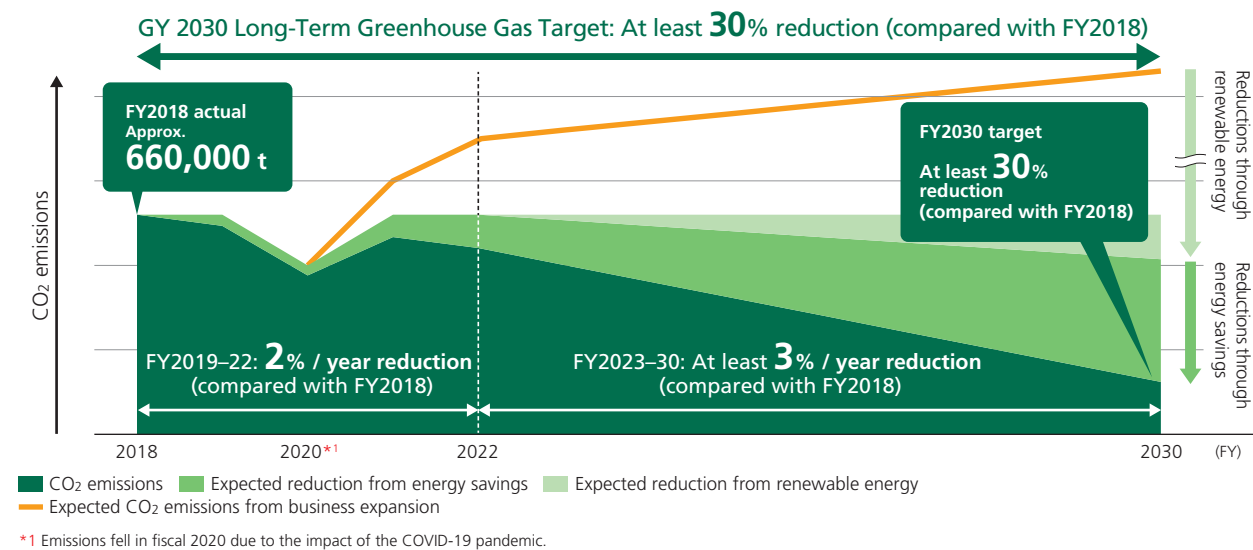
## Overview

We recognize climate change associated with global warming to be an important issue for society and are thus promoting the reduction of CO<sub>2</sub> emissions from our business activities. In May 2021 we established the "GY 2030 Long-Term Greenhouse Gas Target," our goal for reducing CO<sub>2</sub> emissions through fiscal 2030. To fulfill

our responsibilities as a company in preparing for the transition to a decarbonized society, we are engaged in a variety of measures aimed at reducing CO<sub>2</sub> emissions from our business activities by at least 30% versus fiscal 2018 by fiscal 2030.

Target	Reduce FY2030 CO <sub>2</sub> emissions by at least <b>30%</b>
Base year	FY2018
Period	<b>12 years</b> (FY2019 – 2030)
Rate of reduction	FY2019 – 2022: <b>6%</b> (2% / year)    FY2023 – 2030: At least <b>24%</b> (at least 3% / year)

## Road map for reducing CO<sub>2</sub> emissions



## Three measures for achieving the target

**Measure 1 Promote energy-saving measures**

- Upgrade to energy-saving equipment
- Develop prescriptions for efficient charging methods and develop new ones
- Implement peak cut / peak shift\*3 practices

**Measure 2 Captive consumption of renewable energy**  
(solar power generation, etc.)

- Estimate amount of power generated onsite and consider initial investment and use of the PPA\*4 model
- Deploy and conduct validation tests on own products (ESS\*5, etc.)

**Measure 3 Procure renewable energy**

- Purchase electric power that uses renewable energy
- Utilize emissions trading

\*3 Peak cut: Reducing electric power usage during peak hours at factories, etc.; Peak shift: Shifting the hours of electric power usage at factories, etc.  
 \*4 Acronym for Power Purchase Agreement, an agreement between the power generator and the consumer for the sale of electric power  
 \*5 Energy Storage System

## Examples of initiatives to date

**Measure 1 Reduction of energy consumed by air-conditioning equipment by heat-shield painting of Kyoto Plant rooftop** (Japan)

We are making an effort to reduce the amount of energy consumed by air-conditioning equipment by heat-shield painting of our Kyoto Plant's rooftop, which restrains the rise of indoor temperatures. In fiscal 2019 energy consumption was reduced by about 170 MWh in the building that underwent heat-shield painting; this was the equivalent of saving about 10% of the building's electricity consumption.

Before painting      The roof of the plant after heat-shield painting

**Measure 3 100% shift to electricity derived from renewable energy sources at Kyoto Head Office Plant** (Japan)

On November 1, 2021, GS Yuasa concluded an agreement with Kansai Electric Power Co., Inc. to switch all the electricity used at the Kyoto Plant, which amounts to about 100 GWh / year, to electricity derived 100% from substantially renewable energy using non-fossil certificates.\*6

As a result of this shift, the ratio of electricity derived from renewable energy sources used at business sites in Japan is expected to reach 30% (compared to result in fiscal 2020), and CO<sub>2</sub> emissions are estimated to drop by the equivalent of 50,000 t.\*7

\*6 Certificates separating the non-fossil fuel value of electricity generated from non-fossil energy sources (methods of generating electricity without using such fossil fuels as natural gas, coal, and oil).  
 \*7 Calculated from the fiscal 2016 CO<sub>2</sub> emissions coefficient, which is GS Yuasa's standard.

## TOPIC

### Conclusion of sustainability-linked loan agreement

On July 19, 2021, the Company concluded a sustainability-linked loan\*2 (SLL) agreement with MUFG Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited, the Bank of Kyoto, Ltd., and Shiga Bank, Ltd. In line with the "GY 2030 Long-Term Greenhouse Gas Target", we set the sustainability performance target relating to the relevant indicator as a "reduction of CO<sub>2</sub> emissions by 15% from the fiscal 2018 level by fiscal 2025 as a milestone toward a reduction by at least 30% from the fiscal 2018 level by fiscal 2030." By donating the interest benefits gained by meeting this target to the Kyoto Citizens Environment Fund, in addition to the enhancement of

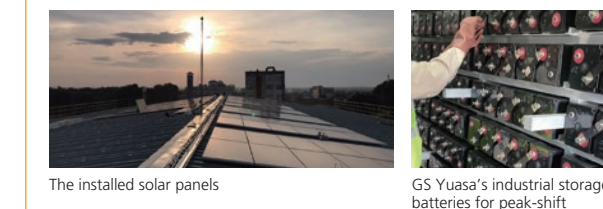
our corporate value through ESG-related initiatives, we aim to contribute to the sound and sustained development of the regional community.



\*2 SLLs are loans in which the financial institution evaluates the extent to which the borrowing company achieves its targets toward the solution of environmental and social issues and, depending on the extent of achievement, the borrowing company acquires benefits, such as lower interest rates.

### Measure 2 Deploying solar power generation

**Vietnamese site (GS Battery Vietnam Co., Ltd.)**  
 In December 2020 GS Battery Vietnam installed and began to operate solar power generation systems incorporating our Group's industrial storage batteries. These solar power generation systems also contribute to the reduction of CO<sub>2</sub> emissions by supplying electricity from the storage batteries and thereby covering part of the nighttime power consumption. In addition, the generated electricity is consumed as office electricity, and a contract has been concluded to sell surplus electricity to an electric power company.



### Blue Energy Second Plant

Blue Energy Co., Ltd. has installed a solar power generation system with a rated capacity of 250 kW on the roof of its second plant, which began operations in April 2022. The generated electricity is wholly used inside our Osadano Plant including its second plant. As a result, CO<sub>2</sub> emissions will be reduced by an estimated 162 t-CO<sub>2</sub> / year.





# Response to Climate Change (TCFD)

The Group recognizes that climate-related issues are one of the important management issues and, in December 2019, we announced its support for the Task Force on Climate-related Financial Disclosures (TCFD) recommendations and are working on climate-related information disclosure based on the TCFD framework. In fiscal 2021, we launched a project to integrate climate-related risks and opportunities into our future business plans. The climate change scenarios used in the analysis are the 1.5°C scenario and the stated policies scenario (equivalent to the 3°C scenario). We devised strategies based on the short-term (fiscal 2025), medium-term (fiscal 2030), and long-term (fiscal 2050) time axes.



## Governance

Environmental issues (including climate change) are positioned as important management issues for the Group, and the CSR Committee, which is chaired by the director in charge of CSR, formulates and deliberates on environment-related policies, targets, and important topics. The details of deliberations are reported to the Executive Conference, which is headed by the president and has the relevant officers as members.

Topics determined in the Executive Conference to be of material significance are discussed by the Management Meeting and then approved by the Board of Directors. In addition, the status of responses to formulated environmental policies and objectives is reported to individual bodies, which monitor and manage progress.

### [Governance structures relating to climate-related issues]



### [Examples of Matters Discussed by or Reported to the Board of Directors and Management Meeting]

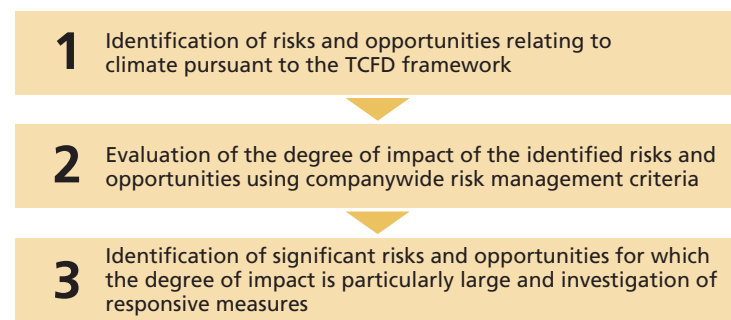
- Formulation of environmental targets on the Fifth Mid-Term Management Plan
- Endorsement of the recommendations of the TCFD
- Formulation of the Fundamental Environmental Policy
- Formulation of long-term environmental target (GY 2030 Long-Term Greenhouse Gas Target) and others

## Risk management

Risks and opportunities are identified and evaluated through the process described on the right.

Identified risks and opportunities and the responses to them are managed under the governance structures including the CSR Committee.

In fiscal 2021, each business division and the Head Office Corporate Management Division established a project team to conduct companywide analysis of scenarios and formulation of strategies.



## Strategy

### <Assumed conditions>

[Time Axis]	Short term	Medium term	Long term
End year	2025	2030	2050
Reason for adoption	Periods of the Fifth (FY2019–2022) and the Sixth (FY2023–2025) Mid-Term Management Plans	Period of the GY 2030 Long-Term Greenhouse Gas Target and achievement of SDGs	1.5°C target achievement period

### [Main Scenarios Used in Scenario Analysis\*1]

Temperature increase	Main scenarios used	Overview
1.5°C	IEA*2 Net Zero Emissions by 2050 Scenario (NZE)	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*3 RCP*4 2.6 Scenario and SSP*5 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)	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

\*1 Scenario analysis uses the scenarios of public agencies and may differ from actual future social conditions.  
\*2 International Energy Agency  
\*3 Intergovernmental Panel on Climate Change  
\*4 Representative Concentration Pathways  
\*5 Shared Socioeconomic Pathways

### [Social conditions under scenario]

			Through 2025 (short term)	Through 2030 (medium term)	Through 2050 (long term)	
1.5°C scenario	Operations	Social demand for emissions reduction	-20%	-40%	-100%	
		Carbon price	\$75 / t-CO <sub>2</sub>	\$130 / t-CO <sub>2</sub>	\$250 / t-CO <sub>2</sub>	
	Automotive related business	Changes in the automobile market	<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>	Ratio of EVs, PHEVs, and FCVs*6 in passenger vehicles (global)		
				<ul style="list-style-type: none"> <li>Sales volume: 64% (1.3 times)</li> <li>Ownership: 20% (1.6 times)</li> </ul>	<ul style="list-style-type: none"> <li>Sales volume: 100%</li> <li>Ownership: 86% (2.1 times)</li> </ul>	
	Industrial battery and power supply related business	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>	Ratio of EV two-wheeled and three-wheeled vehicles (global)		
				<ul style="list-style-type: none"> <li>Sales volume: 85%</li> <li>Ownership: 54%</li> </ul>	<ul style="list-style-type: none"> <li>Sales volume: 100%</li> <li>Ownership: 100%</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-ion 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*7	<ul style="list-style-type: none"> <li>Needs for products adapted to a recycling-oriented society will increase year-by-year</li> </ul>			
		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 about approximately 0.3 m</li> <li>The frequency of intense storms in the vicinity of Japan will increase</li> </ul>			
	Industrial battery and power supply related business	Storm and flood damage, storm surges	<ul style="list-style-type: none"> <li>Expansion of business relating to disaster countermeasures</li> </ul>			

\*6 EV: Electric Vehicle; PHEV: Plug-in Hybrid Electric Vehicle; FCV: Fuel Cell Vehicle  
\*7 An economic mechanism for the circulation of resources without waste. Positioned as a medium- to long-term economic growth policy, particularly in European countries.



# Response to Climate Change (TCFD)

## <Risks and Opportunities>

1.5°C scenario	Operations	<b>Introduction of carbon tax and renewable energy</b> <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 Under the 1.5°C scenario, targets for a major reduction of CO <sub>2</sub> will be required and carbon taxes will be introduced to achieve carbon neutrality. Cost increases are expected due to the introduction of energy-saving equipment and renewable energy to reduce CO <sub>2</sub> emissions in order to achieve carbon neutrality.
	Automotive related business	<b>Opportunity</b> Higher demand for batteries in conjunction with increased sales and ownership of passenger vehicles <b>Starting batteries and batteries for auxiliary equipment</b> <b>Opportunity</b> Higher demand for batteries for auxiliary equipment used in EVs and PHEVs <b>Opportunity Risk</b> Replacement of lead-acid batteries with lithium-ion batteries <b>Risk</b> Declining demand for starting batteries used in internal combustion engine vehicles In conjunction with the expansion of the market for EVs, PHEVs, and other such vehicles, demand for starting batteries used in internal combustion engine vehicles is expected to decline while demand for batteries for auxiliary equipment is expected to increase. Also, a shift of a certain number of lead-acid batteries to lithium-ion batteries is expected.
	Industrial battery and power supply related business	<b>Batteries for HEVs***, PHEVs, and EVs</b> <b>Opportunity</b> Higher demand for batteries used in EVs and PHEVs <b>Opportunity Risk</b> Changes in demand for batteries used in HEVs and PHEVs (higher demand over the short to medium term and declining demand over the long term) It is expected that over the short to medium term, sales of HEVs and PHEVs will increase, but in the long term, as sales of EVs increase substantially and account for approximately 100% of sales ratio in 2050, the battery market will change.
	Supply chains R&D	<b>Lead-acid batteries for backup applications and forklifts</b> <b>Opportunity</b> Higher demand for batteries <b>Risk</b> Replacement of lead-acid batteries with lithium-ion batteries Demand for batteries used in transportation and electric power related applications is expected to increase, but as technological innovation progresses, it is expected that prices for lithium-ion batteries and other such products will fall and that a certain number of lead-acid batteries will be replaced by lithium-ion batteries.
3°C scenario	Operations	<b>Natural disasters and temperature rise</b> <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 Due to increased storm and flooding damage, there is a risk of greater impact including property damage to facilities and machinery at the company's plants, loss of profit from business suspension, and the inability of workers to report to work. Interruption of supply chains is also anticipated.
	Industrial battery and power supply related business	<b>Emergency power supplies</b> <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.
	Supply chains R&D	<b>Raw materials procurement and circular economy</b> <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 procuring and rising price for sustainable raw materials Risks such as rising resource prices and difficult securing resources are expected over the short to medium term. On the other hand, with the development of alternative technologies, it is expected that tight supply and demand situations will be alleviated over the long term. It is also expected that competition relating to procurement of sustainable raw materials will intensify in terms of the environment and society.
		<b>Technological innovation</b> <b>Opportunity Risk</b> Increased business opportunities as a result of leading development of next-generation batteries technologies (all-solid-state batteries, etc.) 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.

Note: Those items that were determined in the risk assessment to be of particular importance in the short to long term are listed.  
 \*\*8 Hybrid Electric Vehicle

## <Direction of Business Strategies>

		Now	2050
1.5°C scenario	Operations	<b>Reduce CO<sub>2</sub> emissions by at least 30% by 2030</b> Implement measures for energy conservation and use of renewable energy	<b>Further accelerate measures for achieving carbon neutrality</b> 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 12 V lead-acid or lithium-ion batteries for auxiliary equipment used in electric vehicles as well (for new automobiles and for replacement)
		<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	<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>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	
	Industrial battery and power supply related business	<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	<b>Focus on the renewable energy and energy management fields</b> <ul style="list-style-type: none"> <li>Strengthen operation, maintenance and inspection services</li> <li>Develop more price-competitive batteries</li> <li>Introduce products and services aligned customer needs to capture demand for renewable energy</li> <li>Capture demand for peak cutting, peak shifting, and other energy management services for business sites</li> </ul>
3°C scenario	Operations	<b>Countermeasures against intensifying disasters</b> <ul style="list-style-type: none"> <li>Evaluate future risks including climate risks, implement countermeasures as necessary</li> <li>Undertake BCP including supply chains</li> </ul>	
	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

### [Fifth Mid-Term Management Plan (FY2019–FY2022)]

<b>CO<sub>2</sub> emissions</b> Reduce by at least <b>6%</b> (compared with FY2018)	<b>Water consumption</b> Reduce by at least <b>8%</b> (compared with FY2018)
<b>Percentage of environmentally considered products in total sales of all products</b> <b>35.0%</b> or more	<b>Ratio of recycled lead used as lead raw materials in lead-acid batteries</b> <b>35.0%</b> or more

### [GY 2030 Long-Term Greenhouse Gas Target]

<b>CO<sub>2</sub> emissions</b> Reduce CO <sub>2</sub> emissions by at least <b>30%</b> (compared with FY2018)
---

### [Internal Carbon Pricing (ICP)]

The price will be set at <b>¥8,600</b> / t-CO <sub>2</sub> Use as reference information when making investment decisions regarding energy-saving and renewable energy measures
---



# Feature

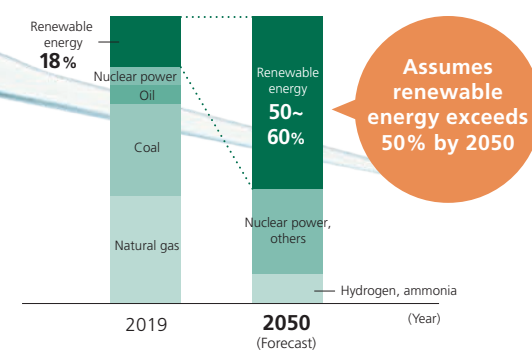
## Tackling the Challenges of the Growing Renewable Energy Market

### Market environment

As the transition to carbon neutrality accelerates, renewable energy such as wind and solar are attracting attention. Many renewable energy-related subsidy programs have been announced in Japan, and subsidies are being introduced and utilized under various measures. Under this environment, renewable energy is expected to account for a majority of Japan's power supply composition by 2050.

On the other hand, the amount of power generated by renewable energy fluctuates greatly depending on the weather and time of day, which can have adverse effects on the electric power grid in terms of stability. Storage batteries are key devices that play a role in mitigating fluctuations in output. As renewable energy becomes more widespread, the market for storage batteries, which are indispensable for controlling supply and demand, is expected to grow rapidly, and we believe that this presents a major opportunity for the Company.

### Power Supply Composition in Japan



Source: Agency for Natural Resources and Energy, "Considerations for Achieving Carbon Neutrality in 2050"

### Main subsidies promoting the introduction of renewable energy

- Grid storage battery and other system introduction support program for accelerating the introduction of renewable energy (Ministry of Economy, Trade and Industry)
  - Regional renewable energy mainstay development and resilience enhancement promotion program through renewable energy price reduction such as use of PPA (Ministry of the Environment)
- Numerous others

### About regular field and emergency field

- [Emergency field]** Used for emergency backup in data centers and communications base stations and other facilities
- [Regular field]** Used for continuous charging and discharging in renewable energy, energy management, and the like

### Strategy

### Challenge the "three new areas" based on extensive track record and respond to needs



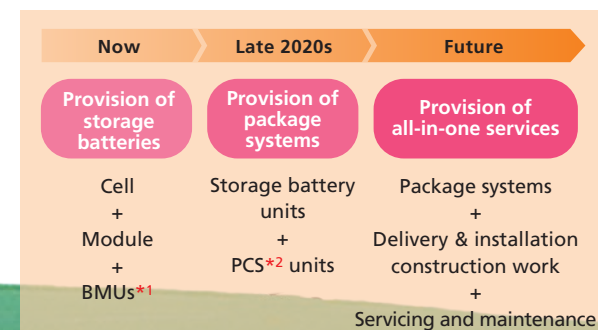
The Group is responding to increased demand while tackling the challenges of the "three new areas."

The first is new markets. The renewable energy market is expanding at a remarkable rate. New companies are entering the market one after another including domestic lithium-ion battery manufacturers, system integrators, and overseas manufacturers. In a diversifying market environment, it is necessary that we emphasize our strengths.

The second is new sales channels. In conventional business, products such as emergency backup battery power supplies are sold through system manufacturers. On the other hand, in the field of renewable energy and other regular fields, in addition to sales to system manufacturers, buyers are highly diverse and direct sales to customers are possible, including facility owners such as electric power companies as well as energy companies and trading companies. For this reason, the Group's technical capabilities, extensive experience, and know-how can provide customers with a sense of trust and security, leading to the development of new sales channels.

Third is new products. In order to be able to respond in competitive markets, we are developing batteries with higher energy density and improved cost competitiveness. Also, the safety of lithium-ion batteries is an issue, and to address this we are developing new products with an awareness of safety measures. Emphasizing "domestic production" and "safety" will lead to increased sales.

### New product development roadmap (conceptual)



\*1 Abbreviation for Battery Management Unit. A device that monitors and controls (protects) lithium-ion batteries by measuring the voltage and module temperature of each battery cell.  
\*2 Abbreviation for Power Conditioning System

### Leveraging our strengths —networks and footwork

We plan to succeed in highly competitive markets by using the Group's two strengths—networks and footwork.

Network means DX-based servicing and maintenance. Preventive maintenance services using AI and DX are essential for maintaining stable operation and optimal control, which are crucial for power generation facilities used for extended periods. Footwork refers to our network of more than 100 service locations throughout Japan. With one of the best support systems in the industry, we can provide safe and secure services 24 hours a day, 365 days a year, leading to BCP support.

By combining these two strengths, we will provide high-quality products, make proposals that incorporate both hardware and software, and help customers solve problems.

### Two strengths support long-term stable operation



### Developing business in the regular field as our second pillar

Currently, the Business Unit of Industrial Batteries and Power Supplies, the Business Unit of Lithium-ion Batteries, and Lithium Energy Japan Ltd. are making concerted efforts to conduct a cross-organizational regular field business development project in order to centrally plan and execute business strategies from product planning to manufacturing, sales, and after-sales service. From the development of lithium-ion battery cells specialized for industrial applications, we are working on system development for future total package proposals.

In addition to these efforts, we will accelerate collaboration with other companies while developing business in the regular field as a second pillar after business in the emergency field.

### TOPIC

### Installation of storage battery system for a large-scale wind power generation project in Hokkaido completed in November 2021

From July 2020 to November 2021, we conducted construction of the world's largest-scale lithium-ion battery facility at the Kita Toyotomi Substation in Hokkaido. The facility has 720 MWh capacity (equivalent to 45,000 BEVs) and 3,840 storage battery panels (the installation area is equal to two soccer pitches). We received the order for this project in recognition of the highly reliable technology and long-term support capabilities that we developed. This wind power generation facility is scheduled to start operating in fiscal 2023, and following the start of operation, we will maintain the storage batteries for 20 years.



### Message from the Project Manager



Takashi Abe  
Director and Deputy Business Unit Manager of Industrial Batteries and Power Supplies  
GS Yuasa International Ltd.

### Enhancing value provided to customers with all-in-one solutions

The power grid is fundamental national infrastructure, and extremely high quality is needed. As renewable energy is fully integrated into electric power infrastructure, storage batteries will be the most important devices for the regular field for supporting stability. As geopolitical risks manifest, our customers can be secure, since we produce our products in Japan.

We have high expectations for the expansion of the storage battery and energy management markets as demand for renewable energy increases. Going forward, we intend to increase the value we provide to customers and to enhance our presence in new markets by proposing all-in-one systems that offer complete packages of power conditioners and storage batteries from products to installation and maintenance as integrated systems.

In addition, we anticipate synergistic effects with the technical resources of GS Yuasa Infrastructure Systems Co., Ltd., which joined the Group in May 2021. We will leverage the company's resources, which have strengths in the mass production technology and communication fields, for new business and create a new Business Unit of Industrial Batteries and Power Supplies.



# Business Structure

Business segment	Net sales / Composition of net sales	Main products	Main applications	Main customers	Characteristics of the business
<p><b>Automotive Batteries (Japan)</b> → pp. 47-50</p>	<p>FY2021 ¥81,494 million</p>	<p>Lead-acid batteries</p> <p>Battery type: Lead-acid</p>	<p><b>For starting</b></p> <p>General vehicles / Vehicles with start-stop systems (ISS: idling stop systems)</p> <p><b>For auxiliary equipment</b></p> <p>Hybrid electric vehicles (HEVs) / Plug-in hybrid electric vehicles (PHEVs) / Electric vehicles (EVs)</p> <p>Automobiles</p> <p>Motorcycles</p>	<p>For new automobiles: Japanese automakers</p> <p>For replacement: Distributors (electrical device shops, etc.), automobile accessory mass retailers, automobile dealers, oil refiners and sellers, etc.</p> <p>For new automobiles: Japanese motorcycle makers</p> <p>For replacement: Distributors, etc.</p>	<p><b>Earnings structure</b></p> <ul style="list-style-type: none"> <li>Consistent earnings 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> </ul> <p><b>Seasonality</b></p> <ul style="list-style-type: none"> <li>The demand period for replacements is October-December</li> </ul>
<p><b>Automotive Batteries (Overseas)</b> → pp. 47-48, 51-52</p>	<p>FY2021 ¥186,743 million</p>	<p>Lead-acid batteries</p> <p>Battery type: Lead-acid</p>	<p><b>For starting</b></p> <p>General vehicles / ISS vehicles</p> <p><b>For auxiliary equipment</b></p> <p>HEVs / PHEVs / EVs</p> <p>Automobiles</p> <p>Motorcycles</p>	<p>For new automobiles: Japanese automakers, etc.</p> <p>For replacement: Distributors, etc. * Varies by country</p> <p>For new automobiles: Japanese motorcycle makers</p> <p>For replacement: Distributors, etc.</p>	<p><b>Earnings structure</b></p> <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>* Sales results of lead-acid batteries for industrial use are also included (Backup batteries in Europe account for the majority).</li> </ul>
<p><b>Industrial Batteries and Power Supplies</b> → pp. 53-56 / Feature pp. 41-42</p>	<p>FY2021 ¥99,465 million</p>	<p>Lead-acid batteries</p> <p>Lithium-ion batteries</p> <p>Various power supply devices (including DC power supply and UPS)</p> <p>Battery type: Lead-acid, Lithium</p>	<p><b>For emergency use</b></p> <p>Mobile phone base stations, office buildings, water and sewer systems, power plants and transformer stations, and railways, etc.</p> <p><b>For regular use</b></p> <p>Solar power and wind power generation systems</p> <p>Forklift</p>	<p>Railways, electric power, government agencies, communications carriers, factories, office buildings, and data centers, etc.</p> <p>* Sales are also conducted via distributors, electrical construction companies, electrical machinery and communications device makers, and others.</p> <p>Forklift makers, maker distributors, etc.</p>	<p><b>Earnings structure</b></p> <ul style="list-style-type: none"> <li>As we offer a one-stop service from design to manufacturing, construction and maintenance, profit margins are high</li> </ul> <p><b>Seasonality</b></p> <ul style="list-style-type: none"> <li>High profit margin projects for national and local government offices are concentrated in the January-March period</li> </ul> <p><b>Earnings structure</b></p> <ul style="list-style-type: none"> <li>Consistent revenue can be secured through replacement batteries</li> </ul>
<p><b>Automotive Lithium-ion Batteries</b> → pp. 57-60</p>	<p>FY2021 ¥47,637 million</p>	<p>Lithium-ion batteries</p> <p>Battery type: Lithium</p>	<p><b>For drive force</b></p> <p>HEVs / PHEVs / EVs</p> <p><b>For starting (12V lithium)</b></p> <p>General vehicles</p> <p><b>For auxiliary equipment (12V lithium)</b></p> <p>HEVs / PHEVs / EVs / General vehicles</p> <p>Automobiles</p>	<p>For new automobiles: Japanese automakers, European automakers</p>	<p><b>Earnings structure</b></p> <ul style="list-style-type: none"> <li>As product lifespan is long, in principle, there is no use for replacements, it is for new automobiles only</li> </ul>
<p><b>Specialized Batteries and Others</b> → pp. 61-62</p>	<p>FY2021 ¥16,791 million</p>	<p>Lead-acid batteries</p> <p>Lithium-ion batteries</p> <p>Specialized batteries</p> <p>Battery type: Lead-acid, Lithium</p>	<p>Submarines</p> <p>Aircraft</p> <p>Satellites</p> <p>Manned research submersibles</p> <p>Rockets</p> <p>Other special applications</p>	<p>Japanese government, electrical machinery makers, aircraft makers, special corporations, etc.</p>	<p><b>Earnings structure</b></p> <ul style="list-style-type: none"> <li>Company-wide expenses are included in the segment</li> </ul>

<b>Battery applications</b>	<b>For starting</b>	For starting engines	<b>For emergency use</b>	For backup use in case of emergencies (power outage, etc.) in locations such as data centers and communication base stations
	<b>For auxiliary equipment</b>	For starting hybrid systems and backup for electrical devices	<b>For regular use</b>	For daily, uninterrupted charging and discharging in renewable energy, energy management, etc.
	<b>For drive force</b>	For driving motors		



# Key Financial Indices by Business Segment



Notes: 1. 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.  
 2. The "automotive batteries (overseas)" segment previously included a portion of transaction amounts for industrial batteries handled overseas, but as of fiscal 2018, the category was changed to "industrial batteries and power supplies." Net sales and operating profit for fiscal 2017 are indicated for the reporting segments after the change.  
 3. In fiscal 2019, some consolidated subsidiaries in the "automotive batteries (overseas)" segment were shifted to the "industrial batteries and power supplies" segment. Accordingly, the figures for fiscal 2018 have been reclassified to reflect the revised segment categories.

4. ROA has been calculated by dividing operating profit before amortization of goodwill by segment assets.  
 5. Depreciation expenses include depreciation of intangible assets.  
 6. Research and development expenses are calculated as total for the "automotive batteries (Japan)" and the "automotive batteries (overseas)" segments.



# Automotive Batteries

## Long-term strategy (Vision for around 2030)

### Long-term vision

- Gain market share in the global market, where demand is expected to expand, by leveraging the technology used in eco-friendly vehicles cultivated in Japan
- Rebuild optimal global production system

### Recognition of issues and future vision



## SWOT

<p><b>S</b> Strengths</p> <ul style="list-style-type: none"> <li>Technological capabilities cultivated through R&amp;D for Japanese automobile manufacturers</li> <li>Overwhelming brand power in Asia</li> </ul>	<p><b>O</b> Opportunities</p> <ul style="list-style-type: none"> <li>Stable lead-acid battery demand in Asia and expanding demand in emerging markets</li> <li>Increase in demand for environment-friendly vehicles using lead-acid batteries</li> </ul>
<p><b>W</b> Weaknesses</p> <ul style="list-style-type: none"> <li>Price competitiveness against Asian rival manufacturers (South Korea, China)</li> <li>Low market share in Europe, U.S., and China, where the demand is high</li> </ul>	<p><b>T</b> Threats</p> <ul style="list-style-type: none"> <li>Growth restricted by tightening of environmental regulations in each country</li> <li>Demand levelling off due to slowing global economy and expansion of sharing businesses</li> </ul>

## Supporting the continually evolving automobiles

Automotive batteries play an important role in supporting driving around the world, and their value is increasing as we move toward a carbon-neutral society. Although a behind-the-scenes presence, automotive lead-acid batteries, in particular, continue to evolve in response to the climate and market characteristics of each region. For example, batteries for vehicles with start-stop systems (ISS: idling stop systems), which lead to improved fuel efficiency, require high durability, weather resistance, and charge-acceptance performance. We are contributing to the spreading popularity of low-environmental-impact ISS vehicles by developing products that meet the demands of automakers. Battery electric vehicles (BEVs) and other electrically powered vehicles are also equipped with lead-acid batteries for use in auxiliary equipment, and they will continue to support automobiles even as electrification advances. These are the fruits of our technological innovations, and are consistent with our corporate philosophy of "Innovation and Growth".

We believe that our corporate value, which leads to "Innovation and Growth," is to bring passion and speed in responding to the diverse needs of the market, and to do so from the perspective of our customers, the automakers. We are also working to build employee motivation, and we believe that increasing engagement and continuing to offer growth opportunities will enhance the Company's overall corporate value.

## Responding to demand with a broad product lineup and a well-developed production and supply system

The automotive industry today is undergoing a once-in-a-century transformation, forcing companies to rethink their management policies. Storage battery manufacturers such as ourselves are no exception, especially in the midst of this great rising tide of automobile electrification, and we cannot survive by merely carrying on with business as an extension of what has gone before. As a device manufacturer with strengths in both lead-acid and lithium-ion batteries, the GS Yuasa Group will offer its customers optimal choices that take advantage of the characteristics of each product, as we keep a close eye on trends among automakers. Lead-acid batteries in particular can be proposed for multiple purposes, including redundancy, backup, and emergency use. They also offer significant advantages in terms of securing raw materials, recyclability, safety, and cost, so we believe they can provide even more value.

The ability to respond to fluctuations in supply and demand is also important. It is also necessary to build a supply system that can flexibly respond to changes in production plans, such as increases or decreases in production by automakers, and to management the supply chain for parts and materials. Our global production, procurement, and sales network is one of our strengths, but at times it can also become a risk. This is why we have been diversifying procurement since 2020 from a business continuity plan (BCP) perspective, after analyzing our risks and costs. We are working to build and strengthen a system that can maintain our production and supply network even in the event of an emergency.

## Properly forecasting market movements and establishing an optimal supply system

Fiscal 2021 was a challenging year in terms of profits due to the impact of COVID-19 pandemic, production cutbacks by automakers caused by semiconductor shortages, soaring raw material prices, and the effects of exchange rate fluctuations. Still, appropriate revisions to selling prices are beginning to be accepted in Japan. On the other hand, the current business environment is very active, and the challenge for fiscal 2022 is how to respond to the demand for supply of products for both new automobiles and replacement applications. We will continue to maintain a production system that does not generate shortages so that we can fully meet our supply obligations.

Overseas, we are optimizing our supply system. In May 2022, we converted our site in Turkey into a consolidated subsidiary, strengthened our supply system and leveraging the site to develop markets in undeveloped regions such as the Middle and Near East. To meet brisk demand in Indonesia, Thailand, and India, we are investing in increasing production. Meanwhile, we intend to make careful decisions regarding the Chinese market, where competition is intensifying, after close analysis of the social situation, our resources, and competitive relationships.

Our responsiveness is being challenged in the face of changes in the way cars are being used during the COVID-19 pandemic and the soaring cost of resources and energy. In planning our business strategy each year, we forecast the global market in 10- and 15-year cycles, but each year the market changes faster than we can keep up with. We will work to identify and ensure we can respond to both opportunities and risks in each region.



### Masahiro Shibutani

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



# Automotive Batteries (Japan)

## Mid-term business policy (Fifth Mid-Term Management Plan)

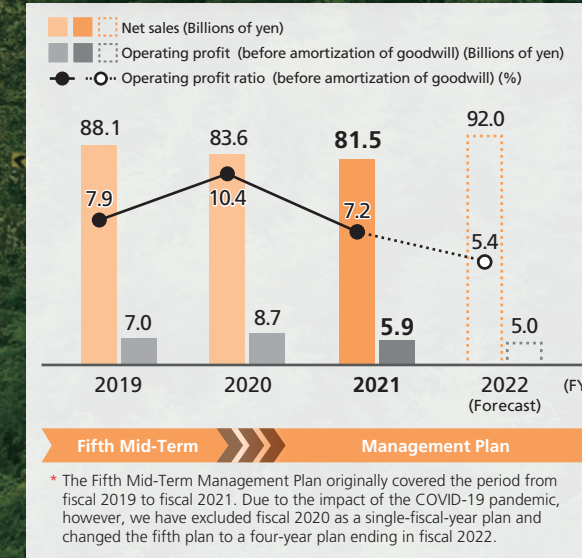
### Business policy

## Aim to shift to a more robust and streamlined business structure through optimal earnings mix

### Strategy and important tasks

- Work to optimize market share and earnings by advancing selection and concentration with emphasis on profits
- Fully demonstrate the strengths of the GS Yuasa brand and increase the weighting of high value-added products
- Promote CO<sub>2</sub> reductions and improve productivity as a global mother plant
- Develop high performance, high quality products
- Create synergies from transfer of Panasonic Corporation's lead-acid batteries business
- Consider a strategy that takes carbon neutrality into account

## Change in performance and plans



## FY2021

### [Overview]

- For new automobiles**
  - Decreased as a result of continued reduction in production by automakers due to semiconductor shortages, etc.
- For replacement**
  - Sales volume remains strong due to increase in continued use of vehicles caused by supply shortages of new automobiles and the market boom for second-hand vehicles, etc.

## FY2022

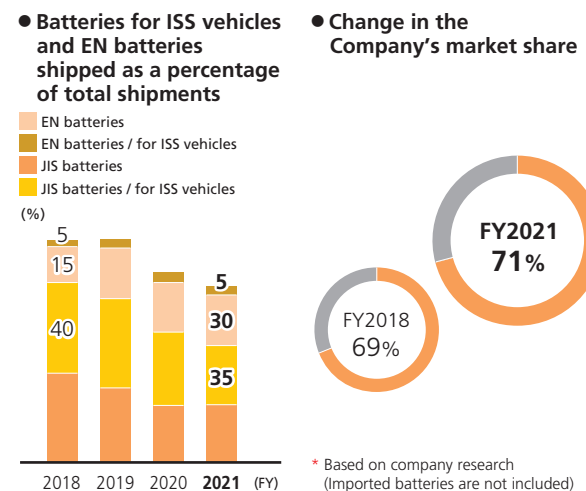
### [Initiatives]

- Response to soaring lead prices**
  - For new automobiles:** An agreement to adjust the selling price according to the domestic lead price quote (lead price slide system)
  - For replacement:** Automotive lead-acid battery price increased by more than 10% after shipments from February 1, 2022

## Progress in business strategies

### 1 For new automobiles: Increased shipment ratio of EN batteries contributing to increased market share

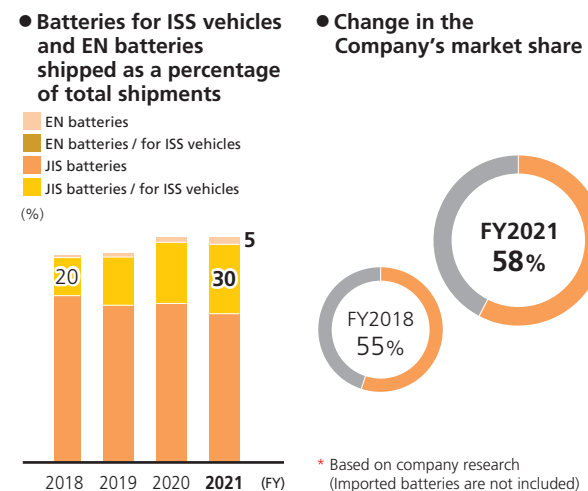
Although the shipment ratio of batteries for vehicles with start-stop systems (ISS: idling stop systems) has decreased, sales of European Norm (EN) batteries, developed ahead of other companies, are expanding, contributing to the maintenance and increase of our market share.



## Progress in business strategies

### 2 For replacement: Increase in demand for batteries for ISS vehicles contributing to improved profitability

Demands for replacement of batteries for ISS vehicles which have been shipped for new automobiles is increasing, contributing to improved profitability. In addition, there is a gradually emerging demand for replacement of EN batteries, which have been contributing to the expansion of the market share for new vehicles, and we can expect further expansion of the market share for replacement in the future.

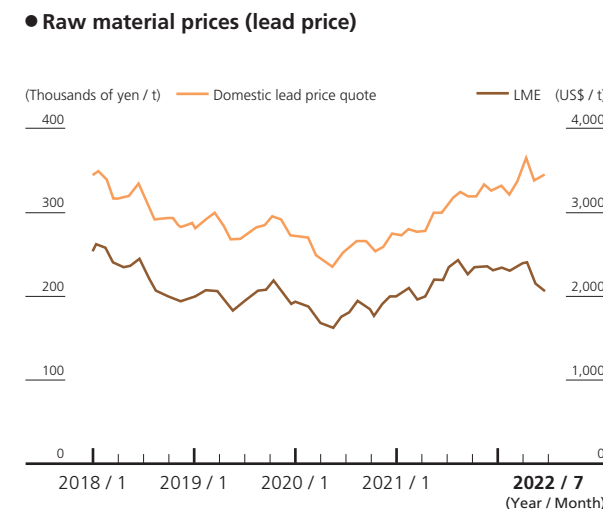


## Progress in business strategies Market data

### 3 Response to the surge in raw material prices

Price indicators for lead, which is the main material for lead-acid batteries, include the London Metal Exchange (LME) price and the domestic lead price quote. Price fluctuations affect the selling price and profit of our lead-acid batteries.

In response to the continued high lead prices and other factors, we have raised the lead price of automotive lead-acid batteries for domestic replacement by more than 10% for shipments from February 1, 2022.



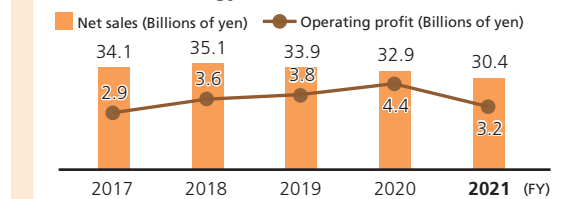
## TOPIC

### Creating synergistic effect with GS Yuasa Energy Co., Ltd.

Since the transfer in 2016, we are leveraging the strength of GS Yuasa Energy in "production of mass produced items" and GS Yuasa International Ltd. strength in "production of low-volume, high-mix," and have been working hard to build an optimal production system by segregating production sites, promoting the rationalization of production, improving development speed through technical exchanges, and strengthening bargaining and procurement capabilities through joint purchasing. As a result, operating profit has improved by more than 10% since fiscal 2017, and the effects of integration have contributed to business performance. Going forward we aim to continue promoting further technological integration and rationalization of production.



### Change in net sales and operating profit of GS Yuasa Energy





# Automotive Batteries (Overseas)

## Mid-term business policy (Fifth Mid-Term Management Plan)

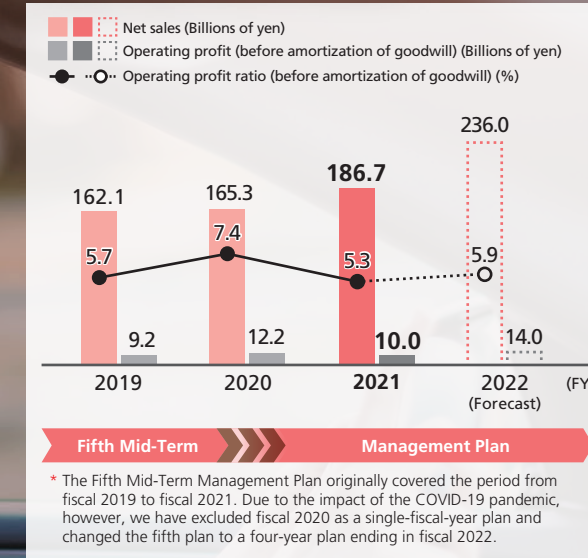
### Business policy

**Aim to secure profits through selection and concentration of production and sales**

### Strategy and important tasks

- Work to enhance profit ratio by introducing new products and building an optimal production structure, while maintaining our share in regions with high market shares
- In regions with low market share, ensure sales expansion through enhancement of product line-up by building a sales and service framework
- Expand into each untapped region strategically, leveraging existing production sites

## Change in performance and plans



## FY2021

### [Overview]

- Business conditions by region
  - ASEAN Region: Increase in sales volume for automobiles and motorcycles in Indonesia and Thailand
  - Europe: Increase in sales volume for replacement and industrial usage
  - China: Decrease in sales volume due to an environment of intensified competitiveness. Implementation of impairment for the Tianjin plant in February 2022
- Increase in sales due to the impact of the depreciation of the yen and the effect of increase in selling prices following the rise in lead prices

## FY2022

### [Initiatives]

- Turkey and Europe
  - Enhancing production capacity by converting our site in Turkey into a consolidated subsidiary and strengthening of the supply system to Europe, the Middle and Near East, and North Africa
- ASEAN Region
  - Sales expansion

## Business strategies

### 1 Maintaining and strengthening production capacity in response to each regional demand

In FY2022, we aim to strengthen our supply system to Europe, the Middle and Near East and North Africa and expand sales in the ASEAN region. We aim to maintain and strengthen our production capacity through initiatives that meet the demands of different regions that are shaped by differing circumstances.

#### Area-specific strategies

**Turkey and Europe**

İnci GS Yuasa Akü Sanayi ve Ticaret Anonim Şirketi

- For automobiles: Expanding sales as a production and supply site to unexplored regions such as the Middle and Near East and North Africa, in addition to Europe
- For forklifts: Expanding sales and strengthening services for forklift batteries, mainly in Europe

Production capacity  
FY2019: 4 million units / year  
FY2022: **6.3 million units / year**

**India**

Tata AutoComp GY Batteries Private Limited

- For motorcycles: Meeting increased demand by increasing production capacity
- For automobiles: Strengthening production of lead-acid batteries for eco-friendly vehicles such as ISS vehicles, for which demand is expected to expand

Production capacity  
FY2019: 2.4 million units / year  
FY2022: **7 million units / year**

**Thailand**

GS Yuasa Asia Technical Center Ltd.

- Expanding market share for new automobiles by strengthening sales of high-value-added products
- Increasing sales volume for replacements
- Development of technologies and products that meet local needs, leveraging the Technical Center

**Indonesia**

Increasing profit by strengthening sales for replacements

**Vietnam**

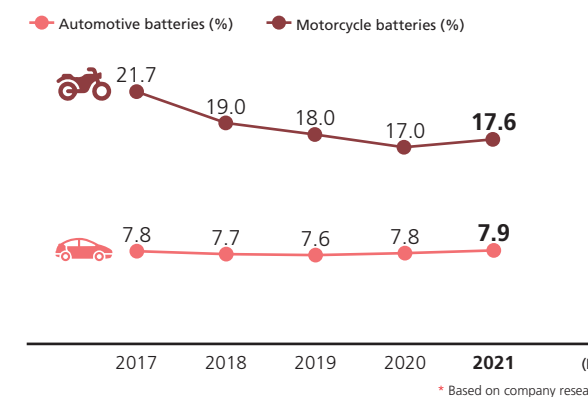
Ensuring profits by securing competitive strength through labor saving at facilities and improving productivity of equipment

## Business strategies

### 2 Increase in global market share in products for both automobiles and motorcycles

In fiscal 2021, although sales volume temporarily declined due to the impact of the COVID-19 pandemic in Vietnam, sales volume for automobiles and motorcycles increased in ASEAN regions such as Indonesia and Thailand. In Europe as well, our market share for both automobiles and motorcycles expanded due to steady sales volume for automotive replacements.

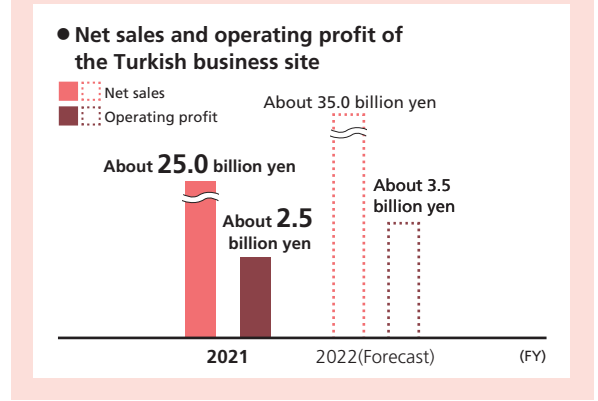
#### Change in the Group's global market share



## TOPIC

### Strengthening sales expansion in Europe, the Middle and Near East and North Africa region by converting our site in Turkey into a consolidated subsidiary

We converted the Turkish business site of İnci GS Yuasa Akü Sanayi ve Ticaret Anonim Şirketi into a consolidated subsidiary in May 2022. The company started operations of its new plant in January 2019 and has been expanding the manufacture and sales of high-performance lead-acid batteries for eco-friendly vehicles such as ISS vehicles and fuel-efficient vehicles. Going forward, we aim to strengthen sales expansion to Europe, the Middle and Near East and North Africa.





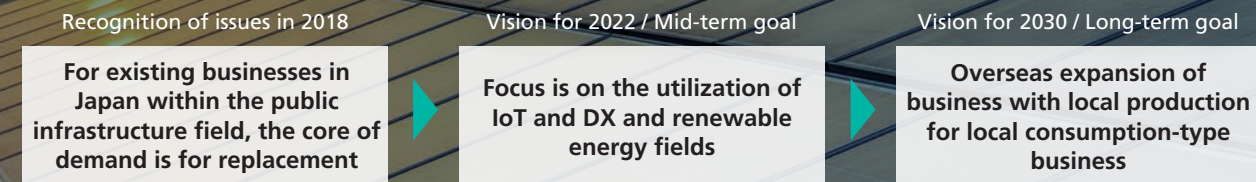
# Industrial Batteries and Power Supplies

## Long-term strategy (Vision for around 2030)

### Long-term vision

- Improve profitability by expanding sales of high value-added products and services utilizing IoT and DX
- Expand sales of lithium-ion batteries in green technology and energy field such as renewable energy applications
- Expand overseas business by expanding local production for local consumption-type business

### Recognition of issues and future vision



## SWOT

<p><b>S</b> Strengths</p> <ul style="list-style-type: none"> <li>■ High market share and brand power in Japan</li> <li>■ Extensive product lineup</li> <li>■ Enhanced sales and service structure</li> </ul>	<p><b>O</b> Opportunities</p> <ul style="list-style-type: none"> <li>■ Expansion of renewable energy</li> <li>■ Advance of disaster mitigation and BCP measures</li> <li>■ Strengthening of environmental and emission regulations</li> <li>■ Expansion of utilization of IoT and DX technologies</li> </ul>
<p><b>W</b> Weaknesses</p> <ul style="list-style-type: none"> <li>■ Global expansion</li> <li>■ Ability to respond to market changes</li> </ul>	<p><b>T</b> Threats</p> <ul style="list-style-type: none"> <li>■ Advances in replacement of lead-acid batteries with lithium-ion batteries</li> <li>■ Intensifying market competition due to entry by companies in other industries and manufacturers from China and South Korea</li> <li>■ Raw materials and distribution cost rises</li> </ul>

## An expanded role in solving global issues such as disaster prevention and mitigation and carbon neutrality

Having long been involved in the industrial batteries and power supplies business, I realize how their importance in society has increased even further. From the time I joined the Company to today, the main role of industrial batteries and power supply devices was to serve as a backup during power outages.

We believe backup batteries and power supplies must be serviced and maintained so that they can supply electricity at any time, trouble-free, once they are installed. This is because, in the event of a power outage, it is extremely important to ensure the health of the system by supplying electricity until the power network is restored. For example, during the Boso Peninsula typhoon of 2019, we rushed to the damaged city of Minami-Boso in Chiba Prefecture with storage batteries to operate their disaster radio system, which local residents relied on during emergencies. Natural disasters have recently increased in frequency and severity, perhaps due to the effects of global warming, and it is in times like these that we need electricity, something I feel even more strongly now than before.

Storage batteries have also gained worldwide attention in recent years as a key device essential to achieving a carbon-neutral society by using renewable energy to stabilize the electric power network itself and by storing surplus power. As such, we recognize that the value we provide has grown to a level where we can play a role in solving issues on a global scale.

## Combining product and service creation to provide reassurance that electricity will always be supplied when needed

In the emergency field, it is unacceptable for a backup battery and power supply to fail and not work when needed. This is why we offer services such as day-to-day servicing and maintenance. Conventionally, people would go to the site and do the work there, but we have always wondered if this process could be made more efficient and labor-saving, and if this could be done through continuous monitoring. This is why we are currently developing services that deploy remote monitoring utilizing communications technology and IoT, AI, and other technologies.

ESS\* also plays an important role in public infrastructure in the regular field. Thus, we not only need to provide optimal products, but also to monitor their operation for a long period of time afterwards.

Going forward, we intend to offering services that combine a "network" of remote monitoring with the "footwork" of an on-site response that leverages our strength in having more than 100 service sites nationwide. In both emergency and regular field, we will also combine product creation with the added value of service creation, differentiating ourselves from our competitors and increasing our own competitiveness, while at the same time offering our customers the reassurance that electricity will be supplied when they need it.

\* Energy Storage Systems

## Growing into a business that provides safety and security in people's lives and further contributes to society

We operate our business under three basic policies of "enhanced service," "expansion of the lithium-ion battery business," and "environmentally friendly."

In the emergency field, we will continue to maintain an earnings base for our business in the domestic market, where solid demand is expected going forward.

In the regular field, the renewable energy market is expected to grow dramatically, primarily around supply and demand adjustments. We started with large wind power generation applications, and have grown to become one of the leading companies in Japan in large-capacity (MWh-scale) lithium-ion batteries. Going forward, we will continue to increase the added value of our products, while aiming to commercialize remote monitoring services and enhance operation and maintenance (O&M).

In the forklift field, in Japan we are moving forward with development and trial deliveries to address lithium-ion battery demand. Overseas, we will broaden our customer base by offering both lead-acid and lithium-ion batteries to our lineup in anticipation of the trend toward electrification.

In fiscal 2021 we also acquired the public infrastructure systems business from Sanken Electric Co., Ltd. and established GS Yuasa Infrastructure Systems Co., Ltd. Welcoming the personnel of that company as our new colleagues, we will strengthen our power supply business and create further effect of synergies.

Even if the shape of devices and service change with future technological innovations, our role in providing safety and security in people's lives will not. We will grow as a business that further contributes to a sustainable society.



**Takashi Taniguchi**

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



# Industrial Batteries and Power Supplies

## Mid-term business policy (Fifth Mid-Term Management Plan)

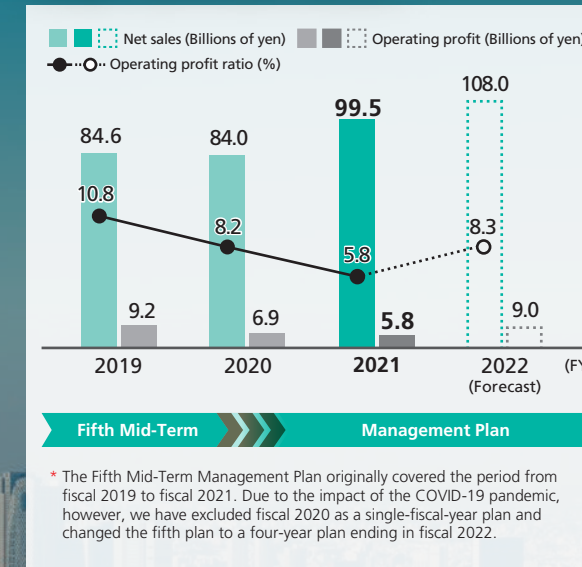
### Business policy

**Lay the groundwork for transition to a global energy solutions company that contributes to societal and environmental safety and security**

### Strategy and important tasks

- Introduce high value-added products and services in existing fields to be focused on
- Secure market position by making a strategic shift to new businesses in the environment and energy fields
- Leverage the ability, cultivated in the domestic market, to propose products, technologies, and services, in order to develop and nurture businesses in overseas markets that are optimized for each region

## Change in performance and plans



## FY2021

### [Overview]

- Regular field**
  - Completed delivery of lithium-ion batteries for a large-scale wind power generation project in Hokkaido
- Emergency field**
  - Sales volume of backup batteries and power supplies decreased due to the impact of shortage of parts and materials
- For forklifts**
  - Sales volume increased due to the progressive shift to battery-powered forklifts

## FY2022

### [Initiatives]

- Regular field**
  - Launch of new lithium-ion battery with increased cost competitiveness
  - Responding to the demand for strengthening the adjustment capabilities of the electric power grid
  - Strengthening the servicing and maintenance business using DX
- Emergency field**
  - Maximizing synergies with GS Yuasa Infrastructure Systems
  - Responding to the growing demand for backup battery power supplies
  - Appropriate passing on of sales price in response to soaring raw material prices

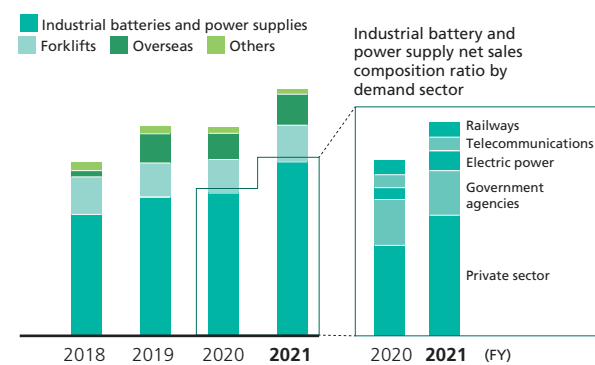
## Progress in business strategies

### 1 Expanding sales of industrial batteries and power supplies mainly for electric power and private sector

In fiscal 2021 although backup batteries and power supplies were impacted due to shipment delays caused by shortage of materials in the fourth quarter, sales and the ratio of private sector demand have increased due to consolidated acquisition of GS Yuasa Infrastructure Systems and an increase in the sales of lithium-ion batteries for large-scale wind power generation.

In addition, sales volume for forklifts has increased due to progress in the shift from engine-powered type to battery-powered forklifts.

### ● Composition ratio of net sales by product type



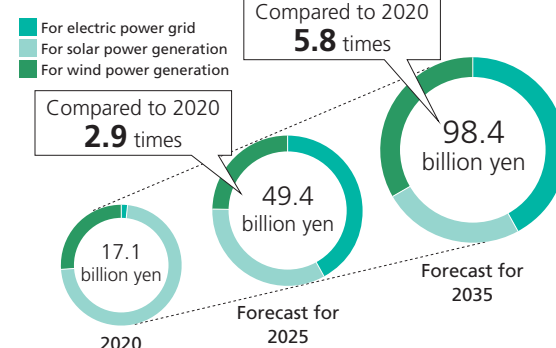
## Market data

### 2 Accelerating introduction of battery energy storage systems due to demand for enhancing adjustment capabilities of regular-use electric power grid

As efforts to achieve carbon neutrality gather speed, the renewable energy market is expected to rapidly expand in various fields.

In particular, further advancement in the deployment of energy storage systems, indispensable for strengthening the adjustment capabilities of the electric power grid, and significant growth in the market for storage batteries, the main device of energy storage systems, are expected. The Group's business opportunities are also, thus, expected to expand more and more.

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



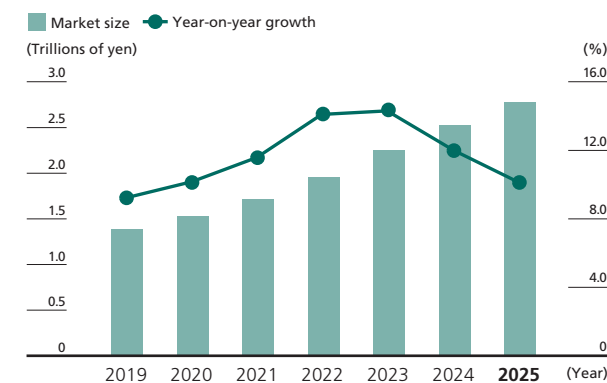
Source: Prepared by GS Yuasa based on Fuji Keizai, Research on the Global Market for ESS and Stationary Batteries

## Market data

### 3 Expansion of the demand for backup batteries and power supplies

The domestic market for data center services is expected to increase by 11.6% year-on-year in 2021. In addition, the average annual growth rate during 2020-2025 is expected to be maintained at a high of 12.5% and the market for backup batteries and power supplies is also expected to expand.

### ● Forecast of market revenue and growth rate for domestic data center services



Source: IDC Japan Inc. website (October 12, 2021 press release)

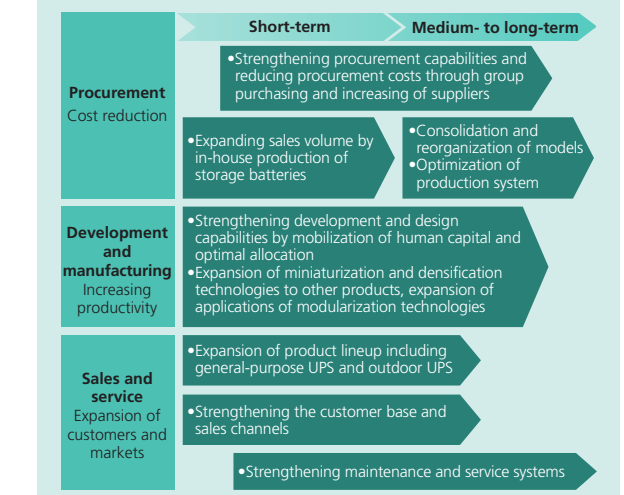
## TOPIC

### Toward maximizing synergies with GS Yuasa Infrastructure Systems Co., Ltd.

In May 2021, we acquired the social infrastructure systems business of Sanken Electric Co., Ltd., and established GS Yuasa Infrastructure Systems. The company has extensive experience in uninterruptible power supplies (UPS) and power supplies for base stations.

In the future, we aim to work on in-house production of storage batteries and the integration of sales models, in addition to strengthening the field of power supplies for telecommunications which is one of the strengths of GS Yuasa Infrastructure Systems.

### ● Expected synergistic effect





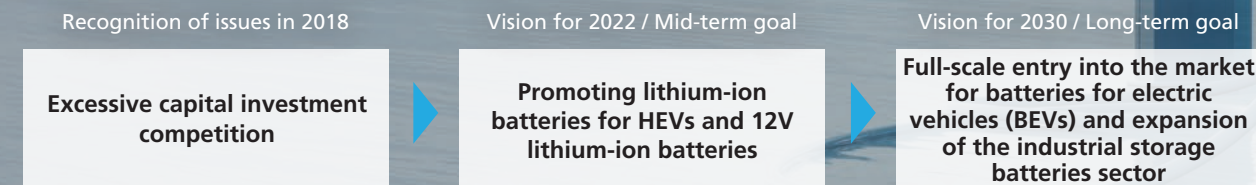
# Automotive Lithium-ion Batteries

## Long-term strategy (Vision for around 2030)

### Long-term vision

- Establish our position and improve profits through enhancement and evolution of alliances with reliable partners
- Promotion of lithium-ion batteries for HEVs and 12V lithium-ion batteries
- Full-scale entry into the market for batteries for electric vehicles (BEVs)
- Expansion of the industrial storage batteries sector

### Recognition of issues and future vision



### SWOT

<p><b>S</b> Strengths</p> <ul style="list-style-type: none"> <li>■ Stable supply of lithium-ion batteries for HEVs</li> <li>■ Advance expansion into 12V lithium-ion battery market</li> <li>■ Extensive track record of supplying to Japanese and European automakers</li> </ul>	<p><b>O</b> Opportunities</p> <ul style="list-style-type: none"> <li>■ Environmental regulations such as ELV Directive in Europe and NEV in China</li> <li>■ Accelerated offering of full-line of electric vehicles (BEVs, PHEVs, HEVs)</li> </ul>
<p><b>W</b> Weaknesses</p> <ul style="list-style-type: none"> <li>■ Stable material procurement capability</li> <li>■ Ensuring management resources that reflect the growth of lithium-ion battery market</li> <li>■ Competitiveness in high capacity lithium-ion batteries</li> </ul>	<p><b>T</b> Threats</p> <ul style="list-style-type: none"> <li>■ Increased competition within the lithium-ion battery business</li> <li>■ Increase bargaining power of suppliers</li> <li>■ Emergence of alternative lithium-ion batteries (all-solid-state batteries)</li> </ul>

## Leveraging knowledge gained through pioneering product development to deliver corporate value

We have worked on lithium-ion batteries for HEVs and PHEVs, and supplied the world's first lithium-ion batteries for HEVs in mass-produced models. We are proud to have thus contributed significantly to the spread of HEVs, which offer excellent fuel efficiency and are effective in reducing CO<sub>2</sub> emissions. I myself am proud to have been at the forefront of lithium-ion batteries for HEVs over the past 10 years or so, from their development to the launch of Blue Energy Co., Ltd. and subsequently getting it on track.

As we continue to develop products with automakers, we have learned and grown a great deal, including mass production technology and the productization process. I believe that an evolution and deepening of our knowledge is important, both in our business processes and in the process of productization. The accumulated experience of digging deep into specific themes and creating products generates a virtuous cycle that enhances the strength of our employees and the organization as a whole.

Storage batteries will become increasingly essential to society going forward, and our responsibility in this business is significant. We will work to leverage our experience and expertise to make further contributions to society, in the belief that the role expected of us is tied directly to our corporate value.

## Addressing an early, full-scale entry into the BEV market with evolution and deepening

In Japan, we expect demand for HEVs to increase through 2030 and then maintain those levels until about 2035, but starting in 2040 we expect to see a shift to BEVs. This is why, in April 2022, we established a new BEV Battery Development Department within the business unit with the goal of making an early, full-scale entry into the BEV lithium-ion battery market. By setting up a dedicated organization within the business unit that is directly connected with the automakers, we aim to further accelerate development and productization by gaining a direct understanding of automaker's needs. Because of the relationships and trust we have cultivated with the automakers to date, we believe there are many opportunities to enter the BEV lithium-ion battery market. Our goal is to quickly enter that market by deepening our review of our business processes, and by leveraging our accumulated experience and expertise in development and mass-production technologies to evolve our products to satisfy automakers' needs.

## Drafting and executing plans from a long-term perspective for sustainable growth

Since lithium-ion batteries have a long life and are not replaced, new automobiles sales volume directly affects our sales and profit. The Company has worked to optimize our production systems and reduce costs in order to minimize the impact of the drop in new

automobiles sales volume caused by the semiconductor shortage and other factors. We believe we have been successful in doing so. In addition to changes in market conditions, various other risks are expected going forward, including natural disasters, supply chain issues, and country risks. To prepare for such risks, we will work to incorporate further specifics into our business continuity plan (BCP), including how we will ensure stable procurement of raw materials and diversify procurement sources.

Blue Energy second plant began operating in April 2022, and even in the short term we have been receiving inquiries from a variety of manufacturers. To meet this brisk demand, we plan to expand annual production capacity to 70 million cells in the latter half of the 2020s. Lithium Energy Japan Ltd. is also in the process of developing new models, having already received further orders in addition to those for its existing lithium-ion batteries for PHEVs and commercial BEVs. In addition, GS Yuasa is also conducting R&D into next-generation batteries for the post-lithium-ion battery era.

The situation is such that we will be able to forecast operating profit of over 10 billion yen in the not-too-distant future. Looking ahead, we intend to use profits from batteries for HEVs, our current mainstay business, as a source of funding for our next business.

The need for storage batteries is increasing as the world works to achieve carbon neutrality. In this context, we believe our worth as a company lies in solving social issues with storage batteries, including next-generation batteries. We will aim for sustainable growth as we work toward achieving a sustainable society.



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



# Automotive Lithium-ion Batteries

## Mid-term business policy (Fifth Mid-Term Management Plan)

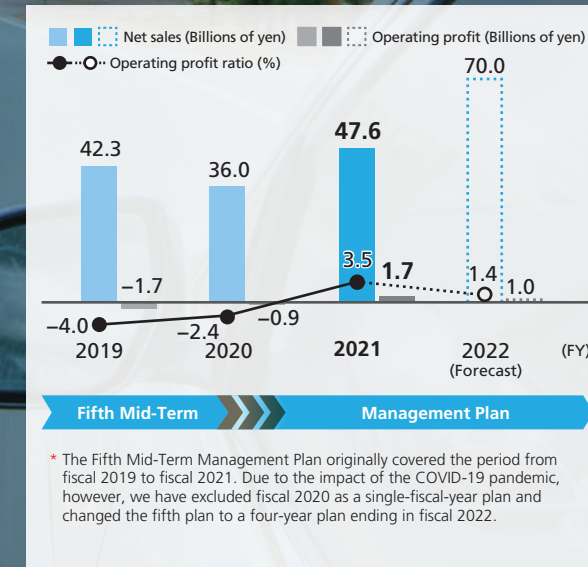
### Business policy

**Build the foundation for a differentiation strategy with a view to future business expansion by grasping changes in the business environment in advance**

### Strategy and important tasks

- Focus on lithium-ion batteries for HEVs primarily for Japanese manufacturers, 12V lithium-ion batteries for European manufacturers, and industrial-use lithium-ion batteries
- Strengthen coordination with existing customers for long-term dealings involving lithium-ion batteries for PHEVs and other BEVs
- Promote development of future technologies that will differentiate us from competitors

## Change in performance and plans



## FY2021

### [Overview]

- Blue Energy**
  - Sales volume of lithium-ion batteries for HEVs increased due to start of trading with Toyota Motor Corporation from the previous fiscal year and the expansion of adopted models
- Lithium Energy Japan**
  - Strong sales performance of vehicles equipped with lithium-ion batteries

## FY2022

### [Initiatives]

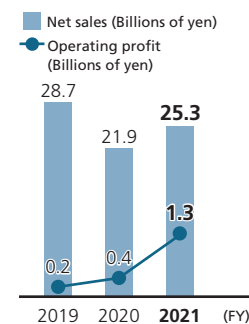
- For HEVs**
  - Responding to increased demand by starting operations of Blue Energy second plant
- For PHEVs**
  - Stable supply to existing customers and sales expansion
  - Expansion of sales activities
- For BEVs**
  - Stable supply and cost reduction of lithium-ion batteries for commercial BEVs
  - Accelerating full-scale entry into the BEVs market through the establishment of the BEV Battery Development Department

## Progress in business strategies

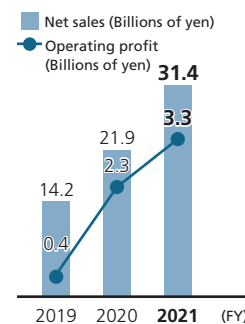
### 1 Increased sales and profits due to strong sales

- Lithium Energy Japan**  
Due in part to strong sales performance of vehicles equipped with lithium-ion batteries, sales volume of lithium-ion batteries for PHEVs increased, resulting in increased sales and profits.
- Blue Energy**  
Due to an increase in the number of battery-equipped models for Honda Motor Co., Ltd. and Toyota Motor Corporation, sales of lithium-ion batteries for HEVs were favorable, resulting in increased sales and profits.

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



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

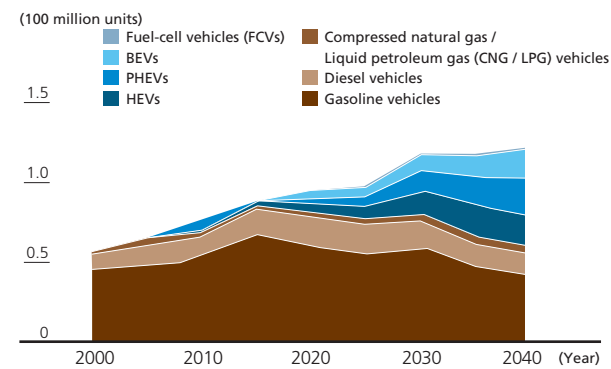


## Market data

### 2 Accelerating electrification of automobiles

Policy moves toward carbon neutrality in countries around the world are accelerating the shift to electrification of automobiles. The market for HEVs, a particular focus for automakers—primarily in Japan—is expected to expand until about 2030. It is expected that, following this, the transition to BEV will advance gradually. We are also promoting product development with the aim of an early, full-scale entry into the BEV lithium-ion battery market.

### Global market forecast for automobiles

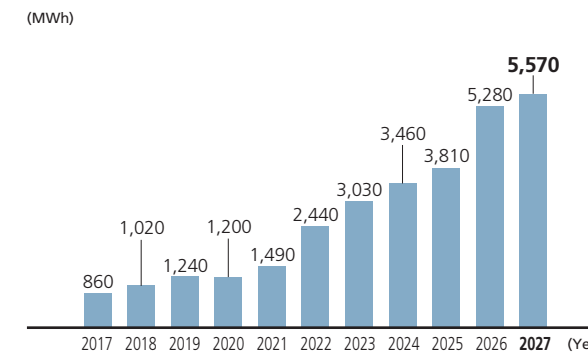


## Market data

### 3 Production volume of lithium-ion batteries for HEVs trending upward

Production of lithium-ion batteries for HEVs has continued to increase year to year. In Japan in particular, demand for lithium-ion batteries for HEVs is expected to grow over the medium to long term, in part due to the strategy of Japanese automakers aimed at achieving the goal of electrification of all new automobiles by the mid-2030s. At the Company too, we are responding to the demand from Japanese automakers by expanding our production capacity.

### Change in production volume of lithium-ion batteries for HEVs



## TOPIC

### Blue Energy second plant started operations in April 2022

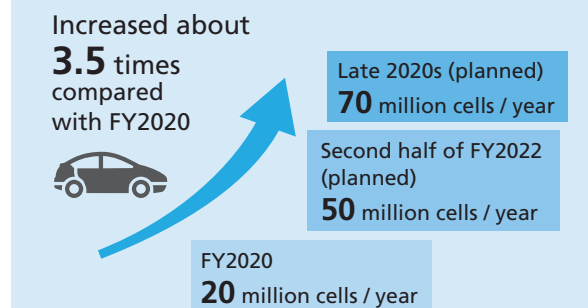
In order to respond to the growing demand for HEVs, mainly by Japanese automakers, operations of Blue Energy second plant were started in April 2022. The second line is expected to be operational in the second half of fiscal 2022, and the Company plans to expand its production capacity to 70 million cells per year in the second half of the 2020s.



Exterior of Blue Energy second plant

In the future, it is expected that there will be further expansion in adoption of models by existing customers and we will continue to strengthen our sales activities to acquire new customers.

### Blue Energy's production capacity





# Specialized Batteries and Others

## Mid-term business policy (Fifth Mid-Term Management Plan)

### Business policy

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

### Strategy and important tasks

- Work to provide stable supply of lithium-ion batteries for submarines and enhance their quality
- Expand sales of lithium-ion batteries for aircraft and satellites by improving reliability and durability

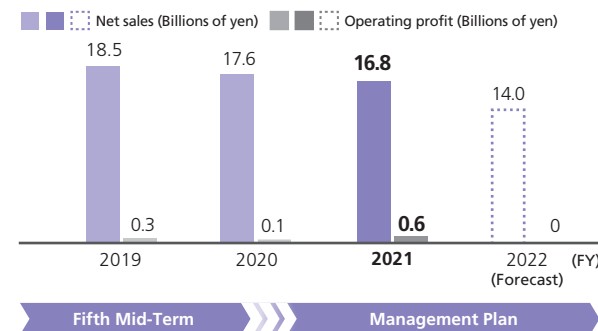
Used in extreme environments, from deep sea to outer space

Work to further improve technological capabilities, providing storage batteries able to continue supplying power even under harsh conditions



©JAXA

### Change in performance and plans



\* The Fifth Mid-Term Management Plan originally covered the period from fiscal 2019 to fiscal 2021. Due to the impact of the COVID-19 pandemic, however, we have excluded fiscal 2020 as a single-fiscal-year plan and changed the fifth plan to a four-year plan ending in fiscal 2022.  
 \* Since company-wide expenses (including labor expenses and R&D expenses) are included in the results, segment loss may occur.

### FY2021

#### [Overview]

- Lithium-ion batteries for submarines  
Decrease in sales due to percentage of completion method
- Lithium-ion batteries for aircrafts  
Increase in sales volume due to steady sales to airlines (replacement)

### FY2022

#### [Initiatives]

- Stable supply of lithium-ion batteries for submarines
- Increase in orders for lithium-ion batteries for satellites and marine applications
- Establishment of a production system for increased production
- Development of batteries for lunar rovers
- Receiving orders for lithium-ion batteries for the manned space station in lunar orbit (Gateway)

## Increasing orders and establishing a production system for lithium-ion batteries used in satellites and other applications

In fiscal 2021 both profits and operating profit ratio improved over the previous fiscal year thanks to solid trends in existing businesses, such as lithium-ion batteries for aircraft, a reduction in expenses, and other factors.

In fiscal 2022 in addition to continued provision of a stable supply of lithium-ion batteries for submarines, we aim to proceed with the establishment of a production system for increased production of lithium-ion batteries for satellites.

### TOPICS

## 1 Common lithium-ion batteries for launch vehicles installed in Epsilon-5 Launch Vehicle

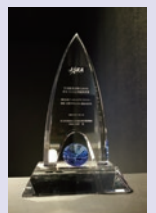
Common lithium-ion batteries for launch vehicles manufactured by GS Yuasa Technology Ltd. (GYT) were installed in the Epsilon-5 Launch Vehicle launched in November 2021. This product was developed by GYT under contract with IHI Aerospace Co., Ltd., and has been used consistently since the first Epsilon was launched in 2013. The batteries have been installed in stages 1, 2, and 3 of the Epsilon-5 Launch Vehicle to supply electricity to the control equipment and other onboard systems. The launch vehicle is also equipped with thermal batteries, which provide the electricity required by its attitude control equipment while in flight.



Epsilon-5 Launch Vehicle (©JAXA)

## 2 Conferred with JAXA's "Meritorious Service Award for Safety and Mission Assurance in Aerospace"

GYT has been awarded the Meritorious Service Award for Safety and Mission Assurance in Aerospace by the Japan Aerospace Exploration Agency (JAXA). The award is given to those who have made outstanding achievements and contributions to the performance of JAXA's various missions. This award is a recognition of how GYT's lithium-ion batteries for use in space that have been loaded onto artificial satellites and onto the H-II Transfer Vehicle (HTV) Kounotori, have contributed to improvements in spacecraft functionality and performance and to the success of the mission.



Commemorative plaque

## 3 Space-use lithium-ion batteries installed in new quasi-zenith satellite "Michibiki-1R"

The space-use lithium-ion batteries manufactured by GYT have been selected for use in all of the quasi-zenith satellites from Michibiki-1 to Michibiki-4 (the Cabinet Office of Japan's satellite navigation system) and through to Michibiki-1R launched in October 2021. The first quasi-zenith satellite, Michibiki-1, with additional satellites (Michibiki-2, Michibiki-3, and Michibiki-4), established a four-satellite constellation to provide the abovementioned satellite positioning service. The recently launched Michibiki-1R will replace Michibiki-1, and is expected to be able to transmit positioning signals with even greater accuracy.



Cells used in space-use lithium-ion batteries



# Research and Development: Initiatives for Next-Generation Batteries

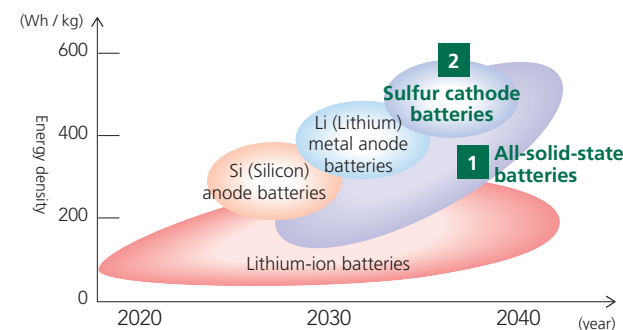
GS Yuasa has been among the first to promote research and development of lithium-ion batteries. We started mass production of prismatic lithium-ion batteries in the 1990s, and in 2008 became the first company in the world to supply lithium-ion batteries to mass-produced EVs. Since then, many automakers have adopted our automotive lithium-ion batteries. We aim to continue to contribute to the achievement of carbon neutrality through the development of next-generation battery technologies for a wide-range of applications including for electric vehicles.

## Current issues regarding lithium-ion batteries

Resource depletion	Lifespan	Energy density	Safety
Since rare metals such as cobalt and lithium are used as raw materials, there is a possibility that supply shortages will occur if electrification advances and demand rises sharply in the future.	Compared to lead-acid batteries, lithium-ion batteries have a longer life, but there is a need to further extend the lifespan of batteries.	Lithium-ion batteries are characterized by high energy density, but further improvement in energy density is necessary to extend the mileage of EVs.	Since the electrolytes used in current lithium-ion batteries are flammable, flame-retardant or non-combustible electrolytes are being sought.

## GS Yuasa's initiatives

### Road map for the development of next-generation batteries



### Research and development system

In order to achieve the early practical application of next-generation batteries such as all-solid-state batteries, we have established a specialized division at the R&D Center and are engaged in our own research and development.

Further, by becoming a member of the Consortium for Lithium-ion Battery Technology and Evaluation Center (LIBTEC) and participating in projects commissioned by the New Energy and Industrial Technology Development Organization (NEDO), we are conducting basic research on all-solid-state batteries, which are expected to be next-generation batteries, in collaboration with Japanese automakers, parts manufacturers, and battery manufacturers.

#### 1 All-solid-state batteries

As part of our own research, we have improved the sulfide solid electrolyte, which is the key material for the commercialization of all-solid-state batteries, and have newly developed a nitrogen-containing sulfide solid electrolyte that combines high ionic conductivity with excellent water-resistance.

##### Point 1

Improved ionic conductivity enables high input / output and one can expect reduced charging time.

##### Point 2

Improved water-resistance can be expected to lead to improved safety during manufacturing and in case of failure.

**Issue** It is necessary to reduce the interface resistance between the solid electrolyte and the active material to prevent capacity loss. **Please scan QR code for further details**

#### 2 Sulfur cathode battery

In NEDO's Advanced Aircraft System Commercialization Project, we have achieved success in demonstration of 400Wh / kg-class lithium-sulfur battery.

##### Point 1

High energy density can be expected as sulfur has a high theoretical capacity.

##### Point 2

Sulfur is an abundant resource, and supply chain problems can be expected to be resolved.

**Issue** Performance improvements in charge / discharge cycle lifetime among other things, are necessary. **Please scan QR code for further details**

### In Focus Selected for Participation in NEDO Green Innovation Fund's Next-Generation Storage Battery Development Project —Accelerating development of all-solid-state battery utilizing proprietary high-performance solid electrolytes—

On April 19, 2022, our proposal for developing all-solid-state battery technologies was selected for the NEDO Green Innovation Fund's Next-Generation Storage Battery project.\* Funding from the Green Innovation Fund will help to accelerate the development and commercialization of all-solid-state batteries, which we have been working on.

#### Outline of the project

<b>Purpose</b>	Development of high-performance storage batteries such as all-solid-state batteries and battery materials
<b>Target</b>	The energy density that affects the cruising range, among other things, is more than twice the current (700-800Wh / L or more)

#### GS Yuasa's development targets for the project

- 1 Development of a solid electrolyte that combines high ionic conductivity with excellent water resistance
- 2 Development of high-capacity positive electrodes with low cobalt content
- 3 Development of negative electrodes with high capacity and long-life performance
- 4 Development of cell design and manufacturing processes that facilitate mass production

Please scan QR code for further details



NEDO news release



\* The Green Innovation Fund was established by NEDO (the New Energy and Industrial Technology Development Organization) to play a central role in Japan's efforts to achieve carbon neutrality. The aim of the fund is to provide long-term ongoing support for green innovation projects implemented by corporations, from the R&D and verification testing stages through to practical application, on the way to the achievement by Japan's public and private sectors of concrete and ambitious shared goals.



## 4 ESG

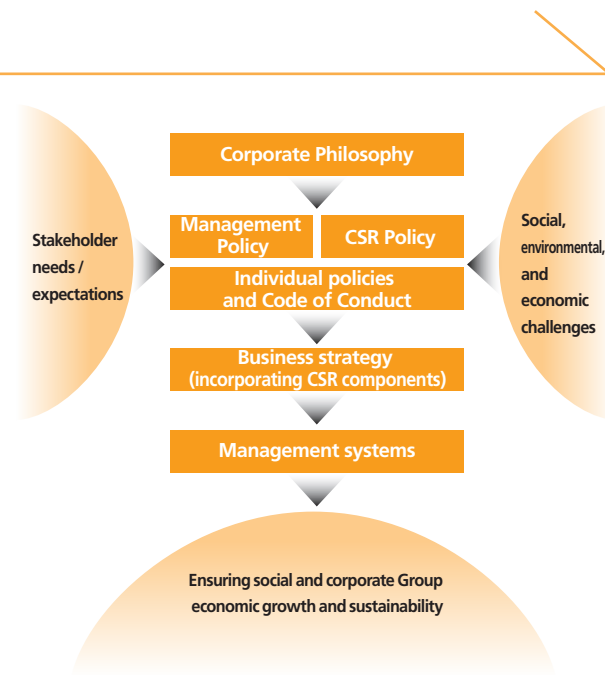
CSR management .....	65
Materiality (Key CSR Issues) and Identification Process .....	66
Targets and Results Concerning Material Issues .....	67
Environment .....	71
Social .....	75
Governance .....	81
Directors and Auditors .....	81
Messages from Outside Directors .....	83
Corporate Governance .....	87



# CSR Management

## Basic approach

The GS YUASA CSR Policy and Code of Conduct, formulated in May 2017 as the President's Policy, are the foundation of the Group's CSR activities. All employees understand that CSR activities are business activities, and all participate based on our CSR Policy and Code of Conduct in order to ensure the sustainable development of society and business.



### CSR Policy

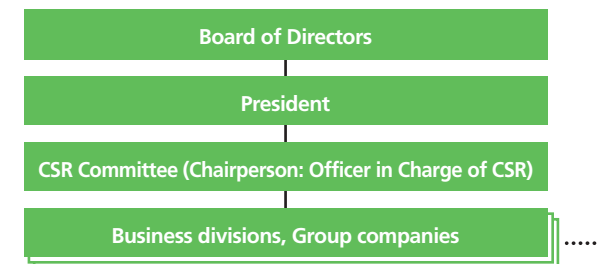
Besides legal compliance, we respect international norms, guidelines, and initiatives related to social responsibility, work on sustainable development of our business through developing energy storage technologies, and contribute to people, society, and the global environment.

\* Our CSR Policy and Code of Conduct are available on our website: <https://www.gs-yuasa.com/en/csr/policy.php>

## CSR promotion framework and process

In order to supervise the CSR activities of the Group, we have designated the company president as the chief commanding officer for the promotion of CSR and set up the post of officer in charge of CSR, who is appointed by and works directly under the president. In addition, the CSR Committee, which is chaired by the officer in charge of CSR and comprises persons responsible for CSR in business divisions, Group companies, etc. as members, leads CSR activities throughout the Group as a whole.

### CSR promotion framework



The GS Yuasa Group advances CSR-related initiatives through business activities. The goal of this process is to achieve enhanced corporate value and stakeholder satisfaction.

Our business strategy process incorporates planning designed to realize CSR policy. Corporate planning is formulated to ensure social and corporate Group economic growth and sustainability which fulfills stakeholder needs and expectations while addressing social issues. Achieving this planning requires application of multiple management systems based on existing

business processes. Performance of operational processes relies on reevaluation by the CSR Committee with continuous improvements as necessary.

TOPIC	
<b>Initiatives for internal implementation of CSR</b>	
<ul style="list-style-type: none"> <li>A CSR manual, translated into six languages, is distributed to all employees and overseas Group companies</li> <li>CSR training is conducted at overseas Group companies</li> </ul>	
Company name	Contents
Century Yuasa Batteries Pty Ltd. (Australia)	Implementing e-learning education on human rights issues (including discrimination, bullying, and sexual harassment) (Confirming the extent of employee comprehension through quiz formats using case studies)
GS Battery Taiwan Co., Ltd. (Taiwan)	Holding kick-off study sessions for CSR Promotion Initiatives (such as formulating CSR Policy and drawing plans for responding to CSR issues)
PT. Yuasa Battery Indonesia (Indonesia)	Distribution of the CSR Guidebook with CSR Policy among other things in local languages to all employees
GS Yuasa Asia Technical Center Ltd. (Thailand)	Regular distribution to all employees of the reader-friendly CSR Newsletter with explanations of CSR and introduction of examples of CSR activities at companies in Thailand



A look at kick-off study session (Taiwan)



CSR Guidebook (Indonesia)

# Materiality (Key CSR Issues) and Identification Process

## GS Yuasa material issues



## Identification process

**Step 1**

Identify risks and opportunities

For each of the key issues in the Mid-Term Management Plan, we identify CSR risks that may hinder the achievement of the relevant issues and CSR opportunities that may promote the achievement of those issues. When identifying CSR risks and opportunities, we referred to international guidelines on CSR (ISO 26000, GRI, etc.).

Participants: ● Employees ● External Stakeholders ● Directors / Officers

**Step 2**

Define important risks and opportunities

The CSR risks and opportunities identified in Step 1 were evaluated and scored taking into account their impact on business. We evaluated the impact of the Group's business activities on society with respect to risks and opportunities that are business priorities and identified risks and opportunities that are priority domains.

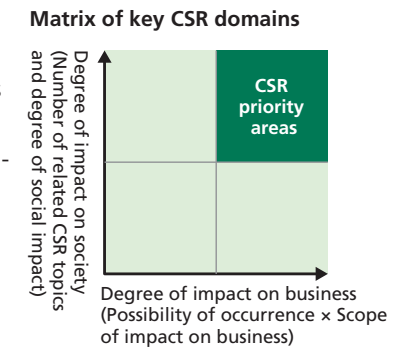
Participants: ● Employees ● External Stakeholders

**Step 3**

Determine materiality

The important CSR risks and opportunities defined in Step 2 were organized and materiality was determined by taking into consideration the methods of response to each was approved at a Management Meeting held in October 2017. The Group CSR Committee periodically reviews materiality, taking into consideration stakeholder needs and expectations and social issues.

Participants: ● External Stakeholders ● Directors / Officers






# Targets and Results Concerning Material Issues

Material issues (materiality)	Activity outline	Scope of application	FY2021 results				FY2022 plan				
			KPI	Target	Results	Initiatives and self-assessment	Policies going forward	KPI	Target	Impact on society	Impact on business
<b>Thoroughly fulfilling our CSR and ensuring compliance</b> See p.96	<b>Provision of legal information and promotion of compliance training</b>	D	Number of times compliance education information disseminated annually	16 times	16 times	<ul style="list-style-type: none"> <li>Issued email publications on compliance, an effective means of informing employees</li> </ul>	<ul style="list-style-type: none"> <li>Continue this program in the future</li> </ul>	Number of times compliance education information disseminated annually	16 times	Maintenance of a sound and well-ordered society	Avoidance of financial losses from compliance violations
			Number of significant compliance violations	None	None	<ul style="list-style-type: none"> <li>Operated a company-wide risk management system and conducted training to raise employee awareness of compliance</li> </ul>	<ul style="list-style-type: none"> <li>Continue this program in the future</li> </ul>	Number of significant compliance violation	None		
		O	Achievement ratio of compliance training plan	100%	100%	<ul style="list-style-type: none"> <li>Translated email publications into seven languages and conducted training by distributing them to 19 sites</li> </ul>	<ul style="list-style-type: none"> <li>Investigate training topics and tools for the next fiscal year and conduct ongoing training</li> </ul>	Achievement ratio of compliance training plan	100%		
			Achievement ratio of significant compliance violation risk response plan	100%	100%	<ul style="list-style-type: none"> <li>Presence of business risks confirmed monthly, inspections regarding risks with a high likelihood of occurrence reinforced</li> </ul>	<ul style="list-style-type: none"> <li>Continue this program in the future</li> </ul>	Achievement ratio of significant compliance violation risk response plan	100%		
<b>Respect and protection for intellectual property</b> See p.98	<b>Thorough avoidance of infringement third-party intellectual property rights, promotion of the use of company intellectual property rights</b>  <b>Promotion of the enforcement against infringement products</b>	D	Achievement ratio of patent acquisition plan in ASEAN region and China	100%	100%	<ul style="list-style-type: none"> <li>Investigated the status of rights infringement in the ASEAN region and completed advance preparations for operation of processes to investigate whether the products of other companies infringe our intellectual property rights in China</li> </ul>	<ul style="list-style-type: none"> <li>Carry out intellectual property utilization strategies through appropriate operation of processes to investigate whether the products of other companies infringe our intellectual property rights</li> </ul>	Achievement ratio of patent acquisition plan in ASEAN region and China	100%	Maintenance of a fair competitive order in society	Avoidance of financial losses from infringement of other companies' patents, prevention of lost sales in the future due to sales of counterfeit products
		O	Achievement ratio of response plan to intellectual property infringement (imitation products)	100%	100%	<ul style="list-style-type: none"> <li>Investigated the status of infringement on websites selling counterfeit goods and identified sites infringing the Company's intellectual property rights</li> </ul>	<ul style="list-style-type: none"> <li>Continuously take action to mitigate the adverse impacts on business of counterfeit goods including measures to shut down sites selling counterfeit goods</li> </ul>	Achievement ratio of response plan to intellectual property infringement (imitation products)	100%		
<b>Strict management of confidential information</b> See p.99	<b>Promotion of security measures and strengthening of illegal / inappropriate access monitoring</b>  <b>Promotion of information security training</b>	G	Cyberattack response ratio at time of detecting high security alerts	100%	100%	<ul style="list-style-type: none"> <li>As a result of continuous implementation of measures to address information security risk, significant leaks of confidential information were prevented</li> <li>Increased the ratio of test-taking by periodically distributing email publications and taking other measures, achieving the target</li> </ul>	<ul style="list-style-type: none"> <li>Continuously reinforce information security countermeasures</li> <li>Continuously implement measures to raise employee awareness concerning the importance of information security</li> </ul>	Cyberattack response ratio at time of detecting high security alerts	100%	Achieve a safe and secure information society	Avoidance of financial losses from leaks of confidential information
		D	Information leak confirmation and response ratio at time of large data output	100%	100%			Information leak confirmation and response ratio at time of large data output	100%		
		D	Ratio of employees passing information security proficiency test	95% or more	96%			Ratio of employees passing information security proficiency test	95% or more		
<b>Respect for individuality</b> See p.76	<b>Promotion of human rights education and thorough publicity of internal whistleblower system</b>	D	Achievement ratio of human rights training plan	100%	100%	<ul style="list-style-type: none"> <li>As a result of analyzing training records at all workplaces, determined that employee awareness of human rights increased</li> <li>Conducted training for employees working overseas and those scheduled to be transferred overseas</li> <li>Visits to local sites could not be conducted due to the impact of COVID-19, and measures to support the introduction of whistleblower systems were suspended</li> </ul>	<ul style="list-style-type: none"> <li>Continue this program in the future</li> <li>Continuously conduct training for employees scheduled to be transferred overseas and expand training to local employees</li> <li>Continuously provide support for the introduction of whistleblower systems</li> </ul>	Achievement ratio of human rights training plan	100%	Raise awareness concerning respect for human rights, provide equal access to judiciary	Avoidance of financial losses from human rights violations
		O	Achievement ratio of harassment education plan	100%	100%			Achievement ratio of harassment education plan	100%		
		O	Introduction ratio of harassment whistleblower system	100%	70%			Introduction ratio of harassment whistleblower system	100%		
<b>Respect for Diversity</b> See p.77	<b>Women's empowerment</b>  <b>Employment of persons with disabilities</b>	D	Number of times training to support women's empowerment conducted annually	1 time or more	3 times	<ul style="list-style-type: none"> <li>Conducted training for female leaders on acquisition of business mindset skills</li> <li>Conducted training for managers on supporting career development by female subordinates</li> <li>Women accounted for 20 of 73 new recruits</li> </ul>	<ul style="list-style-type: none"> <li>Continuously provide opportunities for female employees to enhance their careers</li> <li>Continuously undertake measures including active publicity and expansion of worksites that facilitate empowerment of women</li> </ul>	Ratio of women in management positions	4% or more	Promotion of participation by women in decision-making	Acquisition of shareholders' equity in conjunction with higher external assessment of measures regarding women's empowerment, securing labor capacity by increasing the retention rate for female employees
			Ratio of women among new graduates recruited for career-track positions	30% or more	27%			Ratio of women among new graduates recruited for career-track positions	30% or more		
<b>Human resources development</b> See p.77	<b>Promotion of human resource development programs</b>	D	Achievement ratio of employee growth support training plan	100%	100%	<ul style="list-style-type: none"> <li>Implemented rank-specific training and quality training</li> <li>Each division raised skills necessary for the execution of business in accordance with capacity development plans</li> <li>Implemented development programs for managers at overseas sites</li> <li>Implemented a global leader development program for young employees who are candidates for future managers</li> </ul>	<ul style="list-style-type: none"> <li>Raise employee problem-solving capabilities</li> <li>Implement activities to support future career development</li> <li>Expand educational content and online training services</li> <li>Continuously implement measures to develop global human resources who can serve as business leaders</li> </ul>	Achievement ratio of training plan for development of autonomous-minded human resources	100%	Promotion of skill development for young people	Reinforcement of organizational capabilities through the utilization of the diverse individuality of employees, avoidance of human resource losses through separation, enhancement of human resource performance
			Achievement ratio of worksite education plan	100%	100%			Achievement ratio of worksite education plan	100%		
		O	Achievement ratio of global human resources education plan	100%	100%			Achievement ratio of global human resources education plan	100%		
<b>Enhancement of work environments and occupational health and safety</b> See p.78	<b>Promotion of the thorough management of employees' working hours and prevention of the recurrence of long working hours</b>	D	Response ratio to prevent the recurrence of long working hours	100%	100%	<ul style="list-style-type: none"> <li>Monitored over time work hours by general employees</li> <li>Held monthly labor-management meetings to confirm that there are no violations of labor agreements and that working hours are being appropriately managed</li> <li>General employees: Target achieved</li> <li>Management employees: Target not achieved; however, the achievement ratio increased substantially compared to FY2018 and a certain degree of success was achieved by measures to encourage employees to take paid leave</li> <li>Analyzed working hour survey data, provided feedback on the analysis results to each Group company and requested implementation of measures to curtail long working hours</li> </ul>	<ul style="list-style-type: none"> <li>Continue this program in the future</li> <li>Analyze the status of unachieved targets and continuously implement measures to achieve targets</li> <li>Starting in FY2022, continuously implement working hours management based on working hours in FY2021, which was set as a voluntary management standard</li> </ul>	Response ratio to prevent the recurrence of long working hours	100%	Realization of rewarding workplaces, prevention of health damage, promotion of safe and secure working environment	Avoidance of financial losses from occupational accidents, avoidance of financial losses from work in excess of statutory working hours and failure to use paid leave
			Annual frequency of labor-management consultations relating to working hours	12 times	12 times			Annual frequency of labor-management consultations relating to working hours	12 times		
		Operational achievement ratio of standard for number of days of paid leave taken annually	100%	99%	Operational achievement ratio of standard for number of days of paid leave taken annually			100%			
		O	Achievement ratio of working hours management standards	100%	80%			Achievement ratio of working hours management standards	100%		



# Targets and Results Concerning Material Issues

E Environment S Social G Governance

Material issues (materiality)	Activity outline	Scope of application	FY2021 results					FY2022 plan			
			KPI	Target	Results	Initiatives and self-assessment	Policies going forward	KPI	Target	Impact on society	Impact on business
<b>Enhancement of work environments and occupational health and safety</b> S See p.78 	<b>Promotion of occupational health and safety risk management</b>	G	Number of serious occupational accidents	None	1	<ul style="list-style-type: none"> <li>A serious occupational accident occurred at an overseas Group company. Analyzed the causes, took measures to prevent recurrence, and distributed the information to all Group companies</li> </ul>	<ul style="list-style-type: none"> <li>Conduct rigorous safety management using risk assessment methods and reinforce safety training for employees</li> </ul>	Number of serious occupational accidents	None	Realization of rewarding workplaces, prevention of health damage, promotion of safe and secure working environment	Avoidance of financial losses from occupational accidents, avoidance of financial losses from work in excess of statutory working hours and failure to use paid leave
			D	Missed work frequency ratio	0.8 or less	0.4	<ul style="list-style-type: none"> <li>Focused on fundamental countermeasures and engineering countermeasures against mechanical accidents</li> <li>Conducted rigorous safety management for work in high locations</li> </ul>	<ul style="list-style-type: none"> <li>In fiscal 2022, set targets at half or less of the fiscal 2021 KPI target values and reinforce safety countermeasures even further</li> </ul>	Missed work frequency ratio		
		Number of workers exceeding internal blood lead concentration management standards (35 µg / dL)		None	4	<ul style="list-style-type: none"> <li>Strictly managed blood lead concentration standards for workers who handle lead in accordance with internal standards, but the target was not achieved due to workers levels in excess of the standards</li> </ul>	<ul style="list-style-type: none"> <li>Analyze causes of non-conformity, continuously improve work environments at sites where lead is handled</li> </ul>	Number of workers not meeting internal blood lead concentration management standards	None		
		Number of worksites in work management category III		None	None	<ul style="list-style-type: none"> <li>Launched a project to increase lead dust collection efficiency, reviewed local ventilation facilities, and took other measures</li> </ul>	<ul style="list-style-type: none"> <li>Continue this program in the future</li> </ul>	Number of worksites in work management category III	None		
		O		Missed work frequency ratio	2.1 or less	2.0	<ul style="list-style-type: none"> <li>Shared information on measures for preventing recurrence of examples of accidents that occurred at overseas sites, took measures to prevent occurrence of similar accidents</li> <li>Reduced the number of minor occupational accidents by more than 10%</li> </ul>	<ul style="list-style-type: none"> <li>Continuously implement countermeasures against the risk of accidents resulting in missed work</li> </ul>	Missed work frequency ratio		
			Number of workers exceeding internal blood lead concentration management standards (60 µg / dL)	None	None	<ul style="list-style-type: none"> <li>Started full-scale target management based on internal management standard values at all production sites, improved facilities and operations at production sites</li> </ul>	<ul style="list-style-type: none"> <li>Set even stricter management standards to continuously reduce blood lead concentration levels</li> </ul>	Number of workers not meeting internal blood lead concentration management standards	None		
<b>Provision of high-quality products</b> S See p.79 	<b>Promotion of quality improvement and strengthening of quality communication</b>	G	Achievement ratio of targets for claims and in-process defects	100%	64%	<ul style="list-style-type: none"> <li>Did not achieved the target due to the concentrated occurrence of defects in specified businesses and fluctuations in production resulting from the effects of COVID-19</li> </ul>	<ul style="list-style-type: none"> <li>Implement priority measures to achieve targets</li> </ul>	Achievement ratio of targets for claims and in-process defects	100%	Improvement in energy efficiency, responses to natural resource depletion, reduce waste generation, promotion of sustainable urbanization, development of a safe and secure society	Reduction of financial losses from quality defects, increased profits in conjunction with a stronger replacement business, avoidance of financial losses from the occurrence of product accidents
	<b>Strengthening of maintenance service setup</b>	D	Achievement ratio of operational management standards for product maintenance service systems	100%	100%	<ul style="list-style-type: none"> <li>Conducted target management using indicators to ascertain the status of capturing maintenance demand</li> </ul>	<ul style="list-style-type: none"> <li>Analyze results data and work to improve the efficiency of internal management standards to promote the capture of maintenance demand</li> </ul>	Achievement ratio of operational management standards for product maintenance service systems	100%		
	<b>Promotion of product safety education</b>	G	Number of serious product accidents	None	None	<ul style="list-style-type: none"> <li>Continuously reinforced product safety management through implementation of voluntary action plan concerning product safety</li> </ul>	<ul style="list-style-type: none"> <li>Conduct product safety training at overseas Group companies to raise understanding of product safety throughout the Group</li> </ul>	Number of serious product accidents	None		
<b>Promoting environmental protection</b> E See p.73 	<b>Promotion of effective use of water resources</b>	G	Ratio of reduction of water use (compared with FY2018)	6.0% or more	10.3%	<ul style="list-style-type: none"> <li>Continuously encouraged cyclical use of water at domestic and overseas Group company production sites</li> </ul>	<ul style="list-style-type: none"> <li>Continuously implement measures to curtail water intake</li> </ul>	Ratio of reduction of water use (compared with FY2018)	8.0% or more	Elimination of water shortage problems, improvement in energy efficiency and resource efficiency, climate change mitigation, prevention of water pollution and air pollution, reduction of natural resource consumption, reduce of waste generation	Avoidance of loss of sales opportunities due to delayed responses to issues concerning water security, carbon neutrality, and a recycling-oriented society, avoidance of financial losses from the occurrence of environmental accidents
	<b>Contribution to realization of low-carbon society</b>		Ratio of reduction of CO <sub>2</sub> emissions (compared with FY2018)	4.0% or more	8.1%	<ul style="list-style-type: none"> <li>Launched an energy saving and renewable energy project to undertake company-wide measures</li> </ul>	<ul style="list-style-type: none"> <li>Continuously undertake company-wide countermeasures</li> </ul>	Ratio of reduction of CO <sub>2</sub> emissions (compared with FY2018)	6.0% or more		
	<b>Prevention of environmental pollution</b>		Number of major environmental accidents	None	None	<ul style="list-style-type: none"> <li>Managed operations pursuant to internal management standards stricter than those under environmental regulations</li> </ul>	<ul style="list-style-type: none"> <li>Continuously conduct rigorous environmental risk management</li> </ul>	Number of major environmental accidents	None		
	<b>Improvement in ratio of use of recycled materials in products provided to markets</b>		Ratio of recycled lead used as lead raw materials in lead-acid batteries	35.0% or more	55.9%	<ul style="list-style-type: none"> <li>Increased the recycled lead use ratio at some overseas Group companies in China, Turkey, Indonesia, and Thailand</li> </ul>	<ul style="list-style-type: none"> <li>Work to maintain and improve fiscal 2021 results</li> </ul>	Ratio of recycled lead used as lead raw materials in lead-acid batteries	35.0% or more		
<b>Developing and popularizing environmentally considered products</b> E See p.71 	<b>Market expansion for our products contained in environmentally considered products</b>	G	Percentage of environmentally considered products in total sales of all products	34.0% or more	36.5%	<ul style="list-style-type: none"> <li>Sales recovered from the impact of COVID-19</li> </ul>	<ul style="list-style-type: none"> <li>Take measures to provide products and services that appropriately meet the needs of stakeholders regarding a decarbonized society</li> </ul>	Percentage of environmentally considered products in total sales of all products	35.0% or more	Improvement in energy efficiency, reduction of natural resource consumption, climate change mitigation	Avoidance of loss of sales opportunities from delayed responses to issues concerning a recycling-oriented society, increased profits from expanded sales of environmentally considered products
<b>Responsible procurement</b> S See p.80 	<b>Responses to responsible mineral procurement</b>	G	Achievement ratio of responsible mineral survey plan	100%	100%	<ul style="list-style-type: none"> <li>All matters regarding customer-need based mineral procurement surveys are conducted in cooperation with suppliers (gold, tantalum, tungsten, tin, cobalt, and mica)</li> <li>In Japan, identified smelter with high CSR risk in mineral procurement and took measures to mitigate risk</li> </ul>	<ul style="list-style-type: none"> <li>Collaborate with stakeholders in mineral supply chains to reinforce measures appropriately addressing the relevant risks</li> </ul>	Achievement ratio of responsible mineral survey plan	100%	Realization of sustainable supply chains, abolition of forced labor and child labor, reduction of deaths due to violence, eradication of all forms of violence and torture against children	Avoidance of financial losses from occurrence of supply chain CSR risks
	<b>Management of supply chain CSR risks</b>		Achievement ratio of supplier CSR issues improvement plan	100%	100%	<ul style="list-style-type: none"> <li>Based on the results of a supplier CSR survey, took measures to improve identified CSR issues in supply chains</li> <li>Investigated response measures to issues in collaboration with suppliers and improved operations</li> </ul>	<ul style="list-style-type: none"> <li>Continue this program in the future</li> </ul>	Achievement ratio of supplier CSR issues improvement plan	100%		

D Domestic O Overseas G Global



# Environment

## Developing and Popularizing Environmentally Considered Products

The GS Yuasa Group believes that providing society with products that consider the impact on the environment (environmentally considered products) throughout the entire product lifecycle promotes sustainable consumption and advances market expansion of environmentally considered products. We consider it important to contribute to the creation of a sustainable society by strategically working on the development and popularization of products that foster a virtuous cycle of environment and economy. We also view the strengthening of market competitiveness by attaining competitive advantage as vital.

The Group considers the environmental impact of all processes, ranging from the extraction of raw materials to the disposal and reuse of products. Further, we are committed to promoting initiatives for the development and popularization of products that demonstrate environmental performance and that meet the needs and expectations of society.

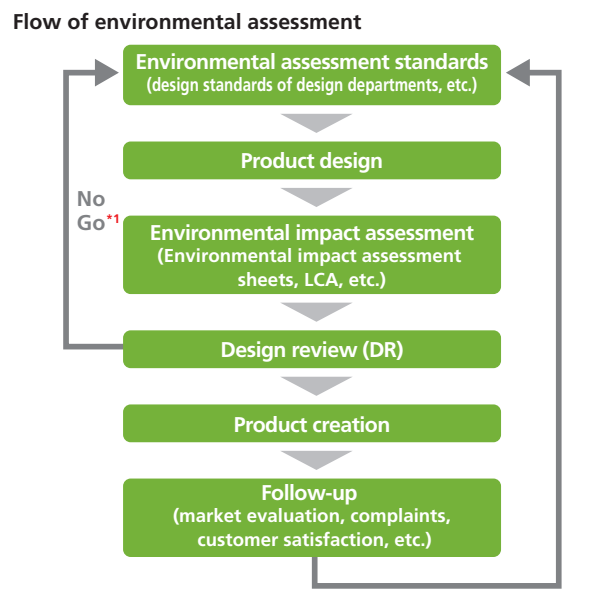
### Designing environmentally considered products

The GS Yuasa Group's products have some 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 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 labelling.

### Environmental assessment

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)

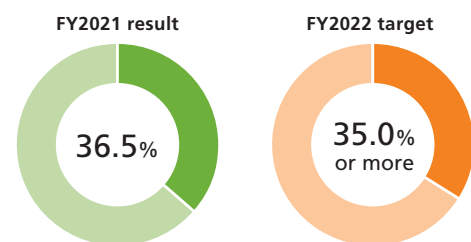


\*1 If the environmental assessment standards are not met, assessment will be conducted again from the beginning.

### Popularizing environmentally considered products

The GS Yuasa Group defines environmentally considered products as those products that help mitigate global warming, and we are actively working to develop and popularize such products. In fiscal 2019 we started incorporating 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



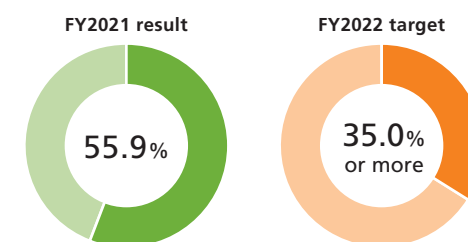
### Examples of environmentally considered products

Business sector	Product
Automotive batteries	<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>
Industrial batteries and power supplies	<ul style="list-style-type: none"> <li>Power conditioners</li> <li>Lithium-ion battery</li> </ul> <p>Effectively utilizing renewable energy</p>
Automotive lithium-ion batteries	<ul style="list-style-type: none"> <li>Lithium-ion batteries for HEVs</li> <li>Lithium-ion batteries for EVs and PHVs</li> </ul> <p>HEV batteries and EV batteries 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. In fiscal 2019 we started taking action to work toward 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. We have 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 material in lead-acid batteries



### Management of chemical substances contained in products

The GS Yuasa Group takes steps to provide products with minimal environmental burden based on the Chemical Substance Management Guidelines, which clarify the standards for chemical substances in products.

These guidelines are part of initiatives to examine chemical substances contained in materials delivered as stipulated in the GS Yuasa Group green procurement criteria. With these guidelines, we classify chemicals contained in our main materials, as well as the secondary materials and the parts used in the products that the Group makes and sells as either prohibited substances or managed substances.

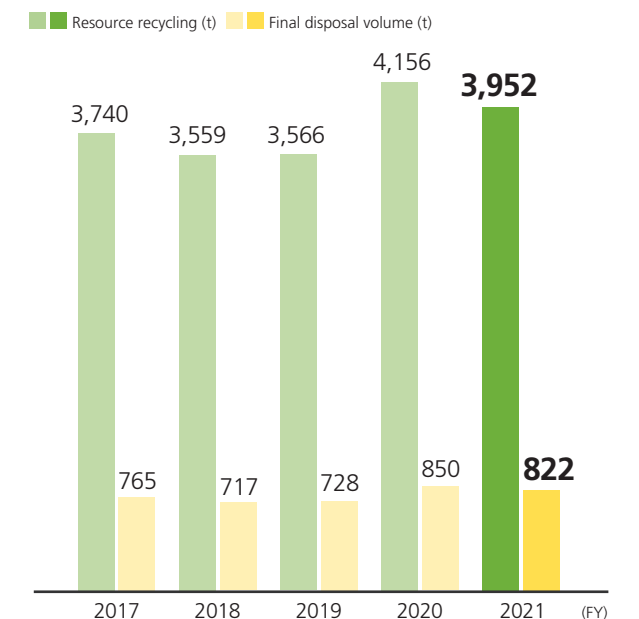
We work with our suppliers who supply main materials, auxiliary materials and components to identify and definitively manage the substances covered by the guidelines to raise the environmental quality of our products.

### Resource recycling of used product

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, we are promoting initiatives for processing used products and resource recycling by using the wide area certification system\*2.

\*2 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.

#### Status of recycling and processing of used products





# Environment

## Contribution to Realization of Low-carbon Society (Promoting Environmental Protection)

The Group believes that it is important to continuously improve the energy management system associated with its business activities and promotes 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 recent years, policies and targets aimed at carbon neutrality have been set forth in countries around the world with the aim of a shift to a sustainable decarbonized society. Going forward, we will continue to contribute to the realization of a sustainable society by suitably responding to global social issues and the needs of our stakeholders.

### Reduction of CO<sub>2</sub> emissions

The Group promotes initiatives that contribute to a low-carbon, sustainable society as part of our business strategy by incorporating CO<sub>2</sub> emissions reduction targets in production activities around the world in the Group's Mid-Term Management Plan.

In fiscal 2021, we launched a company-wide project (Energy Saving and Renewable Energy Project) to promote the target of long-term reduction of CO<sub>2</sub> emissions (reduction by fiscal 2030 of 30% or more compared to fiscal 2018 levels). In this project, we are working on promoting measures to save energy, introducing solar power generation facility in our own factories, and procuring renewable energy from the market. In addition, we have established an energy management system at each business site and Group company and are promoting measures to save energy and initiatives for the introduction of renewable energy.

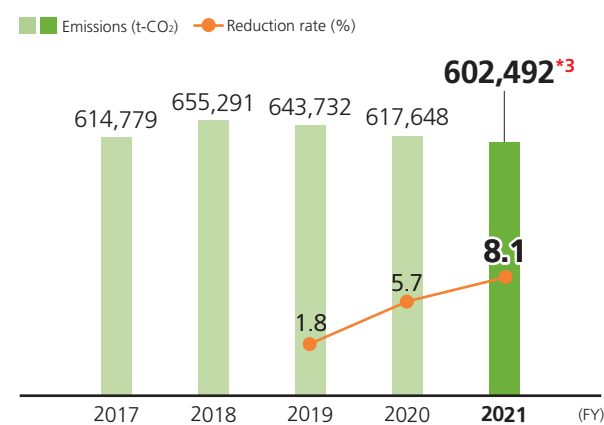
The reduction rate of CO<sub>2</sub> emissions in fiscal 2021 was 8.1% compared to fiscal 2018, achieving the annual target (of 4.0% or more). We believe that enforcing carbon management by utilizing renewable energy is the main reason for achieving the target. We are committed to continued promotion of company-wide initiatives in the future too.

\*The Group manages CO<sub>2</sub> emissions in totality and not on a basis of intensity, with the aim of reducing greenhouse gas emissions consistent with the Paris Agreement.

### Main Activities of the Energy Saving and Renewable Energy Project (Fiscal 2021)

Categories	Items	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	<ul style="list-style-type: none"> <li>● Improvement of storage battery charging process</li> <li>● Examining for improvement of charging facilities</li> </ul>
	Efficient use of production facilities	Thorough periodic inspections of capacity utilization status
Introduction of solar power generation facility	Implementation of the plan to introduce solar power generation facility	Installed a solar power generation system at Blue Energy Co., Ltd. (Estimated reduction: 162t-CO <sub>2</sub> / year)
	Survey on the introduction of solar power generation facility	Survey the feasibility of introducing equipment at all 11 business 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 (FY2021 reduction volume: 19,201t-CO <sub>2</sub> )
	Procurement of electricity through renewable energy certificates (RECs)	Acquisition of domestic and overseas renewable energy certificates (FY2021 reduction volume: 22,536t-CO <sub>2</sub> )

### Changes<sup>\*1</sup> in the Group's CO<sub>2</sub> emissions and the reduction rate<sup>\*2</sup>



\*1 Compared to fiscal 2018.  
 \*2 We have been expanding the scope of application since fiscal 2018.  
 \*3 The amount of CO<sub>2</sub> emissions in fiscal 2021 is provisional.

## Promotion of Effective Use of Water Resources (Promoting Environmental Protection)

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. To that end, we are working to prevent water risks from surfacing by taking measures such as efficient use of water and appropriate wastewater treatment.

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).

### Examples of a water risk initiative

Category	Item	Example of Initiative
Water consumption	Reusing water	Recycling water used in the production process
	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

### TOPIC

#### Reuse of treated rainwater

At our Gunma Plant, we are working to reduce industrial water consumption by reusing water that has been properly treated by rainwater treatment facilities, such as backwash water of industrial water filtration equipment and rainwater. Through this initiative, we aim to reduce industrial water consumption by approximately 1,500 m<sup>3</sup> / year or more.



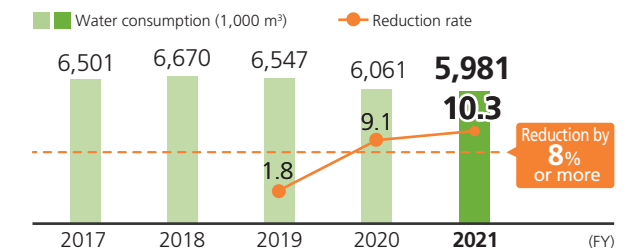
Rainwater treatment facility

### Reducing water use

The Group is working to improve the efficiency of water use in conjunction with our business strategy by incorporating the target for reducing water consumption in production activities worldwide (reduction of water consumption by 8.0% or more by fiscal 2022, in comparison to fiscal 2018) in its Mid-Term Management Plan.

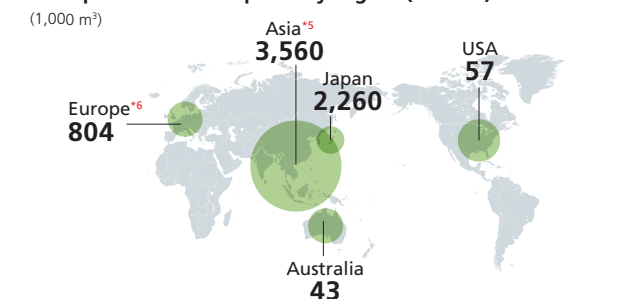
With the water consumption reduction rate in fiscal 2021 being 10.3% compared to fiscal 2018, the annual target (6.0% or more) could be achieved. It is believed that the major factor in achieving the target was continued promotion of water recycling at the production sites of Group companies in Japan and overseas. Going forward, we will continue promoting initiatives to control the quantity of water intake.

### Changes<sup>\*3</sup> in the Group's water consumption and the reduction rate<sup>\*4</sup>



\*3 Compared to fiscal 2018.  
 \*4 We have been expanding the scope of application since fiscal 2018.

### Group water consumption by region (FY2021)



\*5 Total of China, Taiwan, Vietnam, Malaysia, Indonesia, Thailand, India, and Pakistan  
 \*6 Total of UK, Hungary, and Turkey



# Social

Message from Director in Charge of Human Resources

## Continuing to enhance corporate value through diversity management to build stronger worksites



**Kazuhiro Fukuoka**

Director, GS Yuasa Corporation

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

### Importance of human capital in enhancing corporate value

GS Yuasa places importance on continuing to create new value by capitalizing to the maximum degree possible on the diverse values, experiences, knowledge, and abilities possessed by the human resources working at all our sites and pooling their wisdom. Autonomous-minded human resources, which is our ideal for achieving this goal, are the driving force behind the realization of our management philosophy and vision. Raising the HR value of employees through training leads directly to enhancing GS Yuasa's corporate value. To maintain and improve our medium- to long-term organizational strength, increase our competitiveness, and continue to ensure the flexibility and robustness capable of enduring unexpected changes, we must strive to improve the organization and enhance human capital.

Our main initiatives include engagement with employees and regular checks to gauge and improve their mental health condition. In implementing these efforts, we will set important engagement items for the company as key performance indicators (KPIs). In addition, we will promote measures to enhance work engagement and ensure psychological safety.

### Diversity and inclusion, human resource development

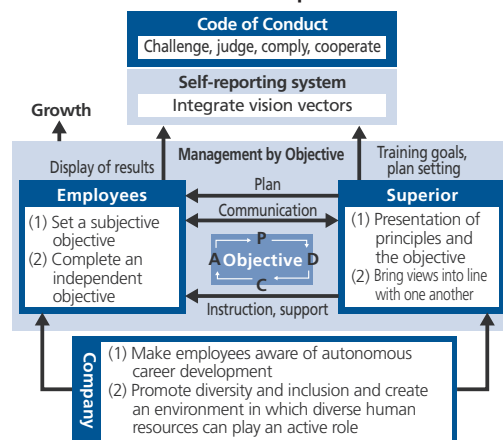
GS Yuasa has endeavored to capitalize on the personalities and abilities of each individual and to build workplaces where each individual can continue to work with enthusiasm and fulfillment. Since 2016 we have devoted efforts toward promoting women's empowerment and in fiscal

2021 GS Yuasa was certified as a Nadeshiko Brand by the Japanese Ministry of Economy, Trade and Industry and Tokyo Stock Exchange, which means that we are recognized as an outstanding enterprise in encouraging women's success in the workplace. Going forward, we see the positioning of diversity in medium- to long-term targets and organizational decision making as most important issues and thus intend to promote further diversity and inclusion. We also expect to achieve our targets over the next few years for raising the ratio of women in managerial posts. In addition, we will endeavor to raise the ratio of non-Japanese in managerial posts and the ratio of mid-career recruits.

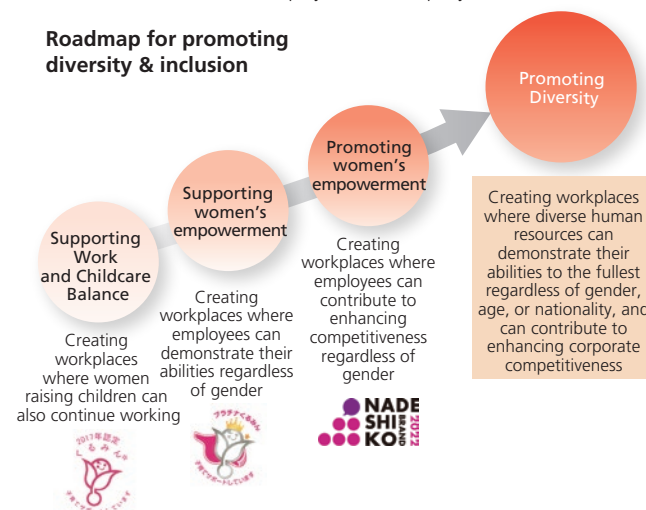
Regarding human resource development, we believe that the wellspring of value creation lies in worksites and therefore devote our efforts to the training of autonomous-minded human resources to boost worksite strength. Future points that will need strengthening are high-level expertise, management that capitalizes on diverse perspectives and ideas, and building a corporate culture in which employees mutually learn outstanding techniques. In particular, we will expand educational opportunities and career development so as to respond to an age characterized by volatility, uncertainty, complexity, and ambiguity (VUCA). Furthermore, we will redefine the necessary skills and rebuild our training system in line with the advance of digitalization. As a result, we will establish diversity management to build stronger worksites.

One of the strengths of our company is that we have many humble and hardy human resources who go about their work with sincerity. It is these human resources that have built GS Yuasa into what we are today through their steady efforts and determination to overcome various difficulties. Amid the increasing diversity of workstyles and values and fluidity of human resources, our aim is to build GS Yuasa into an enterprise with a corporate culture of realizing the creation of innovations in which both employees and company shine.

#### Basics of human resource development



#### Roadmap for promoting diversity & inclusion



## Respect for Individuality

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 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. We promote human rights risk management based on international norms on human rights and are engaged in activities to prevent and reduce the negative impact of human rights on our stakeholders.

### Identification of human rights risks

We collaborate with outside experts to identify human rights issues that pose human rights risk so that we can appropriately manage those risks. We have set not only employees but also stakeholders in the value chain as the target when identifying human rights issues.

Furthermore, we evaluated risks relating to human rights issues at GS Yuasa, a core business company, and identified issues to be addressed with priority. We assess risk that originates not from business but from people from the perspective of whose rights and which rights will be negatively impacted from the Group's business activities. We address related human rights issues by taking human rights risk countermeasures integrated into existing business processes.

In the future, we will deploy this process at domestic and overseas Group companies as well.

#### Human rights issues to be addressed with priority (GS Yuasa International Ltd.)

Issue	Human rights risk	Persons subject to impact
Unsafe or unhealthy work environment	Risk that employees will not be able to work healthily due to inappropriate labor health and safety management	Employees
Harm to health from environmental pollution	Risk that the lives or health of local residents will be harmed due to atmospheric pollution or water contamination resulting from business activities	Local residents

### Organization of grievance mechanisms relating to human rights violations

We operate an internal whistleblower system to provide a remedy to the victims of negative impacts on human rights. We have created a system that enables employees (including

supplier employees) who may have been affected by human rights violations resulting from business activities to directly consult about or report on negative impacts on their human rights. If information that raises concerns regarding human rights violations is received, we promptly analyze the validity of that information and take appropriate measures to prevent any expansion of human rights risk over the course of time.

### Promoting human rights education

We conduct employee education with the aim of fostering an understanding of the importance of business activities and so that we can implement them with respect for human rights.

#### Examples of human rights respect education

- Implementation of human rights education at the workplace
- Distributing email publications on human rights
- Human rights risk explanatory meetings etc.

#### TOPIC

##### Worksite training on diversity

We have been consistently providing human rights education in the form of meetings for all our employees. In fiscal 2021, we set "diversity (respect for diversity and inclusion)" as an essential theme. Through discussions based on case studies in the workplace, we have strived to enhance awareness of the importance of respecting diversity and about unconscious bias (prejudices that one unconsciously holds due to past experiences, knowledge, and beliefs, among other things).

### Responding to human rights issues at overseas group companies

To avoid or mitigate negative impacts on human rights from our business activities, the Group conducts measures to address human rights issues at overseas Group companies.

Specifically, our CSR promotion inspectors toured working environments and examined other aspects of overseas Group companies, confirming compliance with the legal systems in nations and regions where business is conducted and making comparisons with international human rights standards. In addition, we analyze and evaluate the results of those inspections and implement necessary countermeasures while taking into consideration the national and local culture and customs where we conduct business.



# Social

## Human Resource Development / Respect for Diversity

At the GS Yuasa 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

Through on-the-job training (OJT) that focuses on the management by objective system, we are working on fostering autonomous-minded human resources. In addition, off-the-job training (Off-JT) which includes rank-specific training and open-to-all training, is used to improve leadership and management skills and promote career development.

With regard to career development, the Group promotes career management in which employees communicate their aspirations in terms of duties, work location, and skill development, to the Company through annual reviews on career development. This enables them to proactively think about their goals and their vision of their work.

### Promoting diversity (diversity & inclusion)

The Company and its core subsidiaries are actively promoting diversity and inclusion as one of its management issues. In 2018, the Company launched the "GY Mirai Project" to actively recruit diverse human resources and continuously develop an environment that allows each individual to make the most of their individuality and abilities, and to create a workplace where each individual can continue to work with enthusiasm and fulfillment.

In particular, in the promotion of women's empowerment, the Company believes that it is necessary to increase the number of female employees involved in medium- and long-term goals and organizational decision-making, and to develop diversity and inclusion to realize its philosophy of "Innovation and Growth," focusing on expanding opportunities for employees to play an active role by simultaneously supporting the two axes of "career development" and "support for work-life balance." Further, top management regularly sends out messages and is working to help employees understand and spread awareness of the importance and significance of these initiatives.

### Career development

We are also working to build a system that enables early identification of candidates for directors and managerial positions.

#### Main Initiatives

- Conducting training on the theme of career advancement for female employees and their superiors
- Proactive dispatch for external leadership training
- Conducting training to foster next-generation management
- Introduction of e-learning that aims to promote understanding of women-specific health issues
- Holding exchange meetings between female outside directors and managers
- Ensuring fairness in promotions and appointments (responding to life events) and assigning roles according to expertise
- Considering mid-career recruitment of female managers (including candidates for managerial positions)
- Initiatives to promote women's empowerment has been added to the evaluation indicators for managers and the evaluation criteria at the time of appointment



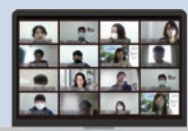
An exchange meeting with female outside directors

### Support for work-life balance

With the aim of "creating an environment that makes it easy for employees to participate in childcare," we have established a support system for childbirth and childcare, etc. In addition, we are working to ensure that both men and women can use the system, such as by establishing an Expert Committee on the Development of Future Generations that holds consultations between the labor union and the Company.

#### Main initiatives

- Sharing information on support systems using the in-house intranet
- Conducting information exchange meetings for work-childcare balance
- Publishing the Handbook on Supporting Work-Childcare Balance, and distributing it to all employees
- Implementing a Questionnaire on Balancing Work and Nursing Care and utilizing it to further understanding of the current situation and consider countermeasures



Information exchange meetings for work-childcare balance (held online)

### Promotion of diversity initiatives in management

We are incorporating and promoting diversity and inclusion initiatives into our management goals.

### Main initiatives

- Establishing a roadmap and goals for diversity promotion, and publicize the details of initiatives and results both internally and externally
- Discussing diversity initiatives and issues at meetings attended by senior management, and report plans and implementation status at Board of Directors meetings
- Establishing an item on diversity as part of director's priority issues

### Key indicator concerning the promoting women's empowerment

Indicator	FY2021 result	FY2024 target
Percentage of women in managerial positions	3.5%	4.0%
Percentage of women among workers	14.1%	15.0%
Ratio of women among new graduates recruited for career-track positions	27.4%	30.0%
Percentage of women at the assistant managers rank	8.9%	10.0%
Men's rate of taking childcare leave	22.5%	40.0%*1

\*1 The target for fiscal 2024 was revised based on the actual value for fiscal 2021.

### TOPIC

#### First certified as a Nadeshiko Brand\*2 in fiscal 2021

The company has been selected for the Nadeshiko Brand that is jointly sponsored by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange.



\*2 The aim is to promote investment in companies and accelerate corporate initiatives by introducing listed Japanese companies that excel in promoting women's empowerment as attractive stocks to investors who place importance on improving corporate value over the medium to long term.

### Promoting employment of persons with disabilities

GS Yuasa Socie Ltd., a special subsidiary of GS Yuasa, actively employs persons with disabilities. The company's fiscal 2021 employment rate for persons with disabilities was 2.68%. 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.

In addition, through the provision of company-wide consultation and support for employment, lifestyle, and medical care, such as holding training sessions to nurture "key support personnel" at all workplaces, we are striving to establish a foundation for an in-house support system that facilitates the realization of long-term stable work.



Training for key support personnel

## Enhancement of Work Environments and Occupational Health and Safety

In order to protect all employees (including contractors) from injury and illness, the Group believes that it is important for the entire company to work together to promote activities aimed at building a culture of safety. To this end, we have established the Fundamental Health and Safety Policy,\*3 which outlines our basic approach to safety and health initiatives throughout the Group, and we are promoting activities aimed at preventing the occurrence of occupational accidents.

\*3 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)

### Promoting health and safety management

In order to promote the activities for achieving the Fundamental Health and Safety Policy, our Occupational Safety

and Health Division oversees the strengthening of health and safety management for the entire Group. In addition, we established organizational structures and promote safety and health measures centered on safety and health committees established in individual business divisions and companies.

#### Health and safety organizational structure overview





# Social

## Reducing occupational accident risk

At all worksites of plants at domestic business sites, we 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 indications made by periodic on-site safety patrol activities conducted under the leadership of the safety and health officer.

We continuously reassess occupational accident risks, indicate sources of risk at the production plants of overseas Group companies, and provide advice on improvement, based on the results of safety and health audits conducted by CSR promotion members. When improvements concerning indications are made, information on domestic management criteria and operational processes is shared, leading to lower risk throughout the Group.

## Work style reform

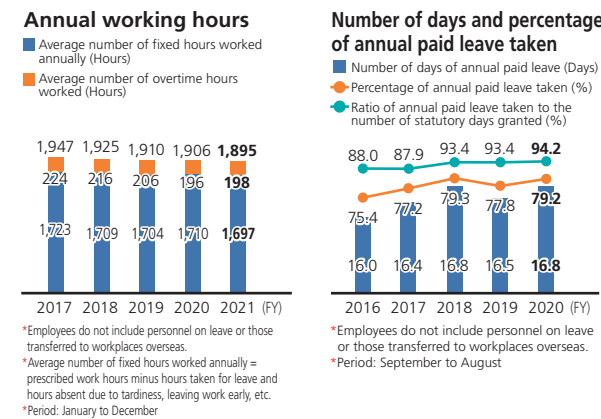
The GS Yuasa Group is striving to ensure the most appropriate work hours through cooperation between labor and management. GS Yuasa has introduced and managed systems to accurately understand and manage

### List of our company's systems

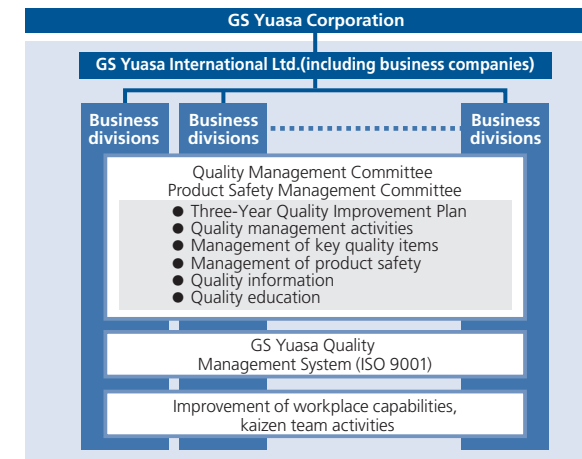
<b>Childbirth, childcare, and nursing care</b>	<ul style="list-style-type: none"> <li>Childcare leave*1</li> <li>Nursing leave</li> <li>Exemption / limitation of overtime work</li> <li>Accumulated leave (System under which employees can accumulate the number of days for annual paid leave whose validity has expired)</li> </ul>	<ul style="list-style-type: none"> <li>Paid leave for births and childcare</li> <li>Long-term and short-term nursing care leave</li> </ul>	<ul style="list-style-type: none"> <li>Short-time working</li> <li>Short-time working due to nursing care (work with a flexible schedule)</li> </ul>
<b>Flexible work style</b>	<ul style="list-style-type: none"> <li>Telecommuting program</li> <li>Staggered work times to secure breaks (securing intervals between shifts)</li> <li>Leave in hourly units</li> <li>Making it compulsory to take at least 10 days of annual paid leave</li> <li>Setting "no overtime" day</li> </ul>	<ul style="list-style-type: none"> <li>Flextime system</li> <li>Half-day leave</li> <li>Menstrual leave</li> <li>Work-life synergy leave (consecutive paid leave is recommended)</li> <li>Monitoring employees working in excess of the standard hours*2</li> </ul>	
<b>Diverse careers</b>	<ul style="list-style-type: none"> <li>Career change system (career track positions⇄regular positions / career track positions⇄specialists (a system that establishes multiple career paths))</li> <li>Recruitment of region-specific office positions</li> <li>System for conversion from non-regular employees to regular employees</li> <li>Leave of absence for volunteering duties, social service leave</li> </ul>	<ul style="list-style-type: none"> <li>Return to work program</li> <li>Leave of absence for self-training</li> </ul>	
<b>Variation in work style</b>	<ul style="list-style-type: none"> <li>Commendation system for improvement activities that have enhanced workability and productivity, etc.</li> </ul>		

\*1 Average acquisition days of childcare leave for men: 48.6 (FY2021) \*2 Average non-statutory working hours per month: 16.5 hours (FY2021)

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 an initiative 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.



## Quality management organization



## Initiatives for product safety

We created a companywide organization centered on the Product

## Responsible Procurement Promotion

The GS Yuasa 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.

## Responsible procurement promotion

We issued the Responsible Procurement Guidelines, which explain matters that we want suppliers to undertake from a responsible procurement perspective, in fiscal 2018. These Guidelines are formulated with the aim of reducing business risks that may impact improvement in mutual performance and business sustainability, based on contribution to a sustainable society through partnerships with suppliers. Through briefings for suppliers and other means, we facilitate an understanding of the essence of these Guidelines, and disseminate them throughout the entire supply chain.

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.

In addition, to continuously improve product safety management, we leverage information such as points for improving product safety obtained through periodic internal audits and external inspection.

## Responsible procurement survey of suppliers

To create a sustainable supply chain, we periodically survey our major suppliers concerning their compliance with the requirements in the Responsible Procurement Guidelines. In this survey, suppliers evaluate their own responsible response status using questionnaire type of surveys, and the Group identifies CSR issues in the supply chain based on the results of the self-evaluations and implements a process to resolve these issues. We are working in collaboration with our suppliers to resolve the CSR issues in the supply chain in order to strengthen our business foundation.

### Overview of Supplier CSR Survey Items (Fiscal 2022)

Category	Number of questions	Example question items
Human rights, labor	12	Forced labor, child labor, working hours, wages, inhumane behavior, discrimination
Health and safety	10	Occupational safety management, preparedness for emergency situations, industrial health, machinery and equipment
Environment	6	Environmental permits, pollution control, hazardous substances, waste, atmospheric emissions, wastewater
Ethics	7	Legal compliance, bribery, intellectual property, unfair trade, internal whistleblower systems, information security
Product safety	1	Ensuring product safety

## Provision of High-quality Products

GS Yuasa's products store, control, and convert electrical energy, and we are aware that because of this, product safety is of paramount importance. It is also 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.

## Implementation of quality management system

The Group promotes group-wide activities aimed at improving the quality of products and services provided to customers based on our Quality Policy.\*3 For this, GS Yuasa 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.

\*3 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)



# Directors and Auditors (As of June 29, 2022)



## Directors

### Osamu Murao President and Representative Director

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

### Masahiro Shibutani Senior Managing Director & 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  
Jun. 2014 Officer, GS Yuasa International Ltd. Corporate Auditor, GS Yuasa Battery Ltd.  
Apr. 2015 General Manager, Financial Division, GS Yuasa International 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. (current position)

Apr. 2021 Managing Director, GS Yuasa International Ltd.  
Jun. 2021 Managing Director of the Company  
Jun. 2022 Senior Managing Director, GS Yuasa International Ltd. (current position) Senior Managing Director of the Company (current position)

### Kazuhiro Fukuoka Director

Apr. 1982 Joined Japan Storage Battery Co., Ltd. (currently GS Yuasa International Ltd.)  
Apr. 2004 General Manager, Corporate Strategic Planning Office (Information Systems) of the Company  
Oct. 2005 Director, GS Yuasa Business Support Ltd. (currently GS Yuasa International Ltd.)  
Aug. 2008 Executive Vice President, Siam GS Battery Co., Ltd.  
Jun. 2015 Officer, GS Yuasa International Ltd.  
Jun. 2017 General Manager, Human Resources Division, GS Yuasa International Ltd. (current position)  
Jun. 2019 Senior Officer, GS Yuasa International Ltd.  
Apr. 2020 Director, GS Yuasa International Ltd. (current position)  
Jun. 2020 Director of the Company (current position)

### Hiroaki Matsushima Director

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 the 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)

### Ikuo Otani Outside Director

Mar. 1976 Joined Wacoal Corp. (currently Wacoal Holdings Corporation)  
Jun. 2004 Corporate Officer and General Manager of Corporate Management Division, Wacoal Corp.  
Jun. 2006 Director and Corporate Officer in charge of Corporate Management, Wacoal Corp.  
Apr. 2008 Director, Corporate Officer and General Manager of General Planning Division, Wacoal Corp.  
Apr. 2010 Director and Corporate Officer in charge of Accounting, Wacoal Corp. General Manager of Corporate Planning Division, Wacoal Holdings Corporation  
Jun. 2010 Director and General Manager of Corporate Planning Division, Wacoal Holdings Corporation  
Jun. 2011 Managing Director, Wacoal Holdings Corporation  
Jun. 2012 Senior Managing Director, Wacoal Holdings Corporation  
Jun. 2017 Outside Director of the Company (current position)

### 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.  
Outside Audit & Supervisory Board Member, Sekisui Jushi Corporation  
Jun. 2018 Outside Director of the Company (current position)

### 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  
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)

## Corporate Auditors

### Masayuki Murakami Corporate Auditor (Full-time)

Apr. 1982 Joined Japan Storage Battery Co., Ltd. (currently GS Yuasa International Ltd.)  
Apr. 2012 General Manager of Original Equipment Sales Department of Automotive Battery Business Unit, GS Yuasa International Ltd.

Oct. 2012 Division Manager of Production Division of Automotive Battery Business Unit, GS Yuasa International Ltd.  
Jun. 2013 Corporate Officer, GS Yuasa International Ltd. Deputy Business Unit Manager of Automotive Battery Business Unit, GS Yuasa International Ltd.  
Jan. 2014 General Manager of Lithium-ion Battery Business Development Department of Automotive Battery Business Unit, GS Yuasa International Ltd.  
Jun. 2015 Director of the Company  
Director, GS Yuasa International Ltd. Business Unit Manager of Automotive Battery Business Unit, GS Yuasa International Ltd.  
Jul. 2015 Division Manager of Sales Division of Automotive Battery Business Unit, GS Yuasa International Ltd.  
Apr. 2017 Deputy Business Unit Manager of Automotive Battery Business Unit, GS Yuasa International Ltd.  
Jun. 2019 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)  
Jun. 2021 Corporate Auditor, GS Yuasa Battery Ltd. (current position)  
Corporate Auditor, GS Yuasa Energy Co., Ltd. (current position)

### Akio Furukawa Corporate Auditor (Full-time)

Apr. 1981 Joined Yuasa Battery Co., Ltd. (currently GS Yuasa International Ltd.)  
Aug. 2003 General Manager, International Sales Department, Company Sales Unit, Power Supply System Sales Division, Yuasa Corporation (currently GS Yuasa International Ltd.)  
Apr. 2010 General Manager, Industrial Battery Business Promotion Division, International Business Unit, GS Yuasa International Ltd.  
Jun. 2011 Officer, GS Yuasa International Ltd.  
Apr. 2012 Deputy General Manager, International Business Unit, GS Yuasa International Ltd.  
Jun. 2014 Corporate Officer, GS Yuasa International Ltd.  
Jun. 2017 Executive Officer of the Company  
Jun. 2018 Director of the Company  
Director, GS Yuasa International Ltd.  
Jun. 2021 Full-time Corporate Auditor of the Company (current position)  
Full-time Corporate Auditor, GS Yuasa International Ltd. (current position)

Corporate Auditor, Lithium Energy Japan Ltd. (current position)  
Corporate Auditor, Blue Energy Co., Ltd. (current position)  
Corporate Auditor, GS Yuasa Fieldings Ltd. (current position)  
Corporate Auditor, GS Yuasa Infrastructure Systems Co., Ltd. (current position)

### 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 Kwansai Gakuin University Law School (current position)  
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. (current position)

### 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)



## Governance: Messages from Outside Directors



### Utilizing various information-sharing forums to bolster discussions with executives

We hold monthly meetings with the directors of GS Yuasa International Ltd., which is the GS Yuasa Group's core operating company, with the aim of exchanging opinions. As well as issues discussed in the Board of Directors, we can hear about such matters as conditions in the market and rival companies and issues concerning business execution, which is useful for our understanding of the situation.

In fiscal 2021 I feel that by promoting the analysis of detailed items on the agenda and information sharing beforehand, the operation of the Board of Directors became more efficient and discussion points were made clearer. Many issues cut across organizations, so going forward, I think it is necessary also to strengthen coordinating functions and bolster cross-section links among organizations.

From fiscal 2022, the three outside directors are scheduled to hold regular meetings as well. Outside directors have an administrative and supervisory position, but we see these meetings as opportunities to discuss matters that the company should change, including issues on the executive management side too. We will convey the results of these discussions to the president.

### Important to continue strengthening monitoring function over overseas subsidiaries

Although the briefings by overseas sites constitute a monitoring function to an extent, further countermeasures are necessary, especially in regions where market changes are rapid. In fiscal 2021 a site in China registered an impairment loss. To avoid such a situation, it is necessary to continue strengthening the monitoring function of overseas subsidiaries. The COVID-19 pandemic poses some difficulties, but I hope that we can strengthen monitoring as much as possible by conducting onsite inspections and creating opportunities for discussions with subsidiary management.

### Achievement of ESG targets essential for gaining the trust of society

Our Fifth Mid-Term Management Plan includes targets for ESG factors. Some items will require considerable effort to achieve the goals, but these targets are promises to society. I hope that activities will be conducted throughout the Group with a strong determination to definitely reach the goals.

To promote sustainability initiatives, I think it is necessary to strengthen the Board of Directors' involvement in sustainability issues through the CSR Committee. In addition, in response to the revision of Japan's Corporate Governance Code, investors and evaluation bodies are calling for ESG factors to be included in director remuneration schemes. In the Group too, I hope that we can discuss in the Nomination and Compensation Committee how the status of efforts to tackle sustainability issues can be reflected in the remuneration scheme, which would lead to the enhancement of our corporate value.



### Clarifying roadmaps to building second and third pillars of business

At present considerations are proceeding on the Long-Term Vision and Sixth Mid-Term Management Plan of the Group. In the Long-Term Vision, we need to outline the company's future image of itself, the main directions of our business, our environmental initiatives, and so on from a long-range perspective. In the next three-year Mid-Term Management Plan, we need to show more specific measures, such as targets, directions, and roadmaps, to address the issues facing us. It is important to indicate the company's strong determination to solve them. We need to clearly show roadmaps for solving the major challenges that must be overcome to enhance our corporate value, such as improving the profitability of the lead-acid batteries business, which is our core business at the moment; the establishment of second and third business pillars; and the strengthening of governance of overseas business. It is also necessary to send a strong message that raises the expectations of stakeholders in the company's future. I think the opportunities for outside directors to make proposals will increase as well.

### Risk management and the speeding up of business operations

I feel that the speeding up of decision making and delegation of authority, which I have been proposing before, are getting better year by year. However, in the lithium-ion batteries business and other fields that the Group will be focusing on going forward, the company's sense of speed is inferior to that of domestic and international rival manufacturers. Hopefully we can further speed up business operations by delegating authority to make faster decision making, improving organizational and corporate culture, clarifying authority and responsibility, and quickly rotating the PDCA (plan-do-check-act) cycle to solve issues.

In fiscal 2021 the Group launched the Business Assessment Committee as a forum to discuss important matters, such as M&A and the acceptance of large orders, thereby endeavoring to substantiate the content of discussions and identify multisided business risks. Improvements can be seen. I appreciate the efforts to tackle risks, but sometimes considerations can become too detailed. It is necessary to align matters that should be discussed with the management point of view.

### Strategic HR development to contribute to the strengthening of governance overseas

Overseas business in the Group, where market growth can be expected, involves many joint ventures that are difficult to control, and I always feel that the strengthening of governance is needed to properly administer the business. For this purpose, the development of human resources who can undertake management overseas is an urgent matter. The company is an agglomeration of organizations. If the power of each organization increases, corporate strength will expand as well. Firstly, I think it is important to enhance the capabilities of individual human resources steering the organizations. I make a suggestion that the Group should implement strategic HR development, selecting future candidate leaders from among young employees and setting job rotation so that they can accumulate various experiences. While making do in the short term by assigning outstanding human resources in Japan to management overseas, in the medium to long term I believe such HR development is sure to lead to stronger organizations and the enhancement of governance, business competitiveness, and corporate value.



## Governance: Messages from Outside Directors



### Further visualization of overseas operation risks and improved speed of risk response

Regarding the visualization of overseas operation risks, outside directors also attend the annual briefings by overseas sites, and results are evident to an extent. However, it is necessary to further speed up the process from gathering information to taking action. Amid the existence of a host of risks, including damage to the supply chain due to the COVID-19 pandemic and geopolitical risks, GS Yuasa needs to build a framework for the real-time sharing of information and to hold discussions at the management level and swiftly adopt countermeasures.

I can appreciate the progress that has been made in delegating authority so that speedy decisions can be made, such as the acceptance of new large-scale business orders. Going forward, I think it is important to properly check results after the delegation of authority has progressed and to rotate the PDCA (plan-do-check-act) cycle for checking and making improvements.

### Enlivening discussions toward optimization of the business portfolio; consideration of human capital in view of future business plans

Regarding optimization of the business portfolio, in fiscal 2021 the Board of Directors also devoted a considerable amount of time to discussing this matter, and I feel that the stance of challenging new fields is taking shape. In response to moves in society toward the realization of carbon neutrality, in addition to lithium-ion batteries for hybrid electric vehicles (HEVs) and plug-in hybrid vehicles (PHEVs), the Group has indicated its stance of addressing battery electric vehicles (BEVs), as well as its clear policy beyond that of developing all-solid-state batteries. Furthermore, in its industrial batteries and power supplies business, the Group is working on a strategy for developing new products and supplying services, such as remote monitoring, in the field of energy management toward promoting the diffusion of renewable energy.

In discussing the business portfolio, the perspective of how to secure human resources to promote business 10 or 20 years down the road is important too. We might acquire human resources from outside, or utilize our current human resources, or engage in reskilling. It is necessary to clarify required skills and visualize how we are going to secure the human capital to sustain our business. For example, in the lead-acid batteries business, the transfer of skills utilizing experienced personnel with expert skills is going to be an issue. In the industrial batteries and power supplies product and service creation business, we will need human resources with a knowledge of IoT and DX. We may also need human resources capable of doing business with software. We must consider the establishment of diverse employment patterns too, including the partial introduction of job-focused employment. Going forward, I intend to continue making suggestions concerning the utilization of human capital, including from the perspective of diversity and inclusion.



### Monitoring the Board of Directors and executive management based on productive information sharing

One year has passed since my appointment as an outside corporate auditor, and my impression is that GS Yuasa's Board of Directors sincerely listens to the suggestions of outside directors. In addition, I feel that communication is being conducted smoothly; discussions between the corporate auditors and the president take place regularly and are lively. Support for outside corporate auditors is extremely generous. For example, there is an in-house database, so much information, such as the minutes of meetings, is shared. In addition, monthly meetings with the internal auditing section enable us to understand the state of internal auditing, and the corporate auditors, including myself, compile monthly audit reports, which are useful in the sense that we can share notes.

As an outside corporate auditor, capitalizing on my experience so far, gained in an auditing company, of studying the governance regimes of many companies and coming into contact with many company managers through account auditing, I want to positively point out matters that I feel may be dubious and wrong.

### High level of governance befitting the Prime Market listing

Regarding evaluation of the effectiveness of the Board of Directors in governance, all directors and corporate auditors reply to questionnaires, and the president holds discussions with outside directors. As a result of these discussions, matters that should be improved are taken up and efforts made to enhance the effectiveness of the Board of Directors.

In April 2022 GS Yuasa moved to listing on the Prime Market of the Tokyo Stock Exchange. As world-leading enterprises, companies listed on the Prime Market are required to exercise an even higher level of governance. To upgrade to the rank of a truly global enterprise, it is important to have a governance function embracing the entire GS Yuasa Group. In particular, I think it is necessary to strengthen the mechanism for understanding the situation of overseas subsidiaries in a timely manner.

### Expectations of a future outlook compiled in a period of major transition

GS Yuasa was founded more than a century ago. In the fields of lead-acid batteries, which have a long history, and lithium-ion batteries, which use state-of-the-art technology, the company supplies products and services for automotive and industrial use.

Today society is facing various issues, such as the realization of carbon neutrality and confusion in the supply chain, and it is standing at a major turning point. Like others, we are being required to make important management decisions regarding future efforts toward batteries for EVs and batteries for clean energy. At present the company is going ahead with formulation of the Sixth Mid-Term Management Plan and Long-Term Vision, which will be announced in 2023. In doing so, it is necessary to firmly seize business chances and to indicate clearly how the Group is going to contribute to society. I hope a future outlook is compiled that balances both the solution of social issues and corporate growth.

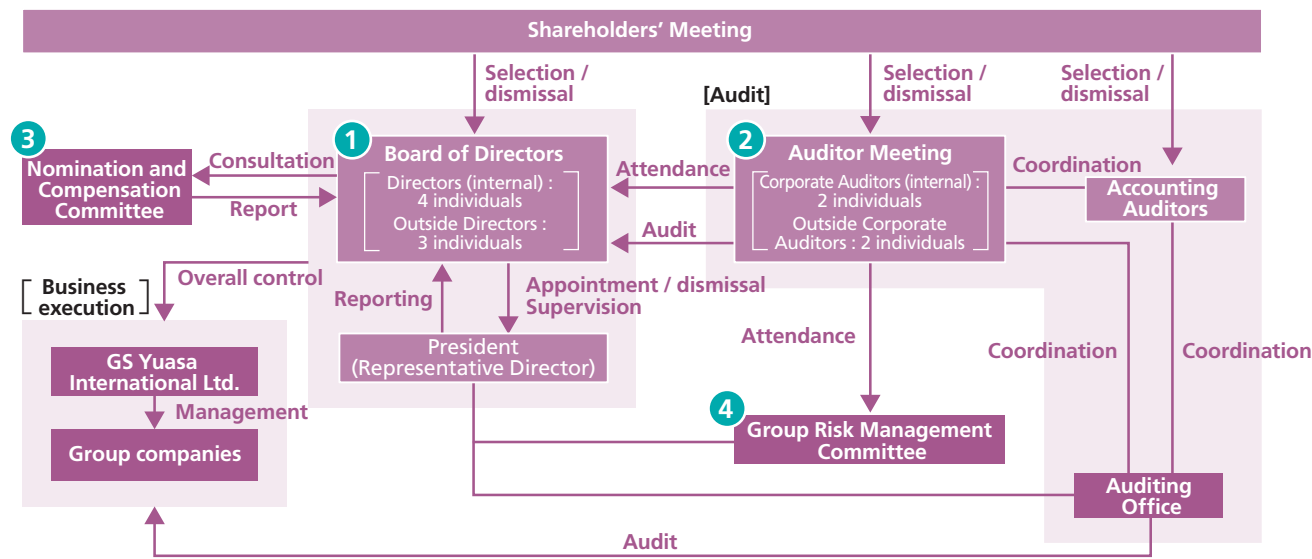


# Corporate Governance

## Corporate Governance

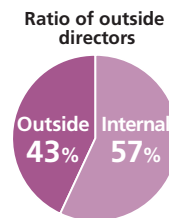
### Chart of corporate governance structure

Governance structure (FY2022)



#### 1 Board of Directors FY2021: 19 meetings

The Board of Directors is chaired by the president, and independent directors comprise one-third or more of its membership. By uniformly deciding the medium- and long-term strategies of the Group, the Board of Directors ensures speedy and effective decision making. In principle the Board of Directors meets once a month, but extraordinary meetings, as well as written resolutions or reports, are also held when necessary. In addition, the Board of Directors Secretariat, secretarial divisions, and others provide support so that outside directors can fully display their monitoring function.



#### 2 Auditor Meeting FY2021: 15 meetings

The Auditor Meeting is chaired by full-time corporate auditors and in principle meets once a month. Corporate auditors conduct appropriate auditing and fulfill a management monitoring function by, among other activities, hearing reports on the business situation, 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.



#### 3 Nomination and Compensation Committee FY2021: 8 meetings

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 FY2021: 2 meetings\*

The Group Risk Management Committee in principle meets twice a year to promote 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.

\*In light of the COVID-19 pandemic status, the second Group Risk Management Committee meeting for fiscal 2021 was held in June 2022.

### Main matters discussed in meetings of the Board of Directors in FY2021

Matters relating to the Shareholders' Meeting	<ul style="list-style-type: none"> <li>Decision on convocation and agenda of the Shareholders' Meeting</li> <li>Deciding of director nominations</li> <li>Approval of business reports, financial documents, etc.</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 director</li> <li>Directors serving concurrently at other companies</li> </ul>
Matters relating to management in general	<ul style="list-style-type: none"> <li>Matters relating to the Group's business strategies</li> <li>Matters relating to capital procurement</li> <li>Reports on state of progress of Mid-Term Management Plan and other business plans</li> <li>Matters relating to key business activities</li> </ul>
Other	<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>Matters relating to revision of the Corporate Governance Code</li> <li>Matters relating to selection of market segments</li> <li>Matters relating to treasury stock acquisition</li> <li>Status reports on the Group's disclosures and other responses in accordance with the TCFD</li> </ul>

### Approach and governance system

To drive sustainable growth and enhance corporate value over the medium and long terms, 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 dynamisms 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.

### Efforts to strengthen corporate governance

	2015	2016	2017	2018	2019	2020	2021	2022
Strengthening internal control	<ul style="list-style-type: none"> <li>2004: Establishment of the Auditing Office Established as an internal auditing body to strengthen internal control functions.</li> <li>2005: Establishment of the GS Yuasa Group Corporate Ethics Hotline Established to facilitate the quick detection and prompt response to risks following enforcement of the Whistleblower Protection Act.</li> <li>2009: Start of employee compliance questionnaire by the president (once a year) Thorough compliance ensured through regular implementation of a questionnaire.</li> </ul>						<ul style="list-style-type: none"> <li>Change of accounting auditor After comparative investigations, a new accounting auditor was appointed as the previous auditor had been in the post continuously for many years.</li> </ul>	<ul style="list-style-type: none"> <li>Reinforcement of structures for reporting by internal auditing divisions The number of times that the Auditing Office reports on matters relating to internal auditing directly to the Board of Directors was increased and collaboration with internal auditing divisions was strengthened.</li> </ul>
Enhancing the objectivity of managerial decisions	<ul style="list-style-type: none"> <li>Appointment of one outside director One individual appointed in 2015.</li> </ul>		<ul style="list-style-type: none"> <li>Number of outside directors increased to two An additional outside director was appointed to strengthen management monitoring functions.</li> </ul>			<ul style="list-style-type: none"> <li>Number of outside directors increased to three An additional outside director was appointed to strengthen management monitoring functions.</li> </ul>		
Enhancing the diversity of the Board of Directors						<ul style="list-style-type: none"> <li>Appointment of female director Extra outside directors included one woman.</li> </ul>		
Clarification of management responsibility (nomination and remuneration of directors)	<ul style="list-style-type: none"> <li>2013: Term of directors shortened to one year To respond swiftly to changes in the management environment and increase opportunities for trust in the Shareholders' Meeting.</li> </ul>		<ul style="list-style-type: none"> <li>Introduction of performance-linked stock remuneration scheme To ensure that directors share the benefits and risks of stock price fluctuations with shareholders.</li> </ul>			<ul style="list-style-type: none"> <li>Establishment of Nomination and Compensation Committee To strengthen the independence, objectivity, and accountability of the functions of the Board of Directors in the nomination and remuneration of directors, etc.</li> </ul>		



# Corporate Governance

## Policy on the appointment of directors

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 size and 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.

Note: Reasons for the selection of individual internal directors are available on our website:  
[▶ https://www.gs-yuasa.com/en/ir/pdf/GYC018ST\\_e.pdf](https://www.gs-yuasa.com/en/ir/pdf/GYC018ST_e.pdf)

## Skills matrix of directors and corporate auditors

Name	Position or responsibility	Knowledge and experience expected by GS Yuasa Corporation								Nomination and Compensation Committee
		Corporate / business management	Financial accounting	Legal affairs Risk management	IT Digitalization	Global	Manufacturing Development	Marketing Sales	ESG	
Osamu Murao	President Chief executive officer (CEO)	●		●			●		●	■
Masahiro Shibutani	Senior Managing Director	●	●			●		●		■
Kazuhiro Fukuoka	Director	●		●	●				●	
Hiroaki Matsushima	Director Chief financial officer (CFO)	●	●		●				●	
Ikuo Otani	Director Outside Independent	●	●	●					●	■
Takayoshi Matsunaga	Director Outside Independent	●				●	●		●	■
Yoshiko Nonogaki	Director Outside Independent	●				●		●	●	■
Masayuki Murakami	Corporate Auditor (Full-time)	●	●				●	●		
Akio Furukawa	Corporate Auditor (Full-time)	●				●		●		
Tsukasa Fujii	Corporate Auditor Outside Independent		●	●					●	
Akira Tsujiuchi	Corporate Auditor Outside Independent		●	●					●	

Note: The number of items expected of directors by the Company is limited to four. The above table does not show all the knowledge and experience possessed by directors.

## Policy on the independence of outside directors

We appoint several outside directors as persons with ample experience and knowledge who can make statements from an objective standpoint and contribute to the medium- to long-term enhancement of our corporate value without being restricted by corporate officers. When making such appointments, we also give

consideration to their external independence, such as by ensuring that any company to which a candidate, or that candidate's close relative, belongs or belonged has no business ties, or just minor business ties, with our Group.

We report all outside directors as independent directors to the Tokyo Stock Exchange.

## Reasons for nomination of, status of main activities of, and record of attendance by outside directors at Board of Directors and Auditor Meetings (FY2021)

Official position	Name	Reasons for nomination and status of main activities	No. of attendances / No. of meetings	
			Board of Directors	Auditor Meeting
Director	Ikuo Otani	<b>Reasons for nomination</b> Ikuo Otani has extensive knowledge about overall group management based on his experience in business planning and group management at the holding company of a listed company engaged in global business and his experience as a director at that company. <b>Status of main activities</b> Mr. Otani has made valuable points and recommendations in deliberations, in particular with regard to business restructuring of the Group and risk management in the management of overseas subsidiaries. As the main independent outside director, he provides leadership in chairing the Nomination and Compensation Committee and evaluating the effectiveness of the Board of Directors and also makes useful suggestion and proposals to strengthen the supervisory function of the Board.	19 / 19 times	—
Director	Takayoshi Matsunaga	<b>Reasons for nomination</b> Takayoshi Matsunaga has extensive knowledge for supervising overall management based on managerial experience as a director of a listed company engaged in global business and experience as an Audit & Supervisory Board member of a listed company. <b>Status of main activities</b> In deliberations on overall management as well as business strategies in particular, Mr. Matsunaga appropriately verifies suitability from an objective perspective and makes valuable suggestions and proposals, from new perspectives that differ from existing viewpoints including indicators and ideas. As an independent outside director on the Nomination and Compensation Committee and when evaluating the effectiveness of the Board of Directors and other times, he makes various suggestions and proposals from the perspectives of accelerating the pace of management and strengthening the Board's supervisory function.	19 / 19 times	—
Director	Yoshiko Nonogaki	<b>Reasons for nomination</b> Yoshiko Nonogaki has extensive knowledge for supervising overall management based on experience as an Outside Director of listed companies in addition to her experience in the business division of a listed company engaged in global business and in management at an overseas subsidiary. <b>Status of main activities</b> In deliberations on overall management as well as business strategies and ESG measures in particular, Ms. Nonogaki appropriately verifies suitability from an objective perspective. As an independent outside director on the Nomination and Compensation Committee and when evaluating the effectiveness of the Board of Directors and at other times, she makes various suggestions and proposals, and from the perspective of promoting diversity, she provides valuable advice to management and has conducted networking events with female managers.	19 / 19 times	—
Corporate Auditor	Tsukasa Fujii	<b>Reasons for nomination</b> Tsukasa Fujii has extensive experience and advanced knowledge relating to corporate legal matters gained as an attorney. <b>Status of main activities</b> Mr. Fujii offers opinions and advice based on his extensive knowledge as an attorney and his advanced expertise regarding legal matters and risk management.	19 / 19 times	15 / 15 times
Corporate Auditor	Akira Tsujiuchi	<b>Reasons for nomination</b> Akira Tsujiuchi has extensive experience and advanced knowledge relating to finance and accounting gained as a certified public accountant. <b>Status of main activities</b> Mr. Tsujiuchi offers valuable opinions and advice based on his broad knowledge gain through extensive experience as a certified public accountant and his advanced expertise regarding finance and accounting.	14 / 15 times	10 / 10 times

Note: Corporate Auditor Akira Tsujiuchi was appointed at the Annual General Meeting of Shareholders held on June 29, 2021, and 15 meetings of the Board of Directors and 10 Auditor Meetings have been held since his appointment.

## Fostering of next-generation management

In the fiscal 2019 evaluation of the effectiveness of the Board of Directors, there was a suggestion regarding policy on the fostering of next-generation management. In the light of this proposal, training is implemented for executives of GS Yuasa Corporation and directors and corporate auditors of GS Yuasa International Ltd., our core operating subsidiary, as well as executive officers and corporate officers, with the aim of deepening their understanding of the duties and responsibilities of directors.

In fiscal 2021, training was conducted on sustainable management, the TCFD, and management analysis with the objectives of enhancing corporate value and identifying management issues.

Fiscal Year	Officer training topics
FY2021	Sustainable management, TCFD, management analysis
FY2022	Purpose-driven management and implementation of sustainable management



# Corporate Governance

## 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. The Board then investigates and carries out improvement measures to address the issues that were identified through the evaluation. The Company will continue to evaluate the effectiveness of the Board and strive to make further improvements in the future.

### Evaluation method

Each director and corporate auditor completes a questionnaire, and based on the responses obtained, individual interviews are conducted. The details of the responses are analyzed and evaluated, and based on the results, the Board of Directors deliberates on improvement measures.

### Evaluation items

- Composition of the Board of Directors
- Agenda of the Board of Directors
- Management of the Board of Directors
- Duties of the Board of Directors

### Results of FY2021 evaluation of effectiveness (Targeted period: January–December 2021)

#### Overall evaluation

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.

#### Main opinions

There were opinions to the effect that further improvements are needed in the efficient operation of resolutions, deliberations, and reporting matters of the Board of Directors and in strengthening the system for internal auditing divisions to report directly to the Board.

#### Our response

A review was conducted of the Group Approval Regulations, which specify decision-making authority within the Group, and the number of times that internal auditing divisions report directly to the Board of Directors.

### Results of FY2020 evaluation of effectiveness (Targeted period: January–December 2020)

#### Main opinions

There were suggestions for further improvements to be made regarding internal control and the risk management setup and involvement in the successor plans of the Nomination and Compensation Committee.

#### Our response

The Company improved its monitoring arrangements, such as the regular supply of information relating to overseas sites, and the expansion of information sharing relating to senior employees in the Nomination and Compensation Committee.

## 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

At a meeting held on February 25, 2021, the Board of Directors approved a policy on determining the details of remuneration including the remuneration of individual directors. In deciding this policy, the Board referred the matter to the Nomination and Compensation Committee and received a report. The Board also confirmed that the method of determining the remuneration for each director

for the current fiscal year and the specifics are consistent with the decision-making policy approved by the Board and that the report from the Nomination and Compensation Committee was complied with and is in line with the decision-making policy. The Board of Directors determines the specific amounts to be paid within the limit of compensation approved by the Shareholders' Meeting and delegates decisions to the president based on the report of the Nomination and Compensation Committee.

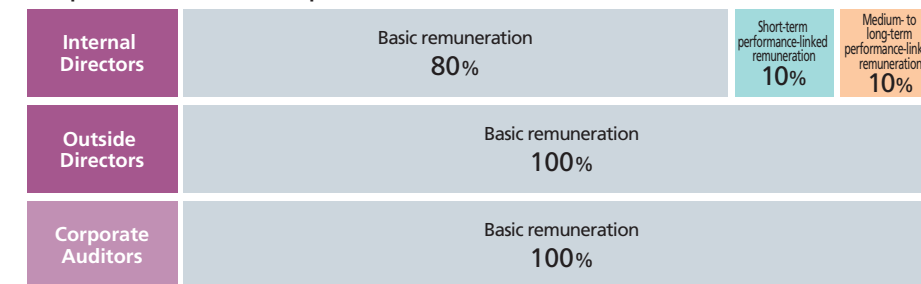
A director's remuneration consists of a fixed basic remuneration, a performance-linked annual bonus as a short-term incentive, and a performance-linked stock remuneration scheme as a medium- to long-term incentive. The basic remuneration (cash remuneration) is decided in consideration of such factors as various assessments and

levels in listed companies with about the same business scale as the Company. The annual bonus, a short-term performance-linked remuneration, is paid to directors (excluding outside directors) after approval by the Shareholders' Meeting with the aim of increasing awareness of the need to contribute to sustained business growth and enhanced corporate value. The stock remuneration scheme is aimed at increasing the awareness of directors of the need to contribute to medium- to long-term business

growth and enhanced corporate value. In principle, company shares are issued at the time of a director's retirement through a trust set up by the Company.

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



Note: The figure is hypothetical with percentages calculated based on results for fiscal 2021 and may change due to variations in consolidated performance and other factors.

### Evaluation items regarding officer remuneration for directors

<b>Basic remuneration</b>	<ul style="list-style-type: none"> <li>● Standard amount in accordance with the director's position, etc.</li> <li>● Evaluation of the business performance of the of the relevant division and individual</li> </ul>
<b>Short-term performance-linked remuneration</b>	<ul style="list-style-type: none"> <li>● Business performance in the fiscal year (profit attributable to owners of parent, etc.)</li> <li>● Degree of improvement and target achievement since the previous year</li> </ul>
<b>Medium- to long-term performance-linked remuneration</b>	<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* 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 performance-linked points awarded in fiscal 2021 were to be calculated based on results for fiscal 2020. However, it was difficult to calculate the consolidated results forecast for fiscal 2020 due to the impact of COVID-19, and as a result, the forecast was excluded from the Fifth Mid-Term Management Plan and no performance-link point index was set. Because of this, performance-linked points were not awarded in fiscal 2021.

### Total amount of remuneration, etc. by category, total amounts of remuneration, etc. by type, and number of applicable persons

Category	Total amount of remuneration, etc.	Total amount of remuneration, etc. by type				Number of eligible persons
		Basic remuneration	Bonus	Share remuneration	Non-monetary remuneration included in the remuneration to the left	
Directors (excluding outside directors)	¥187million	¥157million	¥22million	¥7million	¥7million	5 (including 1 retiree)
Corporate auditors (excluding outside corporate auditors)	¥49million	¥49million	—	—	—	3 (including 1 retiree)
Outside directors / corporate auditors	¥47million	¥47million	—	—	—	6 (3 current directors, 2 current corporate auditors, and 1 former corporate auditor)

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

## Transition to the Tokyo Stock Exchange Prime Market

Upon the transition to the new market classification of the Tokyo Stock Exchange in April 2022, the Company selected the Prime Market. We've been working to ensure transparency in management and improve the effectiveness of corporate governance through efforts such as thorough compliance and improvement of management soundness. Going forward, we will continue to improve the systems

required by the Prime Market, including strengthening corporate governance and enhancing the details of disclosure, and we will maintain management that meets the trust and expectations of shareholders and investors.

Note: Refer to the Corporate Governance Report submitted to the Tokyo Stock Exchange for information regarding the status of compliance with each principal of the Corporate Governance Code.  
▶ [https://www.gs-yuasa.com/en/ir/pdf/governance\\_2022.pdf](https://www.gs-yuasa.com/en/ir/pdf/governance_2022.pdf)

# Corporate Governance

## Internal control system

To strengthen the management foundation, the GS Yuasa Group has improved the system and relevant rules to ensure the maintenance of ethical business practices based on the Companies Act. This system includes 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.

## Cross-shareholding

Cross-shareholding is the possession of shares of other companies for purposes other than pure investment. Possession of the shares of business partners and others can be expected to help maintain medium- to long-term relations, expand business, and promote synergy. If it is deemed that the possession of such shares will enhance our corporate value and benefit our shareholders and investors, we go ahead and hold such shares. Accordingly, every year the Board of Directors examines the rationale

behind the holdings of specific shares. If it is decided that there is no rationale for holding them, efforts are made to reduce them. Also, 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.

## Risk Management and Risk Information

### Risk management

#### 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.

First, by predicting and understanding risks and adopting appropriate preliminary measures, the escalation of risks (outbreak of crises) can be prevented (risk avoidance). Second, effective measures can be taken beforehand so that even if a crisis does occur, losses and other damage are kept to a minimum (risk reduction). Based on this approach, our Group has formulated risk management rules that stipulate the responsibilities of employees and our risk management promotion setup.

#### The 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. The following is an outline of these activities:

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

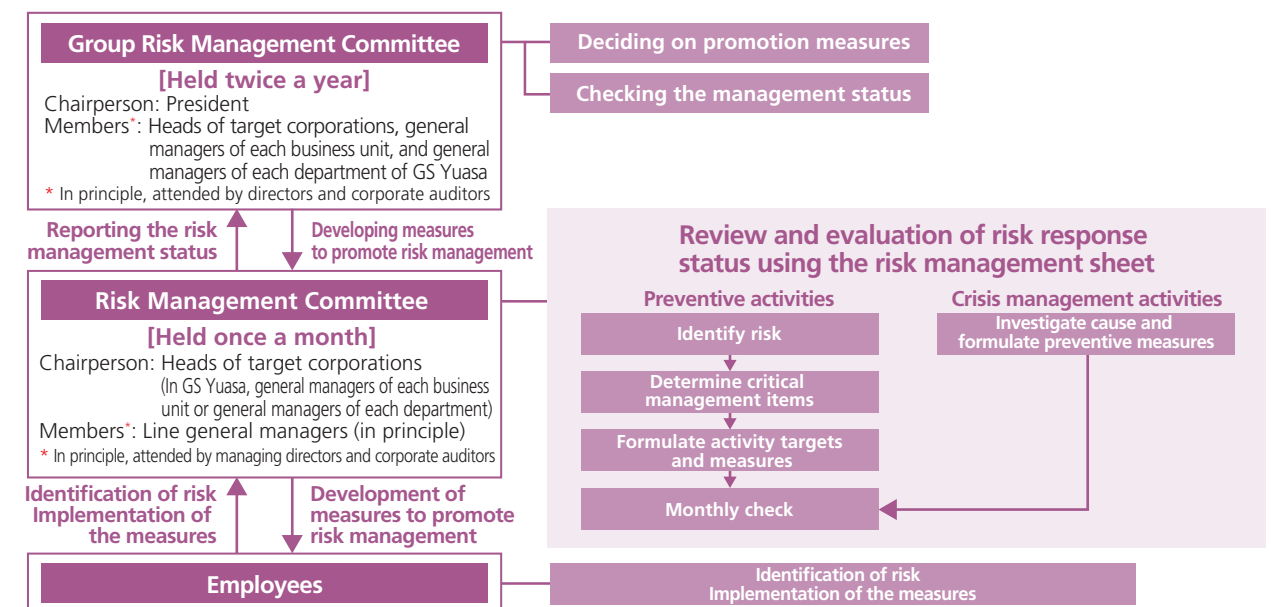
In the event of the occurrence of a critical incident, measures are taken for early resolution and normalization of operations and efforts are made to strengthen management by identifying root causes, implementing and expanding preventive measures, and confirming their status each month using a risk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

#### 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, to minimize corporate losses, and an effective response will be implemented swiftly and with appropriate care.

#### Structure and functions of risk management



### Risk information

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

Risk	Details of impacts if a risk occurs	Likelihood of occurrence of risks	Countermeasure
Raw material markets fluctuations	Lead is a key material used in lead-acid batteries, our main product. However, changes in the market price of lead cannot be reflected immediately in our product prices, so our earnings and financial standing could be affected.	◎	Optimizing production systems and working to reduce costs while building an optimum supply structure.
Intensification of price competition	We are exposed to intense price competition in each of the markets where it conducts business, and setting prices at advantageous levels has become difficult. We not only face the same competitors as in Japan, but also must deal with low-cost products supplied by overseas companies, which make competition more intense. It may not be easy to maintain and expand market share and secure profitability in the future. If business profitability declines as a result, there may be an impact on our earnings and financial standing including the risk of impairment of fixed assets.	◎	Cutting costs and implementing measures to strengthen marketing power.
Foreign exchange rate fluctuations	Financial statement items that are denominated in local currencies outside of Japan, such as sales, expenses, and assets, are converted into yen for consolidated financial statements. The yen value of these amounts can change depending on the exchange rate, even if the amounts have not changed in local currencies. When local currencies appreciate in areas where the Group carries out overseas production, manufacturing and procurement costs can rise in these areas, and medium- to long-term currency fluctuations may impede the Group's ability to procure, manufacture, distribute, and sell goods according to plan. Therefore, it is possible for foreign exchange rate fluctuations to influence our earnings and financial standing.	◎	Conducting forex-hedged transactions in an effort to hold the adverse effects of short-term foreign exchange rate fluctuations to a minimum.



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

Risk	Details of impacts if a risk occurs	Likelihood of occurrence of risks	Countermeasure
Related to international activities and overseas expansion	The following risks are intrinsic to overseas markets, and they could affect our earnings and financial standing. a) Unforeseen changes to laws or regulations b) Difficulty in hiring and keeping human resources c) The possibility that inadequate technology infrastructure will affect our manufacturing and other activities, or lower the reputation of our products among customers d) Social disturbances caused by terrorism or war	○	<b>Strengthening communications between headquarters and our various sites to build a framework capable of rapidly supplying products and services that meet needs in each region of the world.</b>
Environmental regulations	In China, the central government shows signs of strengthening environmental regulations on lead-acid battery manufacturers and lead smelters. Some manufacturing activities at the Group companies could be affected.	◎	<b>Established the Fundamental Environmental Policy to outline our basic Group-wide approach to environmental efforts. The policy aims to guide our contributions to the emergence of a sustainable society. Also, developing and using environmental management systems that will help to reduce environmental impacts and prevent any accidents that could cause environmental pollution.</b>
M&A	When we carry out M&A, the transaction is considered from a range of viewpoints, including the target company's financial standing and potential synergy with our businesses. Due to drastic changes in the business environment or other factors, however, an acquired business might not perform as planned. If invested funds cannot be recovered or a loss on goodwill is recorded, our earnings and financial standing could be affected.	△	<b>Monitoring financial results on a monthly basis.</b>
Climate change	Based on an awareness that climate-related issues are one of the important management issues, we have announced our support for the Task Force on Climate-related Financial Disclosures (TCFD) recommendations and are working to reduce greenhouse gas emissions in our business activities. However, the occurrence of events that make it extremely difficult to adapt to environmental regulations or unforeseen circumstances in the future could increase costs for environmental responses beyond expectations, damage facilities as a result of wind, flooding, or other causes, or restrict business activities, which could affect our earnings and financial standing.	It is difficult to make a complete forecast	<b>Working to reduce greenhouse gas emissions throughout society as a whole by promoting renewable energy that uses storage battery technology and other measures while further expanding information disclosures in line with the TCFD recommendations.</b>
Disasters and accidents	If a natural disaster such as an earthquake, storm or flood damage, or major snowstorm or if an accident such as a fire, explosion, or damage were to occur at our business site, there is a risk of unforeseen events occurring.	◎	<b>Creating earthquake, flood, and snowstorm response manuals and working to enhance fire-prevention management and disaster preparedness.</b>
Interest rate fluctuations	Our interest-bearing debt burden includes some debt with variable interest rates. Therefore, if interest rates rise, the Group's cost for procuring funds could increase.	○	<b>During the Fifth Mid-Term Management Plan, interest-bearing debts are expected to increase somewhat in order to activate growth investment, but we will strive to keep the debt redemption period within three years and to achieve both growth and financial discipline.</b>
Lawsuits and other legal proceedings	In carrying out business, we may be sued by suppliers or third parties, and there is a risk that regulatory authorities could take legal action against us.	○	<b>Continuously surveying the rights, patents, and other intellectual property of other companies and working to minimize the risks by reinforcing internal information sharing.</b>
Economic conditions	Demand for the GS Yuasa Group's products is influenced by economic conditions in the markets where products are sold. Therefore, in the Group's main markets, which include Japan, the rest of Asia, North America, and Europe, economic setbacks and accompanying demand contractions, could adversely affect the earnings and financial standing.	○	<b>Providing reassurance and confidence to customers through business operations based on a fundamental stance that emphasizes quality, and working to enhance corporate value and build corporate infrastructure for sustainable growth in the future in accordance with our corporate philosophy of "Innovation and Growth."</b>
COVID-19 pandemic	If the spread of the COVID-19 pandemic interferes with our production or other business activities, there may be an impact on our earnings and financial standing.	◎	<b>Establishing a crisis management headquarters chaired by the president, gathering and analyzing crisis information, and implementing safety measures including encouraging employees to work from home.</b>

## Thoroughly Fulfilling Our CSR and Ensuring Compliance

### Basic approach

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.

### 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.

### Items included in the CSR Manual

- Concrete examples of compliance operations and risk actualization (explained in a Q&A format and in columns)
- Diagnostic checklist to help employees assess their own adherence to corporate behavioral standards

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.

### Workplace meetings on CSR

Workplace meetings on compliance were initiated in fiscal 2012 as a means of allowing compliance awareness to permeate to each and every employee, and have been held for 10 consecutive years through fiscal 2021.

Since fiscal 2018, meetings have been conducted as "workplace meetings on CSR," covering topics relating to CSR policies. In addition to all GS Yuasa workplaces (380 workplaces), domestic group companies (21 companies)

are also included in the scope of application.

The educational materials used in the meetings are prepared by the division in charge for each topic and include content tailored to the circumstances of the Group. Vigorous debates took place at many workplaces in the meetings held in fiscal 2021, and 96% of the workplaces rate these as meaningful. We intend to continue holding these meetings while constantly upgrading the content.

### Examples of themes of CSR workplace meetings

- Corporate philosophy
- CSR Policy and Code of Conduct
- Diversity (unconscious bias)
- Preventing intentional wrongdoing
- Handling confidential information
- Subcontracting laws
- Personal information protection
- Security trade controls
- Intellectual property
- Harassment (sexual harassment / power harassment)
- Management of working hours
- Occupational health and safety
- Product safety
- Specific facility reports
- Global warming and corporate responsibility
- Promotion of supply-chain CSR activities

### GS Yuasa Group 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 managed rigorously and that whistleblowers are protected so that they are not subject to disadvantageous treatment as a result of making a report.

In fiscal 2021, there were 8 reports to the corporate ethics hotline (4 received in fiscal 2020). While remaining committed to protecting whistleblowers, we conduct inquiries and take appropriate action on these matters.

**Elimination of antisocial forces**

The GS Yuasa 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

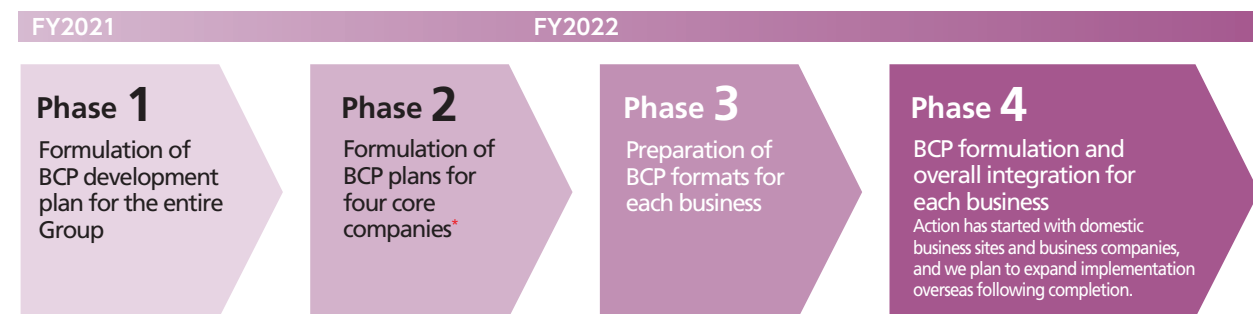
excess of the normal shareholder's right to any person or company associated with organized crime" and "we will cut off business or any other relationships with individuals and organizations having an indication of support for organized crime." This policy and the Code of Conduct have been shared with all Group employees.

**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 implement BCP responses, in fiscal 2021 the Group launched a BCP project led by the

Occupational Safety & Health Division and including personnel from other divisions. We are setting steps for each phase and will deploy them throughout the Group at the earliest possible time for the development and perpetuation of the Company.

**BCP project activity roadmap (conceptual)**



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

**DX Initiatives**

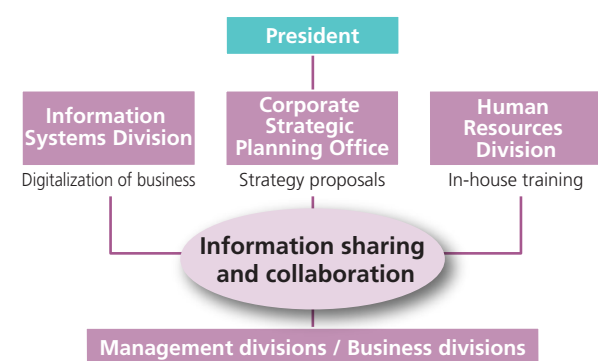
The Group first introduced AI and IoT in 2018 and launched full-scale efforts to promote DX in 2021. In fiscal 2021, the Group held the DX Case Study Presentation Conference that gathered case studies of DX utilization. The event was attended by 350 people online. In addition, the DX Policy Planning Workshop was held to solicit ideas from the entire company according to the topics discussed by management. Two of the ideas selected from the workshop were budgeted as companywide projects in fiscal 2022 and are currently being implemented.

We are also focusing on human resource development, which is necessary to undertake initiatives. In fiscal 2022, all GS Yuasa employees took the "DX Literacy Course". This training was designed for each employee to consider situations in which digital technology can be utilized in their work as part of their assignments and was intended to further establish awareness of DX promotion in the workplace. In fiscal 2023, we will establish a DX promotion organization while increasing operational efficiency and accelerating new service creation to achieve transformation.

**Examples of initiatives**

Overview	Details
Demand forecasts for automotive lead-acid batteries	Use AI to automate demand forecasts for replacement lead-acid batteries, which had been performed based on experience
AI-based predictive failure detection technology for battery energy storage systems	AI can detect potentially faulty storage batteries before a failure occurs. Monitoring large-scale energy storage systems can save manpower
AI-based image inspection for specialized batteries	Introduce AI to image inspections to ensure battery quality, significantly reducing the number of man-hours required for inspections

**Internal structure for DX promotion**



**Intellectual Property Initiatives**



**Intellectual property strategy**

The Group's intellectual property activities are based on the PDCA cycle of identifying patent strength, identifying and avoiding risks, and acquiring rights with an awareness of how to link these activities to the growth of GS Yuasa's business. We reinforced these activities during the period from the Fifth to Sixth Mid-Term Management Plans with emphasis on the following three points.



- 1 Transformation to strategic business**  
Using the landscape method, we analyze the patents of the Company and other companies, share information on technology trends with development and business divisions, and investigate countermeasures.
- 2 Division-oriented IP creation and clearance activities**  
Through personnel exchanges with business divisions and regular intellectual property meetings with development and business divisions, we are building a strategic patent network for promising technologies. In addition, we quickly identify intellectual property rights of other companies that may be an obstacle to our business and take advance measures to avoid them.
- 3 Elimination of overseas competition**  
With regard to competition in China and ASEAN countries in particular, we conduct dismantling studies on information regarding the acquisition of patents by competitors and their products in order to secure interests in them. We also actively acquire and utilize rights.

**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 quarterly management meetings to report on these policies, new issues, and the status of disputes.

- Issues investigated (partial list)**
- Information on the patents of the Company and other companies relating to all-solid-state batteries
  - Synergies with the patents of GS Yuasa Infrastructure Systems Co., Ltd.

**Intellectual property creation activities**  
At the beginning of each fiscal year, an invention policy

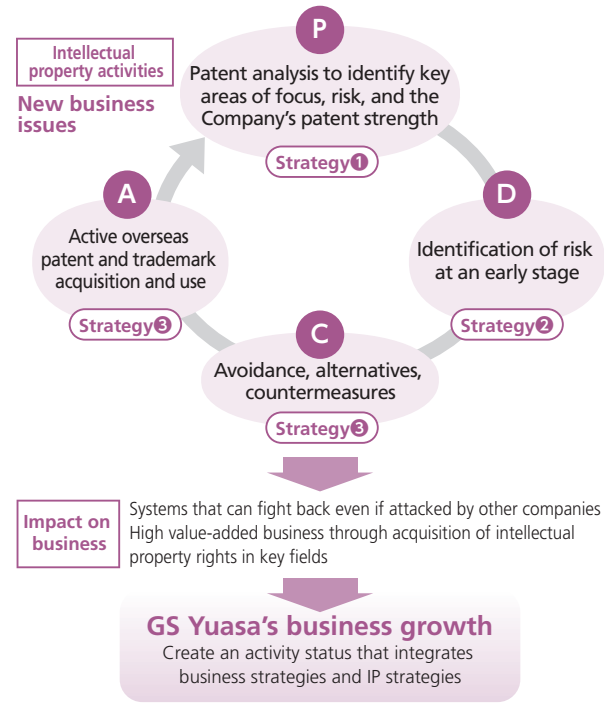
meeting is held with each development division to discuss key topics for the year and coordinate and make arrangements on important issues and methods for building a patent network related to them. Plan progress is reviewed, revisions are made at regular meetings, and measures are taken to achieve targets.

In addition, to enhance the incentives for invention, we have an annual award system that encourages inventions throughout the Company including the Outstanding Invention Award for the patent that has contributed the most to business and the Best Inventor Award for those who have created inventions that are outstanding both in quality and quantity. In recent years, we have been focusing on promoting service-related patent applications to protect and utilize new businesses that make use of AI and IoT from the perspective of patents.

**Global activities**

In addition to applying for foreign patents for most domestic patent applications, the Group is also focusing on business defense through patent rights in order to curb competition from emerging companies overseas. In the area of trademarks, the Group has been curbing counterfeiters in China, ASEAN countries, and other countries by exposing them and suing for injunctive relief and has publicized major results on its own websites and the websites of overseas affiliates to curtail them.

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





## 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 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, 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.

## 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 hold individual interviews, conferences sponsored by securities companies, briefings for individual investors, and other events. Furthermore, we make use of investor relations sites to actively transmit information.

In addition, as a means of disseminating information internally, the director responsible for investor relations provides video presentations of financial results to managers on a half-year basis and regularly publishes and

investor relations column on the PR portal site. In the future, we plan to use in-house training programs to disseminate investor relations information.

We endeavor to regularly share opinions obtained through these activities with management including the Board of Directors and reflect them in our management and business activities.



Financial briefing video Investor relations site

### Record of main IR activities (FY2021)

Activity content	Frequency	Remarks
Financial results briefing for Institutional investors and analysts	4 times	Audio data (Japanese only) for the first and third quarters is available on the shareholder and investor information site Video clips (Japanese and English versions) for the second and fourth quarters are posted on the shareholder and investor information site
Individual meetings	Japan: 143 Overseas: 28	
Overseas virtual roadshows	2 times	
Conferences	3 times	
Small meetings	13 times	
Technology small meetings	1 time	Held jointly with research and development departments regarding initiatives on all-solid-state batteries
Briefing for individual investors	3 times	Held online with video and briefing materials posted on the shareholder and investor information site
Shareholders' Meeting	1 time	



# 5 Financial / Corporate Data

- 11-Year Consolidated Financial Highlights ..... 101
- Financial Analysis ..... 103
- Financial Section ..... 105
- Corporate Information ..... 167
- External Evaluation ..... 168
- Stock and Investor Information ..... 169
- Overall Picture of Information Disclosure ..... 170

# 11-Year Consolidated Financial Highlights

Notes: 1. Operating profit ratio, ROE and total payout ratio refer to profit before amortization of goodwill (operating profit and profit) after fiscal 2016.  
 2. The Company implemented a five-to-one 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.  
 3. The "automotive batteries (overseas)" segment previously included a portion of transaction amounts for industrial batteries handled overseas, but as of fiscal 2018, the segment was changed to "industrial batteries and power supplies." Net sales and operating profit for fiscal 2017 are indicated for the reporting segments after the change.  
 4. Some consolidated subsidiaries in the "automotive batteries (overseas)" segment were transferred to the "industrial batteries and power supplies" segment in fiscal 2019. In conjunction with this change, figures for fiscal 2018 were restated according to the modified segments.  
 5. Aggregate only the amount of depreciation expenses related to tangible fixed assets as depreciation expenses.  
 6. Total debt is total amount of short-term borrowings, commercial papers, bonds payable, and long-term borrowings.

	FY2011	FY2012	FY2013	FY2014		FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
<b>For the fiscal year (millions of yen)</b>												
Net sales	¥ 285,434	¥ 274,509	¥ 347,995	¥ 369,760		¥ 365,610	¥ 359,605	¥ 410,951	¥ 413,089	¥ 395,553	¥ 386,511	<b>¥ 432,133</b>
Automotive batteries (Japan)	58,784	55,648	56,905	51,747		50,986	67,598	89,240	91,460	88,059	83,639	<b>81,494</b>
Automotive batteries (Overseas)	120,906	119,885	164,252	183,759		191,402	170,613	185,574	177,052	162,138	165,296	<b>186,743</b>
Industrial batteries and power supplies	68,464	72,427	79,242	79,822		74,804	72,765	74,237	80,042	84,566	84,037	<b>99,465</b>
Automotive lithium-ion batteries	20,974	10,597	32,501	45,181		38,312	39,305	44,784	45,585	42,264	35,950	<b>47,637</b>
Specialized batteries and others	16,303	15,951	15,094	9,248		10,104	9,323	17,113	18,947	18,525	17,587	<b>16,791</b>
Operating profit	16,030	9,775	18,197	20,914		21,909	23,106	21,920	22,654	21,676	24,810	<b>22,664</b>
Operating profit before amortization of goodwill	–	–	–	–		–	24,185	24,076	25,066	23,935	27,069	<b>23,853</b>
Automotive batteries (Japan)	4,266	3,931	3,310	2,397		3,291	5,676	6,143	7,766	6,976	8,669	<b>5,878</b>
Automotive batteries (Overseas)	6,006	6,380	8,996	10,786		11,358	10,460	8,960	9,926	9,187	12,225	<b>9,965</b>
Industrial batteries and power supplies	9,640	10,813	12,199	8,657		8,061	8,701	7,364	7,827	9,157	6,890	<b>5,775</b>
Automotive lithium-ion batteries	(3,265)	(11,249)	(7,243)	(2,626)		(565)	45	1,320	300	(1,708)	(852)	<b>1,654</b>
Specialized batteries and others	(617)	(100)	936	1,698		(235)	(699)	287	(754)	322	136	<b>579</b>
Profit attributable to owners of parent	11,733	5,767	9,982	10,043		9,030	12,229	11,449	13,524	13,674	11,455	<b>8,468</b>
Profit attributable to owners of parent before amortization of goodwill	–	–	–	–		–	13,699	13,894	15,974	15,925	13,538	<b>9,498</b>
Capital investment	38,849	33,159	18,570	11,008		12,955	19,909	15,223	21,461	18,220	23,159	<b>28,575</b>
Depreciation expenses	11,228	13,264	12,939	15,715		15,309	15,241	16,506	16,115	15,979	16,210	<b>16,775</b>
Research and development expenses	6,250	6,227	6,495	6,725		6,996	9,533	11,170	9,868	9,517	11,201	<b>12,383</b>
Cash flows from operating activities	8,287	19,069	19,704	19,729		30,215	34,846	21,934	31,493	33,119	35,817	<b>12,879</b>
Cash flows from investing activities	(28,660)	(29,249)	(9,786)	(14,519)		(17,311)	(32,912)	(20,810)	(17,570)	(20,690)	(19,327)	<b>(30,204)</b>
Free cash flow	(20,373)	(10,180)	9,918	5,210		12,904	1,934	1,124	13,923	12,429	16,490	<b>(17,325)</b>
Cash flows from financing activities	13,152	3,839	589	(5,798)		(9,685)	(3,715)	(6,702)	(11,706)	(10,245)	(7,018)	<b>5,203</b>
<b>At year-end (millions of yen)</b>												
Total assets	¥ 278,426	¥ 290,368	¥ 340,462	¥ 359,522		¥ 346,523	¥ 370,508	¥ 389,216	¥ 384,243	¥ 385,416	¥ 431,913	<b>¥ 480,763</b>
Cash and cash equivalents	16,476	11,210	23,392	25,708		27,788	24,673	19,776	23,408	24,748	35,807	<b>25,845</b>
Total net assets	136,221	141,189	154,702	182,187		177,790	188,155	205,638	207,708	205,318	234,570	<b>249,938</b>
Total debt	56,124	71,674	80,134	82,166		73,608	74,257	75,153	66,940	64,548	65,420	<b>82,478</b>
Total equity before noncontrolling interests	115,126	125,352	139,454	161,386		153,723	161,722	175,775	178,320	176,336	202,245	<b>215,233</b>
Number of employees	12,265	12,599	13,609	14,506		14,415	14,710	14,585	14,217	13,542	13,305	<b>13,571</b>
<b>Per share data (yen)</b>												
Basic earnings per share	¥ 142.10	¥ 69.85	¥ 120.91	¥ 121.66		¥ 109.39	¥ 148.14	¥ 138.90	¥ 164.74	¥ 168.23	¥ 141.91	<b>¥ 105.23</b>
Net assets per share	1,394.36	1,518.25	1,689.12	1,954.89		1,862.16	1,959.14	2,138.45	2,179.03	2,173.37	2,509.08	<b>2,675.70</b>
Cash dividends per share applicable to the year	40	30	40	50		50	50	50	50	50	50	<b>50</b>
<b>Financial indices</b>												
Operating profit ratio (%)	5.6	3.6	5.2	5.7		6.0	6.7	5.9	6.1	6.1	7.0	<b>5.5</b>
ROE (Return On Equity) (%)	10.2	4.8	7.5	6.7		5.7	8.7	8.2	9.0	9.0	7.2	<b>4.6</b>
Equity ratio (%)	41.3	43.2	41.0	44.9		44.4	43.6	45.2	46.4	45.8	46.8	<b>44.8</b>
Ratio of interest-bearing debt to cash flow (years)	8.0	4.0	4.2	4.3		2.5	2.2	3.5	2.2	2.2	2.0	<b>7.0</b>
Treasury shares purchase amount (purchase amount for next fiscal year) (100 million yen)	–	–	–	–		–	10.0	9.2	13.8	15.0	–	<b>–</b>
Total payout ratio (%)	28.1	42.9	33.1	41.1		45.7	37.4	36.3	34.3	34.9	29.8	<b>42.4</b>
Overseas sales ratio (%)	43.4	44.4	48.5	52.4		55.5	51.1	49.9	49.4	46.2	46.9	<b>47.4</b>



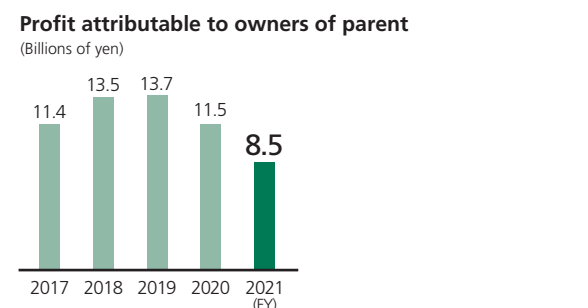
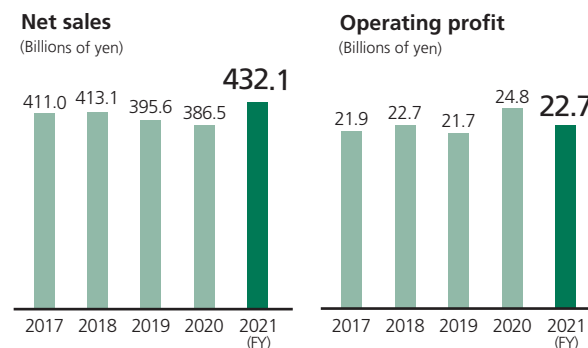
# Financial Analysis

## Financial summary

GS Yuasa Group's consolidated net sales for fiscal 2021, totaled ¥432.1 billion, up from the previous fiscal year. This increase in Group sales mainly reflects an increase in sales of automotive lithium-ion batteries and an increase in sales of lead-acid batteries in the automotive batteries business overseas as well as the exchange rate benefit from a weaker yen.

Operating profit was down from the previous fiscal year, due mainly to the impact of the higher price of raw materials. Profit attributable to owners of parent was down from the previous fiscal year, due mainly to the recording of an impairment loss at a consolidated subsidiary.

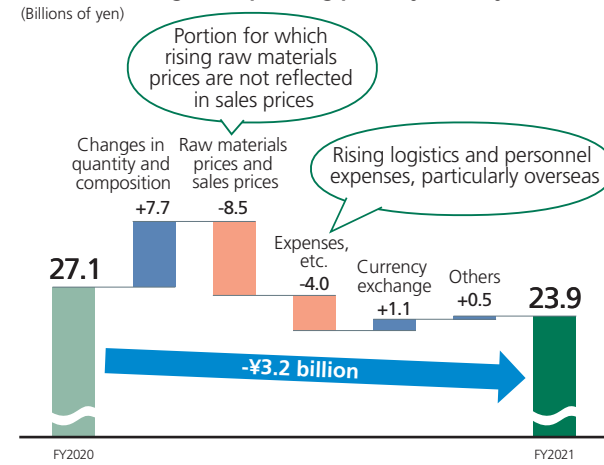
	FY2021	YoY
Net sales	¥432.1 billion	Up 11.8% ↑
Operating profit	¥22.7 billion	Down 8.6% ↓
Operating profit before amortization of goodwill	¥23.9 billion	Down 11.9% ↓
Ordinary profit	¥24.7 billion	Down 9.5% ↓
Profit attributable to owners of parent	¥8.5 billion	Down 26.1% ↓



## Analyzing factors in changes in operating profit

Operating profit came to ¥22.7 billion, down ¥2.1 billion from the previous fiscal year.

## Factors in changes in operating profit (year-on-year)

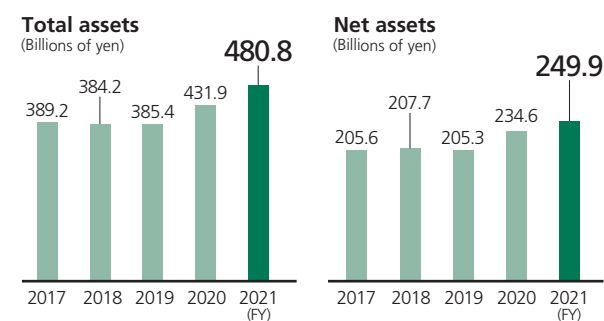


## Financial condition

Total assets as of March 31, 2022, amounted to ¥480.8 billion, ¥48.8 billion more than at the end of the previous fiscal year. This reflects an increase in inventories, as well as the new consolidation of GS Yuasa Infrastructure Systems Co., Ltd., which outweighed a decrease due to impairment of non-current assets.

Liabilities increased to ¥230.8 billion, up ¥33.5 billion from the end of the previous fiscal year, due to long-term borrowings through a sustainability-linked loan and the new consolidation of GS Yuasa Infrastructure Systems Co., Ltd.

Net assets totaled ¥249.9 billion, an increase of ¥15.4 billion from the end of the previous fiscal year. This mainly reflects an increase due to the recording of profit attributable to owners of parent and an increase in the foreign currency translation adjustment due to forex rate fluctuations, which outweighed outflows from dividends paid and the purchase of treasury shares.



## Cash flow condition

Cash and cash equivalents as of March 31, 2022, amounted to ¥25.8 billion, a decrease of ¥10.0 billion from the end of the previous fiscal year.

Net cash provided by operating activities in fiscal

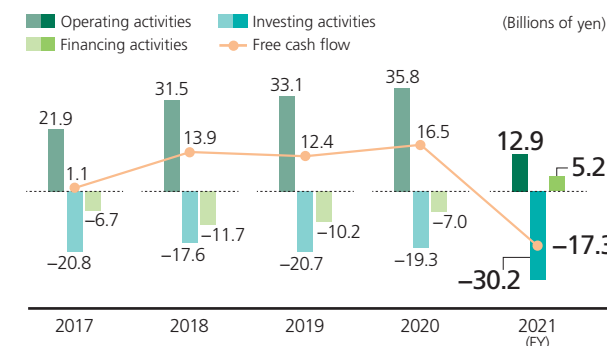
2021, amounted to ¥12.9 billion. There were main contributions from profit before income taxes, depreciation, an increase in trade payables, partially offset by increases in trade receivables and inventories, and the payment of income taxes.

Net cash used in investing activities totaled ¥30.2 billion. The main cash outflow from investments was the investment in Blue Energy second plant and the purchase of shares of subsidiaries.

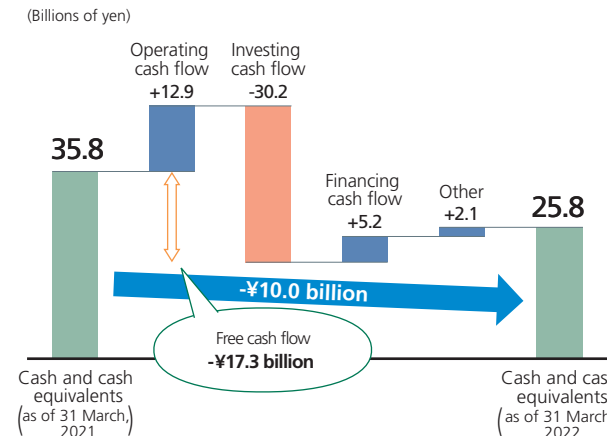
Net cash provided by financing activities amounted to ¥5.2 billion. The main cash outflow was dividends paid. An increase in borrowings was the main source of inflows.

Free cash flow was negative ¥17.3 billion as a result of the drawdown of cash and cash equivalents and acquisition of borrowings for allocation to shareholder returns and other purposes.

## Cash flows from operating activities, investing activities, and financing activities



## Cash flow statement



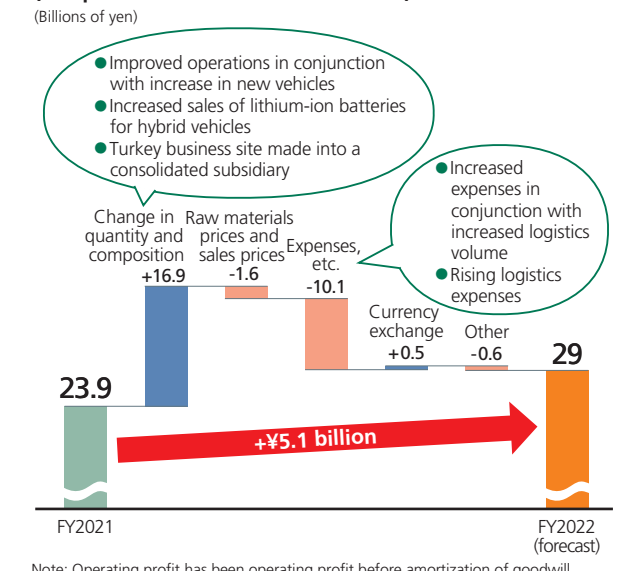
## Financial forecast

In fiscal 2022, the final fiscal year of the Fifth Mid-Term Management Plan, we expect to achieve our initial operating profit target and forecast operating profit of ¥28.0 billion and operating profit before amortization of goodwill of ¥29.0 billion. We will improve profitability by maintaining production and sale structures and

appropriately adjusting sales prices.

	FY2022 forecast	YoY
Net sales	¥520.0 billion	Up 20.3% ↑
Operating profit	¥28.0 billion	Up 23.5% ↑
Operating profit before amortization of goodwill	¥29.0 billion	Up 21.6% ↑
Profit attributable to owners of parent	¥12.0 billion	Up 41.7% ↑

## Factors in changes in operating profit (comparison of results with forecasts)

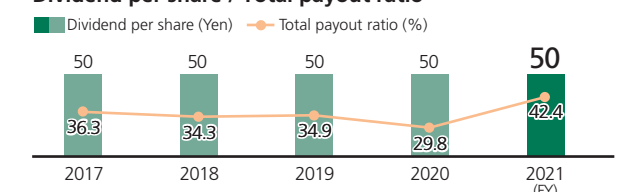


## Shareholder returns

For fiscal 2021, profit attributable to owners of parent decreased year on year, but the Company plans to pay an annual dividend per share of ¥50, which is the same amount as the previous fiscal year. The consolidated payout ratio therefore was 47.5% and total payout ratio was 42.4%.

For dividends for fiscal 2022, assuming that the forecast profits are achieved, the Company plans to pay an interim dividend per share of ¥15 and a year-end dividend per share of ¥35 to provide an annual dividend per share of ¥50.

## Dividend per share / Total payout ratio



Note: The Company implemented a five-to-one 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.

## Financial information

## Preparation of consolidated financial statements

The accompanying consolidated financial statements of GS Yuasa Corporation (the "Company") have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Act and its related accounting regulations and in accordance with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to the application and disclosure requirements from International Financial Reporting Standards.

The Company's consolidated financial statements are prepared in line with "Regulation on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements" (Ministry of Finance Order No. 28 of 1976).

## Consolidated Balance Sheets

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
	Amount	Amount	Amount
<b>Assets</b>			
<b>Current assets</b>			
Cash and deposits	*4 25,855	*4 36,280	*4 211,251
Notes and accounts receivable - trade	–	*4 74,269	–
Notes and accounts receivable - trade, and contract assets	*2, *4 85,399	–	*2, *4 697,761
Electronically recorded monetary claims - operating	7,163	5,039	58,526
Merchandise and finished goods	*4 54,986	*4 37,236	*4 449,269
Work in process	*4 19,236	*4 14,973	*4 157,170
Raw materials and supplies	*4 18,828	*4 15,658	*4 153,836
Other	15,249	11,189	124,594
Allowance for doubtful accounts	(418)	(315)	(3,415)
Total current assets	226,300	194,332	1,849,007
<b>Non-current assets</b>			
Property, plant and equipment			
Buildings and structures, net	*4, *9 56,279	*4, *9 52,837	*4, *9 459,833
Machinery, equipment and vehicles, net	*4, *9 37,108	*4, *9 38,703	*4, *9 303,195
Land	*8 23,335	*4, *8 22,737	*8 190,661
Leased assets, net	284	296	2,320
Right-of-use assets, net	5,398	5,075	44,105
Construction in progress	*9 15,315	*9 9,699	*9 125,133
Other, net	5,284	*4, *9 5,180	43,173
Total property, plant and equipment	*1 143,007	*1 134,530	*1 1,168,453
Intangible assets			
Goodwill	–	659	–
Leased assets	825	1,078	6,741
Other	*4 2,069	2,681	*4 16,905
Total intangible assets	2,894	4,419	23,646
Investments and other assets			
Investment securities	*5 66,319	*5 64,349	*5 541,866
Investments in capital	*5 940	*5 1,657	*5 7,680
Long-term loans receivable	1,116	707	9,118
Retirement benefit asset	32,954	23,920	269,254
Deferred tax assets	2,338	3,497	19,103
Lease receivables	2,635	2,616	21,530
Other	2,538	2,152	20,737
Allowance for doubtful accounts	(322)	(323)	(2,631)
Total investments and other assets	108,520	98,578	886,674
Total non-current assets	254,423	237,528	2,078,789
<b>Deferred assets</b>			
Bond issuance costs	39	52	319
Total deferred assets	39	52	319
<b>Total assets</b>	<b>480,763</b>	<b>431,913</b>	<b>3,928,123</b>

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
	Amount	Amount	Amount
<b>Liabilities</b>			
<b>Current liabilities</b>			
Notes and accounts payable - trade	44,174	34,742	360,928
Electronically recorded obligations - operating	19,861	16,367	162,276
Short-term borrowings	*4 18,782	*4 13,440	*4 153,460
Commercial papers	2,000	–	16,341
Accounts payable - other	12,041	15,976	98,382
Income taxes payable	2,857	4,761	23,343
Notes payable - facilities	274	358	2,239
Electronically recorded obligations - facilities	6,821	3,270	55,732
Provision for bonuses for directors (and other officers)	120	120	980
Other	*3 22,444	18,802	*3 183,381
Total current liabilities	129,376	107,839	1,057,080
<b>Non-current liabilities</b>			
Bonds payable	20,000	20,000	163,412
Long-term borrowings	41,696	31,980	340,681
Lease liabilities	6,100	6,041	49,841
Deferred tax liabilities	19,910	18,045	162,677
Deferred tax liabilities for land revaluation	*8 928	*8 928	*8 7,582
Provision for retirement benefits for directors (and other officers)	67	64	547
Retirement benefit liability	4,892	4,562	39,971
Other	7,852	7,880	64,156
Total non-current liabilities	101,447	89,503	828,883
Total liabilities	230,824	197,342	1,885,971
<b>Net assets</b>			
<b>Shareholders' equity</b>			
Share capital	33,021	33,021	269,801
Capital surplus	55,292	55,301	451,769
Retained earnings	93,661	95,869	765,267
Treasury shares	(351)	(4,654)	(2,868)
Total shareholders' equity	181,623	179,537	1,483,969
<b>Accumulated other comprehensive income</b>			
Valuation difference on available-for-sale securities	16,180	17,171	132,200
Deferred gains or losses on hedges	(794)	(115)	(6,487)
Revaluation reserve for land	2,137	2,137	17,461
Foreign currency translation adjustment	7,163	417	58,526
Remeasurements of defined benefit plans	8,922	3,098	72,898
Total accumulated other comprehensive income	33,609	22,708	274,606
<b>Non-controlling interests</b>	34,705	32,324	283,561
<b>Total net assets</b>	<b>249,938</b>	<b>234,570</b>	<b>2,042,144</b>
<b>Total liabilities and net assets</b>	<b>480,763</b>	<b>431,913</b>	<b>3,928,123</b>



## Consolidated Statements of Income

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
	Amount	Amount	Amount
<b>Net sales</b>	*1 <b>432,133</b>	386,511	*1 <b>3,530,787</b>
Cost of sales	*3 <b>335,359</b>	*3 289,944	*3 <b>2,740,085</b>
Gross profit	<b>96,773</b>	96,566	<b>790,694</b>
<b>Selling, general and administrative expenses</b>	*2, *3 <b>74,108</b>	*2, *3 71,755	*2, *3 <b>605,507</b>
<b>Operating profit</b>	<b>22,664</b>	24,810	<b>185,179</b>
<b>Non-operating income</b>			
Interest income	<b>198</b>	207	<b>1,618</b>
Dividend income	<b>483</b>	419	<b>3,946</b>
Share of profit of entities accounted for using equity method	<b>2,590</b>	2,471	<b>21,162</b>
Foreign exchange gains	–	595	–
Other	<b>722</b>	890	<b>5,899</b>
Total non-operating income	<b>3,995</b>	4,584	<b>32,642</b>
<b>Non-operating expenses</b>			
Interest expenses	<b>946</b>	818	<b>7,729</b>
Sales discounts	–	119	–
Foreign exchange losses	<b>103</b>	–	<b>842</b>
Equipment relocation expenses	<b>227</b>	260	<b>1,855</b>
Other	<b>698</b>	917	<b>5,703</b>
Total non-operating expenses	<b>1,976</b>	2,115	<b>16,145</b>
<b>Ordinary profit</b>	<b>24,684</b>	27,279	<b>201,683</b>
<b>Extraordinary income</b>			
Gain on sale of non-current assets	*4 <b>668</b>	*4 1,350	*4 <b>5,458</b>
Gain on sale of investment securities	<b>116</b>	299	<b>948</b>
Gain on bargain purchase	<b>710</b>	–	<b>5,801</b>
Gain on sale of investments in capital of subsidiaries	<b>547</b>	–	<b>4,469</b>
Gain on reversal of loss on liquidation of subsidiaries and associates	<b>325</b>	–	<b>2,655</b>
Other	<b>5</b>	–	<b>41</b>
Total extraordinary income	<b>2,372</b>	1,650	<b>19,381</b>
<b>Extraordinary losses</b>			
Loss on retirement of non-current assets	*5 <b>715</b>	*5 569	*5 <b>5,842</b>
Loss on sale of non-current assets	*6 <b>47</b>	*6 14	*6 <b>384</b>
Impairment losses	*7 <b>5,779</b>	*7 2,760	*7 <b>47,218</b>
Loss on valuation of investment securities	<b>28</b>	15	<b>229</b>
Factory relocation expenses	<b>1,239</b>	713	<b>10,123</b>
Other	–	7	–
Total extraordinary losses	<b>7,810</b>	4,081	<b>63,812</b>
<b>Profit before income taxes</b>	<b>19,246</b>	24,847	<b>157,251</b>
Income taxes - current	<b>5,583</b>	7,948	<b>45,616</b>
Income taxes - deferred	<b>1,066</b>	2,107	<b>8,710</b>
<b>Total income taxes</b>	<b>6,650</b>	10,056	<b>54,335</b>
<b>Profit</b>	<b>12,595</b>	14,791	<b>102,909</b>
<b>Profit attributable to non-controlling interests</b>	<b>4,127</b>	3,336	<b>33,720</b>
<b>Profit attributable to owners of parent</b>	<b>8,468</b>	11,455	<b>69,189</b>

## Consolidated Statements of Comprehensive Income

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
	Amount	Amount	Amount
<b>Profit</b>	<b>12,595</b>	14,791	<b>102,909</b>
<b>Other comprehensive income</b>			
Valuation difference on available-for-sale securities	<b>(1,016)</b>	5,236	<b>(8,301)</b>
Deferred gains or losses on hedges	<b>22</b>	234	<b>180</b>
Foreign currency translation adjustment	<b>6,825</b>	7,891	<b>55,764</b>
Remeasurements of defined benefit plans, net of tax	<b>5,822</b>	6,145	<b>47,569</b>
Share of other comprehensive income of entities accounted for using equity method	<b>796</b>	813	<b>6,504</b>
Total other comprehensive income	* <b>12,451</b>	* 20,320	* <b>101,732</b>
<b>Comprehensive income</b>	<b>25,047</b>	35,112	<b>204,649</b>
Comprehensive income attributable to			
Comprehensive income attributable to owners of parent	<b>19,369</b>	29,650	<b>158,256</b>
Comprehensive income attributable to non-controlling interests	<b>5,678</b>	5,461	<b>46,393</b>

## Consolidated Statements of Changes in Net Assets

### Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

	(Millions of yen)					(Millions of yen)							Non-controlling interests	Total net assets
	Shareholders' equity					Accumulated other comprehensive income								
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Revaluation reserve for land	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income			
<b>Balance at beginning of period</b>	33,021	55,301	95,869	(4,654)	179,537	17,171	(115)	2,137	417	3,098	22,708	32,324	234,570	
Cumulative effects of changes in accounting policies			(643)		(643)						-		(643)	
Restated balance at beginning of period	33,021	55,301	95,225	(4,654)	178,893	17,171	(115)	2,137	417	3,098	22,708	32,324	233,927	
Changes during period														
Dividends of surplus			(5,241)		(5,241)								(5,241)	
Profit attributable to owners of parent			8,468		8,468								8,468	
Purchase of treasury shares				(503)	(503)								(503)	
Disposal of treasury shares		0		6	6								6	
Cancellation of treasury shares		(4,799)		4,799	-								-	
Transfer from retained earnings to capital surplus		4,791	(4,791)		-								-	
Net changes in items other than shareholders' equity						(990)	(678)		6,746	5,823	10,901	2,380	13,281	
<b>Total changes during period</b>	-	(8)	(1,564)	4,302	2,729	(990)	(678)	-	6,746	5,823	10,901	2,380	16,011	
<b>Balance at end of period</b>	33,021	55,292	93,661	(351)	181,623	16,180	(794)	2,137	7,163	8,922	33,609	34,705	249,938	

### Year ended March 31, 2021 (April 1, 2020 to March 31, 2021)

	(Millions of yen)					(Millions of yen)							Non-controlling interests	Total net assets
	Shareholders' equity					Accumulated other comprehensive income								
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Revaluation reserve for land	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income			
<b>Balance at beginning of period</b>	33,021	55,301	87,180	(3,680)	171,823	11,933	(244)	2,137	(6,265)	(3,047)	4,513	28,982	205,318	
<b>Changes during period</b>														
Dividends of surplus			(2,842)		(2,842)								(2,842)	
Profit attributable to owners of parent			11,455		11,455								11,455	
Purchase of treasury shares				(1,003)	(1,003)								(1,003)	
Disposal of treasury shares		(0)		30	29								29	
Increase by merger			76		76								76	
Net changes in items other than shareholders' equity						5,237	129		6,682	6,145	18,194	3,342	21,537	
<b>Total changes during period</b>	-	(0)	8,688	(973)	7,714	5,237	129	-	6,682	6,145	18,194	3,342	29,252	
<b>Balance at end of period</b>	33,021	55,301	95,869	(4,654)	179,537	17,171	(115)	2,137	417	3,098	22,708	32,324	234,570	

### Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

	(Thousands of U.S. dollars)					(Thousands of U.S. dollars)							Non-controlling interests	Total net assets
	Shareholders' equity					Accumulated other comprehensive income								
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Revaluation reserve for land	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income			
<b>Balance at beginning of period</b>	269,801	451,842	783,307	(38,026)	1,466,925	140,297	(940)	17,461	3,407	25,313	185,538	264,107	1,916,578	
Cumulative effects of changes in accounting policies			(5,254)		(5,254)						-		(5,254)	
Restated balance at beginning of period	269,801	451,842	778,046	(38,026)	1,461,664	140,297	(940)	17,461	3,407	25,313	185,538	264,107	1,911,324	
Changes during period														
Dividends of surplus			(42,822)		(42,822)								(42,822)	
Profit attributable to owners of parent			69,189		69,189								69,189	
Purchase of treasury shares				(4,110)	(4,110)								(4,110)	
Disposal of treasury shares		0		49	49								49	
Cancellation of treasury shares		(39,211)		39,211	-								-	
Transfer from retained earnings to capital surplus		39,145	(39,145)		-								-	
Net changes in items other than shareholders' equity						(8,089)	(5,540)		55,119	47,577	89,068	19,446	108,514	
<b>Total changes during period</b>	-	(65)	(12,779)	35,150	22,298	(8,089)	(5,540)	-	55,119	47,577	89,068	19,446	130,820	
<b>Balance at end of period</b>	269,801	451,769	765,267	(2,868)	1,483,969	132,200	(6,487)	17,461	58,526	72,898	274,606	283,561	2,042,144	



## Consolidated Statements of Cash Flows

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
	Amount	Amount	Amount
<b>Cash flows from operating activities</b>			
Profit before income taxes	19,246	24,847	157,251
Depreciation	18,207	18,031	148,762
Impairment losses	5,779	2,760	47,218
Amortization of goodwill	659	1,335	5,384
Loss (gain) on valuation of investment securities	28	15	229
Loss (gain) on sale of investment securities	(116)	(299)	(948)
Gain on sale of investments in capital of subsidiaries	(547)	–	(4,469)
Increase (decrease) in allowance for doubtful accounts	40	(74)	327
Increase (decrease) in retirement benefit liability	(86)	(1,907)	(703)
Interest and dividend income	(681)	(627)	(5,564)
Interest expenses	946	818	7,729
Foreign exchange losses (gains)	(956)	(589)	(7,811)
Loss (gain) on sale of non-current assets	(621)	(1,335)	(5,074)
Loss on retirement of non-current assets	715	569	5,842
Gain on bargain purchase	(710)	–	(5,801)
Factory relocation expenses	1,239	713	10,123
Share of loss (profit) of entities accounted for using equity method	(2,590)	(2,471)	(21,162)
Decrease (increase) in trade receivables	–	315	–
Decrease (increase) in trade receivables and contract assets	(5,579)	–	(45,584)
Increase (decrease) in advances received	–	(5,646)	–
Increase (decrease) in contract liabilities	740	–	6,046
Decrease (increase) in inventories	(18,794)	(162)	(153,558)
Increase (decrease) in trade payables	7,597	3,388	62,072
Other, net	(2,658)	3,503	(21,717)
Subtotal	21,856	43,184	178,577
Interest and dividends received	1,524	1,250	12,452
Interest paid	(946)	(818)	(7,729)
Factory relocation expenses paid	(237)	(713)	(1,936)
Income taxes paid	(9,318)	(7,085)	(76,134)
Net cash provided by (used in) operating activities	12,879	35,817	105,229

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
	Amount	Amount	Amount
<b>Cash flows from investing activities</b>			
Purchase of property, plant and equipment	(27,024)	(19,019)	(220,802)
Proceeds from sale of property, plant and equipment	706	1,286	5,768
Purchase of intangible assets	(143)	(99)	(1,168)
Purchase of investment securities	(2)	(3)	(16)
Proceeds from sale of investment securities	149	375	1,217
Purchase of shares of subsidiaries resulting in change in scope of consolidation	*2 (2,819)	–	*2 (23,033)
Payments for investments in capital of subsidiaries and associates	–	(214)	–
Purchase of shares of subsidiaries and associates	(150)	(600)	(1,226)
Loan advances	(480)	(750)	(3,922)
Proceeds from collection of loans receivable	185	4	1,512
Other, net	(624)	(307)	(5,098)
Net cash provided by (used in) investing activities	(30,204)	(19,327)	(246,785)
<b>Cash flows from financing activities</b>			
Increase (decrease) in short-term borrowings and commercial papers	10,657	(2,719)	87,074
Proceeds from long-term borrowings	12,365	9,050	101,029
Repayments of long-term borrowings	(7,481)	(6,371)	(61,124)
Purchase of treasury shares	(503)	(1,003)	(4,110)
Proceeds from disposal of treasury shares	6	29	49
Dividends paid	(5,241)	(2,842)	(42,822)
Dividends paid to non-controlling interests	(3,271)	(2,085)	(26,726)
Other, net	(1,328)	(1,074)	(10,851)
Net cash provided by (used in) financing activities	5,203	(7,018)	42,512
Effect of exchange rate change on cash and cash equivalents	2,159	1,586	17,640
Net increase (decrease) in cash and cash equivalents	(9,962)	11,057	(81,396)
Cash and cash equivalents at beginning of period	35,807	24,748	292,565
Increase in cash and cash equivalents resulting from merger with unconsolidated subsidiaries	–	1	–
Cash and cash equivalents at end of period	*1 25,845	*1 35,807	*1 211,169

# Notes

## Basis of preparation of consolidated financial statements

The consolidated financial statements are stated in Japanese yen, rounded down to the nearest million yen. Also, solely for the convenience of readers outside Japan, yen amounts have been translated into U.S. dollars at the rate of ¥122.39 to U.S. \$1.00, the approximate exchange rate at March 31, 2022. The translations should not be construed as representations that the Japanese yen amounts have been, could have been or could in the future be converted into U.S. dollars at this or any other rate.

### 1. Scope of consolidation

#### (1) Number of consolidated subsidiaries: Fifty-two (52) companies

In the fiscal year ended March 31, 2022, following the acquisition of all shares of Sanken Densetsu Co., Ltd. and the company's subsequent consolidation as a subsidiary, it was included in the scope of consolidation. Additionally, Sanken Densetsu Co., Ltd. changed its name to GS Yuasa Infrastructure Systems Co., Ltd. on May 1, 2021.

GS Yuasa Accounting Service Ltd., which was a consolidated subsidiary, merged with GS Yuasa International Ltd., which was the surviving company, and was therefore excluded from the scope of consolidation.

Tianjin Yuasa Batteries Co., Ltd., which was a consolidated subsidiary, was excluded from the scope of consolidation due to the transfer of all of its shares.

#### (2) Number of non-consolidated subsidiaries: Five (5) companies

The main non-consolidated subsidiary is GS Yuasa Chuo Sales Ltd.

The name of GS Chuo Battery Ltd. was changed to GS Yuasa Chuo Sales Ltd.

The name of GS Environmental Science Laboratory Co., Ltd. was changed to GS Yuasa Environmental Science Laboratory Co., Ltd.

These non-consolidated subsidiaries are small in scale and their operations have no material impact on consolidated the financial statements in terms of total assets, net sales, profit/loss (amounts attributable to the equity) and retained earnings (amounts attributable to the equity) and are therefore excluded from the scope of consolidation.

### 2. Application of the equity method

(1) Number of non-consolidated subsidiaries and associates accounted for using the equity method: Twenty (20) companies

(2) Five (5) non-consolidated subsidiaries and five (5) associates are not accounted for under the equity method because they are insignificant in terms of their impact on the Company's consolidated profit/loss (amounts attributable to the equity) and consolidated retained earnings (amounts attributable to the equity), as well as in terms of their importance to the Group.

(3) For companies accounting for by the equity method with fiscal year-end dates that differ from the consolidated fiscal year-end date, the financial statements that were closed at their fiscal year-end dates or provisionally closed at the consolidated fiscal year-end date were used for consolidation.

### 3. Fiscal year-end date of consolidated subsidiaries and related matters

Yuasa Battery (Thailand) Pub. Co., Ltd. and one (1) other company

The fiscal year-end date for the two companies is December 31. Consolidated financial statements were prepared using their financial statements as of their fiscal year-end date instead of using their financial statements provisionally closed at the consolidated fiscal year-end date. However, for important transactions that took place between the fiscal year-end date of those companies and the consolidated year-end date, adjustments necessary for consolidation were performed.

### 4. Accounting policies

#### (1) Valuation standards and methods for principal assets

##### (i) Securities

a Subsidiaries' and associates' shares

The moving-average method is used.

b Available-for-sale securities

Marketable securities:

Marketable securities are reported at fair value, with unrealized gains and losses, net of applicable taxes, reported as a separate component of net assets. The cost of securities sold is determined based on the moving average method.

Non-marketable securities:

The moving-average method is used.

##### (ii) Derivatives

Derivatives are measured at fair value.

##### (iii) Inventories

Merchandise and finished goods, work in process, raw materials and supplies:

Inventories are principally stated at the lower of cost, determined by the average method, or net realizable value.

### (2) Depreciation/amortization of principal non-current assets

#### (i) Property, plant and equipment (except for leased assets)

The straight-line method is used.

Assets held by the Company or its domestic consolidated subsidiaries with an acquisition price of ¥100 thousand or more and less than ¥200 thousand are depreciated using the straight-line method over three years.

The principal useful lives are as follows.

Buildings and structures : 5 to 50 years

Machinery, equipment and vehicles : 2 to 18 years

#### (ii) Intangible assets (except for leased assets)

The straight-line method is used.

#### (iii) Leased assets

Finance leases for which ownership of the leased assets does not transfer to the lessees, these assets are depreciated using the straight-line method with the lease term as the useful life and assuming no residual value.

#### (iv) Right-of-use assets

The straight-line method is used based on the lease term.

### (3) Amortization method for deferred assets

Bond issuance costs are amortized with the straight-line method over the bond redemption period (5 and 10 years) in accordance with ASBJ PITF No. 19, Tentative Solution on Accounting for Deferred Assets, which was issued by the ASBJ in August 2006.

### (4) Accounting standards for principal provisions and allowances

#### (i) Allowance for doubtful accounts

The Company and its domestic consolidated subsidiaries provide allowances for the amount not expected to be recovered from doubtful receivables based on the historical loan-loss ratio. For loans and receivables requiring special attention, an allowance is provided for the estimated uncollectible amounts after reviewing the collectability of receivables individually. Foreign consolidated subsidiaries provide allowances for doubtful accounts estimated mainly through the analysis of individual receivables.

#### (ii) Provision for bonuses for directors (and other officers)

To prepare for the payment of bonuses to directors, a provision is recorded based on the amount expected to be paid.

#### (iii) Provision for retirement benefits for directors (and other officers)

To prepare for the payment of retirement benefits for directors and executive officers, the necessary amount at the end of the fiscal year is recorded in accordance with internal regulations of certain consolidated subsidiaries.



## Notes

### (5) Accounting treatment for retirement benefits

To prepare for the payment of employee retirement benefits, retirement benefit liability was recorded in the amount calculated by subtracting the value of plan assets from the amount of retirement benefit obligations estimated on March 31, 2022.

#### (i) The method for attributing expected pension benefits to periods of employee service

For the calculation of retirement benefit obligations, a benefit formula is applied to attribute expected pension benefits for the period up to the end of the fiscal year under review (March 31, 2022).

#### (ii) Actuarial gains or losses and past service cost

Past service cost is amortized using mainly the straight-line method over a certain number of years (14 years), which is within the average remaining service periods of employees at the time when the service cost was incurred.

Actuarial gains or losses are amortized from the fiscal year that starts after the accrual of the gains or losses using the straight-line method over a certain number of years (mainly 10 to 14 years) within the average remaining service periods of the employees who will receive the benefits.

Unrecognized actuarial gains or losses and unrecognized past service cost are recorded in accumulated other comprehensive income of the net assets under the account "remeasurements of defined benefit plans" after being adjusted with tax effects.

### (6) Standards for recognition of principal revenues and expenses

The details of the main performance obligations related to revenues from contracts with customers of the Company and its consolidated subsidiaries and the timing when the Company typically satisfies its performance obligations (typical timing of revenue recognition), etc., are as follows.

Consideration for these performance obligations is received within approximately one year after they are satisfied, and does not include any significant financial component.

#### (i) Sale of goods and products

The main business of the Company and its consolidated subsidiaries is the manufacture and sale of batteries, power supplies, lighting equipment and other battery and electrical equipment. The Company recognizes revenue from the sale of such merchandise and finished goods once its obligations have been satisfied and control has been transferred to the customer. As a rule, this is at the point in time at which the merchandise and finished goods have been delivered or at the point in time as specified in International Commercial Terms. The Company recognizes revenue upon shipment for domestic transactions when control over the finished goods is transferred to customers in a typical period after the shipment, in line with Paragraph 98 of the Implementation Guidance on Accounting Standard for Revenue Recognition.

Sales contracts for batteries and other items include variable consideration because they are sold with discounts based on the sales volume. When selling with a discount, the transaction price is calculated by deducting the estimated amount of the discount, etc., from the consideration promised with the customer in the contract.

#### (ii) Provision of services

The Company and its consolidated subsidiaries provide services, such as work related to the installation of batteries and power supplies. With regard to such installation work, etc., the performance obligation is considered to be satisfied when the provision of services is completed, and revenue is recognized at that time.

Batteries, equipment, etc., and contract work, etc., are usually sold together. For transactions in which delivery and installation work are identified as separate performance obligations, transaction prices are allocated to each performance obligation by using the observable prices such as the contractually stated price or the stand-alone selling price estimated by the sum of the expected cost of the finished goods plus an appropriate margin.

### (7) Standards for translating principal assets or liabilities denominated in foreign currencies into Japanese yen

Foreign currency denominated receivables and payables are translated into Japanese yen at the spot rate prevailing on the consolidated balance sheet date. Foreign exchange gains or losses are recorded on the statement of income. The assets and liabilities of foreign consolidated subsidiaries are also translated into Japanese yen at the spot rate prevailing on the balance sheet date, while their revenues and expenses are translated into Japanese yen at the average rate for the period. Any translation gains or losses are recorded in the net assets under the account "foreign currency translation adjustment" and "non-controlling interests."

### (8) Significant hedge accounting

#### (i) Hedge accounting method

If derivatives used for hedging purposes qualify for hedge accounting because of the high correlation and effectiveness between the hedging instruments and the hedged items, gain or loss on those derivatives are deferred until the maturity of the hedged transactions. When a foreign exchange forward contract meets certain conditions, the hedged item is stated at the forward exchange contract rate. Interest rate swaps which qualify for hedge accounting and meet specific matching criteria are not remeasured at market value, but the differential paid or received under the swap agreements is recognized and included in interest expense (a specific accounting method).

#### (ii) Hedging instruments and hedged items

Hedging instruments : Interest rate swaps, foreign exchange forward contracts, commodity price swaps, and foreign currency swaps

Hedged items : Interest on borrowings, foreign currency denominated receivables and payables, and trade payables

#### (iii) Hedging policy

a In accordance with internal rules and in order to reduce the risk of interest rate fluctuations, the Company utilizes interest rate swaps hedging instruments in which the notional amounts, conditions for receiving and paying interests, and the contract terms match those for the hedged items.

b The Company utilizes foreign exchange forward contracts and foreign currency swap contracts with an aim to reduce the risks associated with future interest rate fluctuations against import/export transactions and foreign currency denominated debt that are conducted or incurred in the ordinary course of business.

c The Company utilizes commodity price swaps to reduce price fluctuation risks for lead, etc., the principal raw material for its business.

#### (iv) Method for evaluating hedge effectiveness

The Company evaluates hedge effectiveness by comparing the accumulated change in market values of the hedging instrument and of the hedged item over the period from the inception of the hedging relationship to the time for evaluation. For interest rate swaps which adopt a specific accounting method, evaluation is omitted.

### (9) Amortization method and period for goodwill

Goodwill is amortized on a straight-line basis over a period of five years.

### (10) Research and Development Expenses

Research and development expenses are charged to income as incurred.

### (11) Increases/Decreases and Transfer of Common Stock, Reserve, and Surplus

Under Japanese laws and regulations, the entire amount paid for new shares is required to be designated as capital stock. However, a company may, by a resolution of the Board of Directors, designate an amount not exceeding one half of the price of the new shares as additional paid-in capital, which is included in capital surplus. The Companies Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve (a component of retained earnings) or as additional paid-in capital (a component of capital surplus) depending on the equity account charged upon the payment of such dividends until the aggregate amount of legal reserve and additional paid-in capital equals 25% of the common stock. Under the Companies Act, the total amount of additional paid-in capital and legal reserve may be reversed without limitation. Furthermore, all additional paid-in capital and all legal earnings reserve may be transferred to other capital surplus and retained earnings, respectively, and are potentially available for dividends. The Companies Act also provides that common stock, legal reserve, additional paid-in capital, other capital surplus and retained earnings can be transferred among the accounts within equity under certain conditions upon resolution of the shareholders.

The maximum amount that a company can distribute as dividends is calculated based on its non-consolidated financial statements in accordance with the Law.

## Notes

### (12) Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements

Under Accounting Standards Board of Japan ("ASBJ") Practical Issues Task Force ("PITF") No. 18, Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements, the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should in principle be unified for the preparation of the consolidated financial statements. However, financial statements prepared by foreign subsidiaries in accordance with either International Financial Reporting Standards ("IFRS") or generally accepted accounting principles in the United States of America (Financial Accounting Standards Board Accounting Standards Codification) tentatively may be used for the consolidation process, except for the following items that should be adjusted in the consolidation process so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; (d) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting; and (e) recording a gain or loss through profit or loss on the sale of an investment in an equity instrument for the difference between the acquisition cost and selling price and recording impairment loss through profit or loss for other-than-temporary declines in the fair value of an investment in an equity instrument when a foreign subsidiary elects to present in other comprehensive income subsequent changes in the fair value of an investment in an equity instrument.

### (13) Business Combinations

Business combinations are accounted for using the purchase method. Acquisition related costs, such as advisory fees and professional fees, are accounted for as expenses in the periods in which the costs are incurred. If the initial accounting for a business combination is incomplete by the end of the reporting period in which the business combination occurs, the acquirer shall report in its financial statements provisional amounts for the items for which the accounting is incomplete. During the measurement period, which shall not exceed one year from the acquisition, the acquirer shall retrospectively adjust the provisional amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date and that would have affected the measurement of the amounts recognized as of that date. Such adjustments shall be recognized as if the accounting for the business combination had been completed at the acquisition date. A parent's ownership interest in a subsidiary might change if the parent purchases or sells ownership interests in its subsidiary. The carrying amount of a non-controlling interest is adjusted to reflect a change in the parent's ownership interest in its subsidiary while the parent retains its controlling interest in its subsidiary. Any difference between the fair value of the consideration received or paid and the amount by which the non-controlling interest is adjusted is accounted for as capital surplus as long as the parent retains control over its subsidiary.

### (14) Scope of cash and cash equivalents in the consolidated statements of cash flows

Cash and cash equivalents in the consolidated statements of cash flows are composed of cash on hand, bank deposits able to be withdrawn on demand, and short-term investments with maturities of three months or less at the date of acquisition that represent a minor risk of fluctuation in value.

### (15) Other important information on preparation of the Consolidated Financial Statements

#### (i) Application of consolidated taxation system

The Company and some of its domestic consolidated subsidiaries have applied the consolidated taxation system since the fiscal year ended March 31, 2022.

#### (ii) Application of tax effect accounting for the transition from the consolidated taxation system to the group tax sharing system

From the fiscal year ending March 31, 2023, the Company and some of its domestic consolidated subsidiaries will transition from the consolidated taxation system to the group tax sharing system. However, the Company applies the treatment under the provisions of Paragraph 3 of Practical Solution on the Treatment of the Tax Effect Accounting for the Transition from the Consolidated Taxation System to the Group Tax Sharing System (ASBJ Practical Issues Task Force No. 39, March 31, 2020) in relation to items that are revised for the transition to the group tax sharing system established under the Act for Partial Revision of the Income Tax Act, etc. (Act No. 8 of 2020) and for the non-consolidated tax payment system in conjunction with the transition to the group tax sharing system, but does not apply the provisions of Paragraph 44 of the Implementation Guidance on Tax Effect Accounting (ASBJ Guidance No. 28, February 16, 2018) and the amount of deferred tax assets and deferred tax liabilities are determined in accordance with the provisions of tax act before the revision.

From the beginning of the fiscal year ending March 31, 2023, the Company plans to apply Practical Solution on the Accounting and Disclosure Under the Group Tax Sharing System (ASBJ PITF No. 42, August 12, 2021), which establishes the treatment for corporate tax and local corporate tax as well as accounting treatment and disclosure for tax effect accounting in the application of the group tax sharing system.

## Significant accounting estimates

### Valuation of non-current assets

#### (1) Amount recorded on consolidated financial statements for current fiscal year

	(Millions of yen)		(Thousands of U.S. dollars)
	Current fiscal year	Previous fiscal year	Current fiscal year
Property, plant and equipment	143,007	134,530	1,168,453
Intangible assets	2,894	4,419	23,646
Impairment losses	5,779	2,760	47,218

#### (2) Information on the nature of significant accounting estimates for identified items

##### (i) Method in making the accounting estimates

The Group applies Japanese accounting standards for Japanese bases and International Financial Reporting Standards, etc., for overseas bases in line with Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries, etc., for Consolidated Financial Statements (PITF No. 18).

When considering impairment losses on non-current assets, for assets used for business, the assets are grouped based on a unit such as a business category used for managerial accounting, the smallest unit that generates an independent cash flow. Real estate for rent and idle assets are grouped individually.

The Company assesses whether there is any indication that non-current assets may be impaired at the end of the current fiscal year. An indication of impairment is determined if operating profit or loss will result in continued loss, there is a prominent deterioration in the business environment, and there is a prominent decline in the market value of non-current assets, etc. However, when new businesses are launched, if a rational business plan is formulated, and from the beginning, it is projected that sales activities will result in sustained losses, this is not an indication of impairment unless actual losses are dramatically greater than the projected losses in the business plan.

Asset groups are tested for impairment when there is an indication that an asset may be impaired. If the recoverable amount of the asset is less than its carrying amount, the carrying amount of the asset shall be reduced to its recoverable amount. The recoverable amount is the higher of the asset's value in use and net realizable value (for Japanese accounting standards) or the asset's fair value less costs of disposal (for International Financial Reporting Standards). When calculating the value in use, there are certain assumptions regarding future cash flows, discount rate, etc.



## Notes

### (ii) Key assumptions used in accounting estimates

The business plan and other items used to determine indications of impairment and calculate the value in use are based on forecasts of sales and sales expense, etc., that take into consideration sales volume and unit selling price projections and other items. The discount rate used to calculate value in use is based on the weighted average cost of capital.

Furthermore, the net realizable value or the asset's fair value less costs of disposal used to recognize and measure impairment loss is based on the roadside price, appraisal value obtained from an external asset appraisal expert, and other items.

### (iii) Impact on the consolidated financial statements for the following fiscal year

Indications of impairment of non-current assets and recognition and measurements of impairment losses are based on management's best estimates, but there is the uncertainty in management's assumptions and judgments. If future stricter environmental regulations, the impact on the market environment of fiercer price competition with rivals in the same industry, or other developments result in significant changes in the assumptions and conditions incorporated into business plans, appraisal values, and other items that are part of the assumptions used for estimates, this could have a significant impact on the valuation of non-current assets in the following fiscal year.

## Changes in accounting policies

### Application of Accounting Standard for Revenue Recognition, etc.

The Company has applied the Accounting Standard for Revenue Recognition (ASBJ) Statement No. 29, March 31, 2020 and relevant revised ASBJ regulations from the beginning of the current fiscal year, and it has recognized revenue at the time the control of promised goods or services is transferred to the customer at the amount expected to be received upon exchange for transferring promised goods or services to a customer.

For finished goods that require installation work, certain consolidated subsidiaries previously recorded sales at the point the installation work was completed. However, as a result of the above change, the Company is identifying delivery of finished goods and the installation work as distinct performance obligations and is therefore recognizing revenue at the point that each performance obligation is satisfied. For discounts, etc., these were previously excluded from net sales at the point that the price was determined, but were included in the transaction price only to the extent that it was highly probable that a significant reversal in the amount of cumulative revenue recognized would not occur when the uncertainty associated with the variable consideration is subsequently resolved. Furthermore, promotion expenses and sales discounts, etc., paid to customers which had been included in selling, general and administrative expenses and non-operating expenses are excluded from net sales.

The application of such changes in accounting policies follows the transitional treatment prescribed in the proviso of Paragraph 84 of the Accounting Standard for Revenue Recognition such that the new accounting policy was applied from the beginning balance of retained earnings of the current consolidated fiscal year to add to or deduct from the amount of beginning balance of retained earnings of the current consolidated fiscal year the cumulative effects of applying retrospectively the new accounting policy from the beginning of the current consolidated fiscal year. "Notes and accounts receivable - trade" under "current assets" on the consolidated balance sheet for the previous fiscal year has been included in "Notes and accounts receivable - trade, and contract assets" in the current fiscal year. In accordance with the transitional treatment provision set out in Paragraph 89-2 of the Accounting Standard for Revenue Recognition, "Notes and accounts receivable - trade" for the previous fiscal year has not been reclassified in "Notes and accounts receivable - trade, and contract assets."

As a result, in comparison with the amounts that would have been reported without applying Accounting Standard for Revenue Recognition and relevant ASBJ regulations, the amounts on the consolidated statements of income for the current fiscal year changed as follows: net sales decreased by ¥1,611 million (USD \$13,163 thousand); cost of sales increased by ¥425 million (USD \$3,473 thousand); selling, general and administrative expenses fell ¥2,021 million (USD \$16,513 thousand); operating profit declined ¥16 million (USD \$131 thousand); and ordinary profit and profit before income taxes each increased by ¥78 million (USD \$637 thousand).

This had an insignificant impact on the consolidated statements of cash flows for the current fiscal year.

Having reflected the cumulative effects on the beginning balance of net assets of the previous consolidated fiscal year, the beginning balance of retained earnings in the consolidated statements of changes in net assets decreased by ¥643 million (USD \$5,254 thousand).

The effects on per share information are explained in the Note "Per share information."

In accordance with the transitional treatment provision set out in Paragraph 89-3 of the Accounting Standard for Revenue Recognition, relevant information for the previous fiscal year is not provided in the Note "Revenue recognition."

### Application of Accounting Standard for Fair Value Measurement, etc.

The Company has applied the Accounting Standard for Fair Value Measurement (ASBJ Statement No. 30, July 4, 2019) and relevant revised ASBJ regulations from the beginning of the current fiscal year, and has prospectively applied the new accounting policies under ASBJ Statement No. 30 in accordance with the transitional treatment provision set out in Paragraph 19 of the standard, as well as Paragraph 44-2 of the Accounting Standard for Financial Instruments (ASBJ Statement No. 10, July 4, 2019).

The application of the above standards has had no material impact on the consolidated financial statements.

In addition, within the Notes of "Financial instruments," disclosure is made by level of the fair values of financial instruments. However, in accordance with the transitional treatment provision set out in Paragraph 7-4 of the Implementation Guidance on Disclosures about Fair Value of Financial Instruments (ASBJ Guidance No. 19, July 4, 2019), related notes for the previous fiscal year are not provided.

## Changes in presentation

### Consolidated statement of cash flows

"Factory relocation expenses," which was included in "Other" under "cash flows from operating activities" in the previous fiscal year, has been presented separately in the current fiscal year due to its increased financial materiality. To reflect this change, "Factory relocation expenses" included in "Other" has been reclassified as a separate account in the consolidated statements for the prior fiscal year.

As a result, on the consolidated statement of cash flows for the previous fiscal year, "Factory relocation expenses" of ¥713 million and "Factory relocation expenses paid" of ¥(713) million under "Cash flows from operating activities" have been presented independently, and the subtotal was changed from ¥42,470 million to ¥43,184 million.

## Additional information

### Accounting estimates related to COVID-19

The Group conducts impairment accounting for fixed assets based on the information available at the time the financial statements are prepared. It is difficult to reasonably predict the future impact of COVID-19 on our business at this time. However, with the progress made in vaccinations, it is expected that the spread will gradually decline, and the economy will recover due to the economic measures taken in each country. Therefore, we are considering accounting estimates etc., on the assumption that sales of new cars, including electric vehicles in Japan and overseas, will gradually recover. Since there are many uncertainties regarding the impact of COVID-19, future changes in the situation may affect the financial position and operating results of the Group.

## Notes

### Consolidated balance sheet

#### \*1. Accumulated depreciation of property, plant and equipment

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Accumulated depreciation of property, plant and equipment	242,531	236,387	1,981,624

#### \*2. Notes and accounts receivable - trade and contract assets that are receivables or contract assets arising from contracts with customers were as follows.

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Notes receivable - trade	4,385		35,828
Accounts receivable - trade	74,638		609,837
Contract assets	6,375		52,088

#### \*3. Other current liabilities that are contract liabilities were as follows.

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Contract liabilities	2,181		17,820

#### \*4. Assets pledged as collateral and secured liabilities

Assets pledged as collateral were as follows.

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Cash and deposits	305	136	2,492
Accounts receivable - trade	989	493	8,081
Merchandise and finished goods	730	421	5,965
Work in process	43	37	351
Raw materials and supplies	184	91	1,503
Buildings and structures	70	57	572
Machinery, equipment and vehicles	85	82	695
Land	–	16	–
Other property, plant and equipment	–	4	–
Other intangible assets	3	–	25
Total	2,413	1,340	19,716

Secured liabilities were as follows.

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Short-term borrowings	1,006	333	8,220
Total	1,006	333	8,220

#### \*5. Items related to unconsolidated subsidiaries and associates were as follows.

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Investment securities (stocks)	37,704	34,168	308,064
[of which is investment in jointly controlled entities]	[3,630]	[3,146]	[29,659]
Investments in capital	770	1,509	6,291

#### \*6. Guarantee obligations

Guarantee obligations for affiliates' borrowings from banks, etc., were as follows.

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Tianjin Toho Lead Recycling Co., Ltd.	1,014	902	8,285
Total	1,014	902	8,285

#### \*7. Trade notes receivable endorsed

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Trade notes receivable endorsed	1,845	872	15,075

#### \*8. Land revaluation

Land used for business by some consolidated subsidiaries was revaluated, and the difference in land revaluation was recorded under net assets based on the Act on Revaluation of Land (Act No. 34 of 1998).

##### (1) Date of revaluation : March 31, 2002

##### (2) Revaluation method

Revaluation is calculated by making rational adjustments to the "price recorded in the land tax ledger of Article 341, Item 10 of the Local Tax Act or Item 11 of the supplementary land tax ledger of the same article," stipulated in Article 2, Paragraph 3 of the Order for Enforcement of the Act on Revaluation of Land (Cabinet Order No. 119 of 1998).

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Difference between the fair value of revalued land at the end of the fiscal year and the post-revaluation carrying amount	(1,130)	(1,328)	(9,233)

#### \*9. Tax purpose reduction entry deducted from the purchase price because national subsidies were received

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Buildings and structures	1,018	1,078	8,318
Machinery, equipment and vehicles	7,374	9,985	60,250
Construction in progress	–	83	–
Other	35	69	286



## Notes

### Consolidated statement of income

#### \*1. Revenue from contracts with customers

The revenue from contracts with customers and other revenue are not separately presented at the net sales. The amount of revenue from contracts with customers is provided in Note "Revenue Recognition 1. Disaggregation of revenue from contracts with customers."

#### \*2. Main selling, general and administrative expense items were as follows.

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Packing and freight expenses	11,502	10,369	93,978
Employee salaries and bonuses	22,068	20,498	180,309
Welfare expenses	3,608	3,451	29,480
Retirement benefit expenses	1,049	1,445	8,571
Rent expenses on real estate	974	967	7,958
Depreciation	2,963	3,200	24,209
Research and development expenses	9,299	7,997	75,978

#### \*3. Total research and development expenses included in general and administrative expenses and manufacturing costs for period

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
	12,383	11,201	101,177

#### \*4. Breakdown of gain on sale of non-current assets is as follows.

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Buildings and structures	608	385	4,968
Machinery, equipment and vehicles	43	82	351
Land	–	870	–
Other	16	11	131
Total	668	1,350	5,458

#### \*5. Breakdown of loss on retirement of non-current assets is as follows.

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Buildings and structures	195	377	1,593
Machinery, equipment and vehicles	201	98	1,642
Other	318	94	2,598
Total	715	569	5,842

#### \*6. Breakdown of loss on sale of non-current assets is as follows.

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Buildings and structures	0	0	0
Machinery, equipment and vehicles	17	10	139
Other	29	4	237
Total	47	14	384

#### \*7. Impairment losses

##### Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

The Group recorded impairment losses on the following asset groups.

Location	Use	Type	(Millions of yen)	(Thousands of U.S. dollars)
			Impairment loss	Impairment loss
Tianjin, China Note 1	Production facilities, etc.	Buildings and structures	2,767	22,608
		Machinery, equipment and vehicles	1,977	16,153
		Other	197	1,610
		Total	4,943	40,387
Odawara, Kanagawa, Japan Note 2	Production facilities, etc.	Buildings and structures	484	3,955
		Land	29	237
		Other	4	33
		Total	518	4,232
Fukuchiyama, Kyoto, Japan Note 3	Production facilities, etc.	Construction in progress	318	2,598
		Total	318	2,598

##### Grouping method

Assets used for business are grouped based on a unit, such as business category, used for managerial accounting, the smallest unit that generates an independent cash flow.

Real estate for rent and idle assets are grouped individually.

Recognizing impairment losses and methods used to calculate recoverable value.

Note 1. The consolidated subsidiary Tianjin GS Battery Co., Ltd. under the Automotive Batteries (Overseas) segment is expected to recognize recurring operating losses because its performance deteriorates due to intensification of competition with competitors, and such conditions would constitute an impairment indicator. Therefore, the impairment test was performed and the carrying amount was reduced to the recoverable amount, and the resulting decrease in the carrying amount was recognized as an impairment loss under extraordinary losses. The recoverable amount was calculated using the fair value less cost of disposal in accordance with International Financial Reporting Standards (IFRS), and the fair value was calculated using valuation expert.

Note 2. When it was decided to withdraw from the Odawara Plant, the carrying amount of non-current assets owned by consolidated subsidiaries that are part of the automotive batteries-Japan, industrial batteries and power supplies, and other segments was lowered to the recoverable value, and that decline was recorded as an impairment loss under extraordinary losses. The recoverable value was calculated using net selling price, and the net selling price was calculated by deducting expected disposals costs from the valuation amount based on roadside value and other factors.

Note 3. When it was no longer expected that some non-current assets under development would be commercialized in the future, the carrying amount of those non-current assets owned by consolidated subsidiaries that are part of the Other segment was lowered to the recoverable value, and that decline was recorded as an impairment loss under extraordinary losses. The recoverable value was calculated using net selling price, and the net selling price was valued to be zero because it would be difficult to sell or make other use of those assets.

##### Year ended March 31, 2021 (April 1, 2020 to March 31, 2021)

The Group recorded impairment losses on the following asset groups.

Location	Use	Type
Ritto, Shiga, Japan	Production facilities, etc.	Buildings and structures; machinery, equipment and vehicles; and construction in progress

##### Grouping method

Assets used for business are grouped based on a unit, such as business category, used for managerial accounting, the smallest unit that generates an independent cash flow.

Real estate for rent and idle assets are grouped individually.

Recognizing impairment loss

During the second quarter of the fiscal year ended March 31, 2021, the consolidated subsidiary Lithium Energy Japan, which is part of the automotive lithium-ion batteries segment, expected to see a dramatic decline in sales volume and prominent deterioration in the business environment as a result of a major client's new business strategy. Because this corresponds to a sign of an impairment of non-current assets such as production equipment, etc., it was decided to measure and recognize an impairment loss. As a result, an impairment loss on owned production equipment (pre-impairment loss carrying value of ¥6,216 million) of ¥2,760 million was recorded.

## Notes

### Breakdown of impairment losses

The impairment losses consisted of ¥1,683 million on buildings and structures; ¥864 million on machinery, equipment and vehicles; ¥84 million on construction in progress; and ¥127 million on other.

### Methods used to measure recoverable value

The recoverable value is based on value in use and is measured using the present discounted value of future after-tax cash flows based on business plans, including sales volume forecasts formulated by managers, and a discount rate of 5%, which is based on the after-tax weighted average cost of capital. Future cash flows are calculated from past sales results and business plans based on capturing new orders for lithium-ion batteries used in cars and industry and taking into consideration the possibility of sales for each group of finished goods.

## Consolidated statement of comprehensive income

### Reclassification adjustments and tax effects related to other comprehensive income

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Valuation difference on available-for-sale securities:			
Amount for current fiscal year	(1,420)	7,775	(11,602)
Reclassification adjustments	(87)	(284)	(711)
Before tax effect adjustments	(1,508)	7,491	(12,321)
Tax effect	492	(2,254)	4,020
Valuation difference on available-for-sale securities	(1,016)	5,236	(8,301)
Deferred gains or losses on hedges:			
Amount for current fiscal year	6	118	49
Reclassification adjustments	15	116	123
Before tax effect adjustment	22	235	180
Tax effect	-	(0)	-
Deferred gains or losses on hedges	22	234	180
Foreign currency translation adjustment:			
Amount for current fiscal year	6,311	7,891	51,565
Reclassification adjustments	514	-	4,200
Before tax effect adjustments	6,825	7,891	55,764
Tax effect	-	-	-
Foreign currency translation adjustment	6,825	7,891	55,764
Remeasurements of defined benefit plans, net of tax:			
Amount for current fiscal year	7,849	7,535	64,131
Reclassification adjustments	616	1,285	5,033
Before tax effect adjustments	8,465	8,821	69,164
Tax effect	(2,642)	(2,675)	(21,587)
Remeasurements of defined benefit plans, net of tax	5,822	6,145	47,569
Share of other comprehensive income of entities accounted for using equity method:			
Amount for current fiscal year	796	813	6,504
Share of other comprehensive income of entities accounted for using equity method	796	813	6,504
Total other comprehensive income	12,451	20,320	101,732

## Consolidated statements of changes in net assets

### Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

#### 1. Class and total number of issued shares and class and number of treasury shares

	Number of shares at the beginning of the current fiscal year (thousand)	Increase in number of shares during the current fiscal year (thousand)	Decrease in number of shares during the current fiscal year (thousand)	Number of shares at the end of the current fiscal year (thousand)
Issued shares				
Common stock Note 1	82,714	-	2,115	80,599
Total	82,714	-	2,115	80,599
Treasury shares				
Common stock Notes 2, 3, and 4	2,109	168	2,118	159
Total	2,109	168	2,118	159

Notes 1.The decrease in the number of issued common shares was because of the cancellation of treasury shares based on a Board of Directors' resolution.  
2.The increase in the number of treasury shares (common stock) of 168 thousand shares was because of the purchase of 167 thousand treasury shares based on a Board of Directors' resolution and one thousand shares from the purchase of shares less than one share unit.  
3.The decrease in the number of treasury shares (common stock) of 2,118 thousand shares was because of the cancellation of 2,115 thousand treasury shares based on a Board of Directors' resolution and the provision of two thousand shares for performance-linked share-based payment system.  
4.The number of treasury shares (common stock) at the beginning and end of the current fiscal year includes treasury shares held in trust (69 thousand shares at the beginning and 67 thousand shares at the end of the current fiscal year).

## 2. Dividends

### (1) Dividends paid

Resolution	Class of shares	Total amount of dividends		Dividend per share		Record date	Effective date
		(Millions of yen)	(Thousands of U.S. dollars)	(Yen)	(U.S. dollars)		
June 29, 2021, annual general meeting of shareholders	Common stock	4,033	32,952	50	0.41	March 31, 2021	June 30, 2021
November 5, 2021, Board of Directors meeting	Common stock	1,207	9,862	15	0.12	September 30, 2021	December 1, 2021

Note The total amount of dividends of ¥4,033 million (USD \$32,952 thousand) and ¥1,207 million (USD \$9,862 thousand) includes ¥3 million (USD \$25 thousand) and ¥1 million (USD \$8 thousand) in dividends for treasury shares held in trust.

### (2) Those with a record date in the current fiscal year but effective date in the following fiscal year

Resolution	Class of shares	Total amount of dividends		Dividend source	Dividend per share		Record date	Effective date
		(Millions of yen)	(Thousands of U.S. dollars)		(Yen)	(U.S. dollars)		
June 29, 2022, annual general meeting of shareholders	Common stock	2,817	23,017	Retained earnings	35	0.29	March 31, 2022	June 30, 2022

Note The total amount of dividends includes ¥2 million (USD \$16 thousand) in dividends for treasury shares held in trust.



## Notes

Year ended March 31, 2021 (April 1, 2020 to March 31, 2021)

### 1. Class and total number of issued shares and class and number of treasury shares

	Number of shares at the beginning of the current fiscal year (thousand)	Increase in number of shares during the current fiscal year (thousand)	Decrease in number of shares during the current fiscal year (thousand)	Number of shares at the end of the current fiscal year (thousand)
Issued shares				
Common stock	82,714	–	–	82,714
Total	82,714	–	–	82,714
Treasury shares				
Common stock Notes 1, 2, and 3	1,579	542	13	2,109
Total	1,579	542	13	2,109

Notes 1.The increase in number of treasury shares (common stock) of 542 thousand shares was because of the purchase of 540 thousand treasury shares based on a Board of Directors' resolution and one thousand shares from the purchase of shares less than one share unit.  
2.The decrease in the number of treasury shares (common stock) of 13 thousand shares was because of the provision of 13 thousand shares for performance-linked share-based payment system.  
3.The number of treasury shares (common stock) at the beginning and end of the current fiscal year includes treasury shares held in trust (82 thousand shares at the beginning and 69 thousand shares at the end of the current fiscal year).

### 2. Dividends

#### (1) Dividends paid

Resolution	Class of shares	Total dividends	Dividend per share	Record date	Effective date
		(Millions of yen)	(Yen)		
June 26, 2020, annual general meeting of shareholders	Common stock	2,842	35	March 31, 2020	June 29, 2020

Note The total amount of dividends includes ¥2 million in dividends for treasury shares held in trust.

#### (2) Those with a record date in the current fiscal year but effective date in the following fiscal year

Resolution	Class of shares	Total dividends	Dividend source	Dividend per share	Record date	Effective date
		(Millions of yen)		(Yen)		
June 29, 2021, annual general meeting of shareholders	Common stock	4,033	Retained earnings	50	March 31, 2021	June 30, 2021

Note The total amount of dividends includes ¥3 million in dividends for treasury shares held in trust.

## Consolidated statement of cash flows

### \*1. Relationship between cash and cash equivalents at end of period and amounts stated on the consolidated balance sheet

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Cash and deposits	25,855	36,280	211,251
Time deposits (term exceeds three months)	(10)	(473)	(82)
Cash and cash equivalents	25,845	35,807	211,169

### \*2. Major breakdown of assets and liabilities of the company that became a newly consolidated subsidiary in the current fiscal year due to the acquisition of shares

The breakdown of assets and liabilities of GS Yuasa Infrastructure Systems Co., Ltd. (hereinafter referred to as "GYIS") at the time of its consolidation due to the acquisition of shares, and the relationship between the acquisition cost of GYIS shares and the expenditure for the acquisition of GYIS (net amount) are as follows.

	(Millions of yen)	(Thousands of U.S. dollars)
Current assets	8,016	65,496
Non-current assets	518	4,232
Negative goodwill	(710)	(5,801)
Current liabilities	(4,149)	(33,900)
Non-current liabilities	(440)	(3,595)
Acquisition cost of GYIS shares	3,235	26,432
GYIS cash and cash equivalents	(416)	(3,399)
Balance: Expenditures for the acquisition of GYIS	2,819	23,033

## Leases

### 1. Finance lease transactions (as lessee)

Finance leases for which ownership of the leased assets does not transfer to the lessees

#### (i) Description of leased assets

- a Property, plant and equipment
  - Mainly production facility (machinery, equipment and vehicles)
- b Intangible assets
  - Software

#### (ii) Depreciation/amortization of leased assets

See : Basis of preparation of consolidated financial statements; 4. Accounting policies; (2) Depreciation/amortization of principal non-current assets.

### 2. Operating lease transactions (as lessee)

Future minimum lease payments under non-cancelable operating leases

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Within one year	68	62	556
Exceeding one year	240	206	1,961
Total	309	268	2,525

### 3. Lease transactions under International Financial Reporting Standards

#### (i) Right-of-use assets

Mainly office leasing, vehicles and transportation equipment

#### (ii) Depreciation/amortization of right-of-use assets

See : Basis of preparation of consolidated financial statements; 4. Accounting policies; (2) Depreciation/amortization of principal non-current assets.

## Notes

### Financial instruments

#### 1. Matters concerning the status of financial instruments

##### (1) Policy for financial instruments

The Group's funds are invested in highly secure financial assets. Funding is procured mainly through borrowings from banks and other financial institutions, bonds, and commercial papers, based on demand in capital investment, investment and financing plans and other capital needs. Derivatives are used to avoid the risks described below, and speculative transactions are prohibited.

##### (2) Financial instruments, their risks and risk management

Notes and accounts receivable - trade and electronically recorded monetary claims - operating are exposed to customer credit risk. The Company manages the risk by, among other things, monitoring due dates and outstanding balances for each customer and periodically evaluating the status of major customers in order to identify and mitigate collection concerns at an early stage.

Investment securities are mainly stocks of companies with which the Company has business relationships and are exposed to market price fluctuations and other risks. However, the Company regularly monitor market conditions, market prices, and the financial status and business relationships of the issuing companies and review its holdings on an ongoing basis.

Most notes and accounts payable - trade and electronically recorded obligations are due within five months, and the Company manages liquidity risk by preparing monthly funding plans for each group company and division.

Of borrowings, short-term borrowings and commercial papers are used mainly for working capital, while long-term borrowings and bonds payable are mainly for capital investment. Some long-term borrowings are vulnerable to interest rate fluctuation because they are procured at floating interest rates. However, the Company uses interest rate swaps and currency swap transactions to limit the risk of fluctuations in interest rates payable and foreign currency exchange rate fluctuations.

Receivables and payables denominated in foreign currencies related to operating transactions are vulnerable to exchange rate fluctuations, against which exchange forward contracts are used to hedge the risk of exchange rate fluctuations, except for receivables and payables denominated in the same foreign currencies within the balance of the receivables and payables.

These derivative transactions are executed and managed by the department in charge in accordance with internal rules, and the Auditing Office conducts audits to determine whether they are executed and managed in accordance with the rules.

Hedging instruments and hedged items, hedging policy, and methods for evaluating the effectiveness of hedging with respect to hedge accounting are described in "Basis of preparation of consolidated financial statements; 4. Accounting policies; (8) Significant hedge accounting."

Consolidated subsidiaries operate under the principle of self-management and self-responsibility based on their own rules and regulations, and the Company is aware of such rules and regulations. In addition, the Company receives regular risk management reports and conducts monitoring and control.

##### (3) Supplementary explanation on fair value of financial instruments and related matters

Since variable factors are incorporated in the measurement of the fair value of financial instruments, such values may change due to the adoption of different assumptions and other factors. In addition, the contract amounts of derivative transactions, set forth in these Notes do not indicate the market risk involved in derivative transactions themselves.

#### 2. Fair value of financial instruments and related matters

Consolidated balance sheet amounts, fair values and their differences are as follows.

##### As of March 31, 2022

	Consolidated balance sheet amount	Fair value	Difference
(1) Investment securities	46,832	44,025	(2,806)
Total assets	46,832	44,025	(2,806)
(2) Bonds payable	20,000	19,959	(41)
(3) Long-term borrowings (including current portion)	45,018	44,346	(672)
(4) Lease liabilities (including current portion)	7,801	7,394	(407)
Total liabilities	72,820	71,699	(1,120)
Derivatives <sup>(*)2</sup>	71	71	-

(Millions of yen)

(\*)1 "Cash and deposits," "notes and accounts receivable - trade, and contract assets," "electronically recorded monetary claims - operating," "notes and accounts payable - trade," "electronically recorded obligations - operating," "short-term borrowings," "commercial papers," "accounts payable - other," "income taxes payable," "notes payable - facilities," and "electronically recorded obligations - facilities" are omitted because they are in cash or their fair value approximates their book value due to their short maturities.

(\*)2 Net receivables and payables arising from derivative transactions are shown as net amounts, and items that are net liabilities in total are shown in parentheses.

(\*)3 Unlisted shares, etc., (consolidated balance sheet amount: ¥19,486 million) and investments in capital (¥940 million) are not included in (1) Investment securities in the table above because they are stocks and other securities without market prices.

##### As of March 31, 2021

	Consolidated balance sheet amount	Fair value	Difference
(1) Investment securities	46,652	47,284	632
Total assets	46,652	47,284	632
(2) Bonds payable	20,000	20,034	34
(3) Long-term borrowings (including current portion)	39,419	38,791	(627)
(4) Lease liabilities (including current portion)	7,809	7,526	(282)
Total liabilities	67,228	66,352	(875)
Derivatives <sup>(*)2</sup>	(0)	(0)	-

(Millions of yen)

(\*)1 "Cash and deposits," "notes and accounts receivable - trade," "electronically recorded monetary claims - operating," "notes and accounts payable - trade," "electronically recorded obligations - operating," "short-term borrowings," "accounts payable - other," "income taxes payable," "notes payable - facilities," and "electronically recorded obligations - facilities" are omitted because their fair value approximates their book value due to their short maturities.

(\*)2 Net receivables and payables arising from derivative transactions are shown as net amounts, and items that are net liabilities in total are shown in parentheses.

(\*)3 The following financial instruments are not included in (1) Investment securities because they do not have market prices and it is extremely difficult to determine their fair value. The consolidated balance sheet amounts of such financial instruments are as follows.

Categories	Previous fiscal year
Unlisted shares	17,697
Investments in capital	1,657

(Millions of yen)



## Notes

## As of March 31, 2022

(Thousands of U.S. dollars)

	Consolidated balance sheet amount	Fair value	Difference
(1) Investment securities	382,646	359,711	(22,927)
Total assets	382,646	359,711	(22,927)
(2) Bonds payable	163,412	163,077	(335)
(3) Long-term borrowings (including current portion)	367,824	362,334	(5,491)
(4) Lease liabilities (including current portion)	63,739	60,413	(3,325)
Total liabilities	594,983	585,824	(9,151)
Derivatives <sup>(*)2</sup>	580	580	-

(\*1) "Cash and deposits," "notes and accounts receivable - trade, and contract assets," "electronically recorded monetary claims - operating," "notes and accounts payable - trade," "electronically recorded obligations - operating," "short-term borrowings," "commercial papers," "accounts payable - other," "income taxes payable," "notes payable - facilities," and "electronically recorded obligations - facilities" are omitted because they are in cash or their fair value approximates their book value due to their short maturities.

(\*2) Net receivables and payables arising from derivative transactions are shown as net amounts, and items that are net liabilities in total are shown in parentheses.

(\*3) Unlisted shares, etc., (consolidated balance sheet amount: USD \$159,212 thousand) and investments in capital (USD \$7,680 thousand) are not included in (1) Investment securities in the table above because they are stocks and other securities without market prices.

Note 1. Scheduled redemptions for monetary claims and securities with maturity dates after the consolidated fiscal year-end date

## As of March 31, 2022

(Millions of yen)

	One year or less	One to five years	Five to ten years	Over ten years
Cash and deposits	25,855	-	-	-
Notes and accounts receivable - trade, and contract assets	85,399	-	-	-
Electronically recorded monetary claims - operating	7,163	-	-	-
Total	118,418	-	-	-

## As of March 31, 2021

(Millions of yen)

	One year or less	One to five years	Five to ten years	Over ten years
Cash and deposits	36,280	-	-	-
Notes and accounts receivable - trade	74,269	-	-	-
Electronically recorded monetary claims - operating	5,039	-	-	-
Investment securities				
Available-for-sale securities with maturity dates				
Bonds	-	28	-	-
Total	115,590	28	-	-

## As of March 31, 2022

(Thousands of U.S. dollars)

	One year or less	One to five years	Five to ten years	Over ten years
Cash and deposits	211,251	-	-	-
Notes and accounts receivable - trade, and contract assets	697,761	-	-	-
Electronically recorded monetary claims - operating	58,526	-	-	-
Total	967,546	-	-	-

Note 2. Scheduled repayments of bonds payable, long-term borrowings, lease liabilities and other interest-bearing liabilities after the consolidated fiscal year-end date

## As of March 31, 2022

(Millions of yen)

	One year or less	One to two years	Two to three years	Three to four years	Four to five years	Over five years
Short-term borrowings	15,459	-	-	-	-	-
Commercial papers	2,000	-	-	-	-	-
Bonds payable	-	10,000	-	-	-	10,000
Long-term borrowings	3,322	11,556	9,697	8,098	9,111	3,231
Lease liabilities	1,701	745	680	785	471	3,417
Total	22,483	22,302	10,378	8,883	9,583	16,649

## As of March 31, 2021

(Millions of yen)

	One year or less	One to two years	Two to three years	Three to four years	Four to five years	Over five years
Short-term borrowings	6,112	-	-	-	-	-
Bonds payable	-	-	10,000	-	-	10,000
Long-term borrowings	7,327	2,764	11,005	8,623	7,894	1,692
Lease liabilities	1,768	806	646	568	848	3,171
Total	15,208	3,570	21,652	9,191	8,743	14,863

## As of March 31, 2022

(Thousands of U.S. dollars)

	One year or less	One to two years	Two to three years	Three to four years	Four to five years	Over five years
Short-term borrowings	126,309	-	-	-	-	-
Commercial papers	16,341	-	-	-	-	-
Bonds payable	-	81,706	-	-	-	81,706
Long-term borrowings	27,143	94,419	79,230	66,166	74,442	26,399
Lease liabilities	13,898	6,087	5,556	6,414	3,848	27,919
Total	183,700	182,221	84,795	72,579	78,299	136,032

## Notes

### 3. Fair value hierarchy of financial instruments

The fair value of financial instruments is classified into the following three levels based on the observability and materiality of the inputs used to calculate fair value.

Level 1: Calculated based on quoted market prices in an active market for the assets or liabilities for which the observable fair value is calculated.

Level 2: Calculated using inputs with observable fair values other than Level 1 inputs.

Level 3: Calculated using inputs with unobservable fair value measurements.

When multiple inputs that have a significant impact on the measurement of fair value are used, the fair value is classified at the Level from which the lowest levels of inputs were used.

#### (1) Financial instruments carried on the consolidated balance sheet at fair value As of March 31, 2022

(Millions of yen)

Categories	Fair value			Total
	Level 1	Level 2	Level 3	
Securities and investment securities				
Available-for-sale securities				
Equity securities	28,022	–	–	28,022
Derivatives				
Currency related	–	71	–	71
Total assets	28,022	71	–	28,093

(Thousands of U.S. dollars)

Categories	Fair value			Total
	Level 1	Level 2	Level 3	
Securities and investment securities				
Available-for-sale securities				
Equity securities	228,957	–	–	228,957
Derivatives				
Currency related	–	580	–	580
Total assets	228,957	580	–	229,537

#### (2) Financial instruments not carried on the consolidated balance sheet at fair value As of March 31, 2022

(Millions of yen)

Categories	Fair value			Total
	Level 1	Level 2	Level 3	
Securities and investment securities				
Available-for-sale securities				
Equity securities	16,003	–	–	16,003
Total assets	16,003	–	–	16,003
Bonds payable	–	19,959	–	19,959
Long-term borrowings (including current portion)	–	44,346	–	44,346
Lease liabilities (including current portion)	–	7,394	–	7,394
Total liabilities	–	71,699	–	71,699

(Thousands of U.S. dollars)

Categories	Fair value			Total
	Level 1	Level 2	Level 3	
Securities and investment securities				
Available-for-sale securities				
Equity securities	130,754	–	–	130,754
Total assets	130,754	–	–	130,754
Bonds payable	–	163,077	–	163,077
Long-term borrowings (including current portion)	–	362,334	–	362,334
Lease liabilities (including current portion)	–	60,413	–	60,413
Total liabilities	–	585,824	–	585,824

Note Valuation techniques and inputs used in the measurement of fair value

##### (1) Investment securities

The fair value of listed equity securities is estimated using quoted market prices. Since listed equity securities are traded in active markets, their fair value is classified as Level 1.

##### (2) Derivatives

The fair value of exchange forward contracts is determined using the discounted present value method with observable inputs such as exchange rates and is classified as Level 2.

##### (3) Bonds payable

The fair value of bonds payable is calculated by discounting the total amount of principal and interest at the interest rate that would be applicable if similar new financing were procured, and is classified as Level 2.

##### (4) Long-term borrowings

The fair value of long-term borrowings is calculated by discounting the total amount of principal and interest at the interest rate that would be applicable if similar new borrowings were arranged and is classified as Level 2. The fair value of long-term borrowings that qualify for special treatment in interest rate swaps is calculated by discounting the total amount of principal and interest accounted for together with the interest rate swaps by the reasonably estimated interest rate that would be applicable to similar borrowings and is classified as Level 2.

##### (5) Lease liabilities

The fair value of lease liabilities is calculated by discounting the total amount of principal and interest using the interest rate that would apply to a new lease contract with the same remaining term and conditions, and is classified as Level 2.



## Notes

### Securities

#### 1. Available-for-sale securities

As of March 31, 2022

(Millions of yen)				
	Class	Consolidated balance sheet amount	Acquisition cost	Difference
Securities whose consolidated balance sheet amount exceeds acquisition cost	Equity securities	27,918	4,802	23,116
Securities whose consolidated balance sheet amount does not exceed acquisition cost	Equity securities	103	198	(95)
Total		28,022	5,001	23,020

Note Unlisted shares, etc., (consolidated balance sheet amount: ¥591 million) are not included in available-for-sale securities in the table above because they are stocks and other securities without market prices.

As of March 31, 2021

(Millions of yen)				
	Class	Consolidated balance sheet amount	Acquisition cost	Difference
Securities whose consolidated balance sheet amount exceeds acquisition cost	Equity securities	29,457	4,832	24,625
Securities whose consolidated balance sheet amount does not exceed acquisition cost	Equity securities	103	198	(95)
Total		29,560	5,031	24,529

Note Unlisted shares, etc., (consolidated balance sheet amount: ¥620 million) are not included in available-for-sale securities in the above table because they do not have market prices, and it is significantly difficult to determine their fair value.

As of March 31, 2022

(Thousands of U.S. dollars)				
	Class	Consolidated balance sheet amount	Acquisition cost	Difference
Securities whose consolidated balance sheet amount exceeds acquisition cost	Equity securities	228,107	39,235	188,872
Securities whose consolidated balance sheet amount does not exceed acquisition cost	Equity securities	842	1,618	(776)
Total		228,957	40,861	188,087

Note Unlisted shares, etc., (consolidated balance sheet amount: USD \$4,829 thousand) are not included in available-for-sale securities in the table above because they are stocks and other securities without market prices.

#### 2. Available-for-sale securities sold

Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

(Millions of yen)			
Class	Sale amount	Total gain on sale	Total loss on sale
Equity securities	149	116	0
Total	149	116	0

Year ended March 31, 2021 (April 1, 2020 to March 31, 2021)

(Millions of yen)			
Class	Sale amount	Total gain on sale	Total loss on sale
Equity securities	375	299	0
Total	375	299	0

Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

(Thousands of U.S. dollars)			
Class	Sale amount	Total gain on sale	Total loss on sale
Equity securities	1,217	948	0
Total	1,217	948	0

#### 3. Securities for which impairment losses were recognized

In the previous fiscal year, impairment loss of ¥15 million (¥15 million for stocks of available-for-sale securities) was recognized on securities.

In the current fiscal year, impairment loss of ¥28 million (USD \$229 thousand) (¥28 million on bonds of available-for-sale securities) was recognized on securities.

In the event that the fair value at the end of the fiscal year has declined by 50% or more compared to the acquisition cost, the securities are recognized as impaired. In the event that the fair value has declined by 30-50%, impairment loss is recognized for the amount deemed necessary in consideration of the possibility of recovery and other factors.

## Notes

## Derivatives

## 1. Derivative transactions for which hedge accounting is not applied

## (1) Currency related

As of March 31, 2022

(Millions of yen)					
Categories	Class of transaction	Contract amount, etc.	Contract amount, etc., exceeding one year	Fair value	Valuation gains/losses
Non-market transactions	Exchange forward contracts				
	Short (sale)				
	GBP	5,201	–	51	51
	AUD	493	–	16	16
	NZD	144	–	6	6
	USD	46	–	(2)	(2)
Total		5,886	–	71	71

As of March 31, 2021

(Millions of yen)					
Categories	Class of transaction	Contract amount, etc.	Contract amount, etc., exceeding one year	Fair value	Valuation gains/losses
Non-market transactions	Exchange forward contracts				
	Short (sale)				
	GBP	2,324	–	31	31
	AUD	199	–	(3)	(3)
	NZD	18	–	(0)	(0)
	USD	126	–	(5)	(5)
Total		2,669	–	21	21

Note Method used to measure fair value  
Fair value is based on prices, etc., provided by financial institutions, etc., with which the Company does business.

As of March 31, 2022

(Thousands of U.S. dollars)					
Categories	Class of transaction	Contract amount, etc.	Contract amount, etc., exceeding one year	Fair value	Valuation gains/losses
Non-market transactions	Exchange forward contracts				
	Short (sale)				
	GBP	42,495	–	417	417
	AUD	4,028	–	131	131
	NZD	1,177	–	49	49
	USD	376	–	(16)	(16)
Total		48,092	–	580	580

## (2) Interest rate related

As of March 31, 2022

Not applicable

As of March 31, 2021

Not applicable

## 2. Derivative transactions for which hedge accounting is applied

## (1) Currency related

As of March 31, 2022

(Millions of yen)					
Method of hedge accounting	Class of transaction	Main hedged item(s)	Contract amount, etc.	Contract amount, etc., exceeding one year	Fair value
Appropriation treatment for exchange forward contracts	Currency swap(s) Received in JPY - paid in USD	Long-term loans receivable	683	627	(82) (Note)
Total			683	627	(82)

Note The fair value of currency swap transactions is treated as appropriation for exchange forward contracts to long-term loans receivable and is not included in "Financial instruments, 2. Fair value of financial instruments and related matters."

As of March 31, 2021

(Millions of yen)					
Method of hedge accounting	Class of transaction	Main hedged item(s)	Contract amount, etc.	Contract amount, etc., exceeding one year	Fair value
Principle method of accounting	Exchange forward contracts	Accounts payable - trade	324	–	(2)
	Long (buy) USD				
Principle method of accounting	Currency option(s)	Accounts payable - trade	99	–	(1)
	Short call USD				
	Long put USD				
Appropriation treatment for exchange forward contracts	Currency swap(s) Received in JPY - paid in USD	Long-term loans receivable	738	683	(49) (Note 2)
Total			1,262	683	(52)

Notes 1. Method used to measure fair value  
Fair value is based on prices, etc., provided by financial institutions, etc., with which the Company does business.  
2. The fair value of currency swap transactions is treated as appropriation for exchange forward contracts to long-term loans receivable and is not included in "Financial instruments, 2. Fair value of financial instruments and related matters."



## Notes

As of March 31, 2022

(Thousands of U.S. dollars)

Method of hedge accounting	Class of transaction	Main hedged item(s)	Contract amount, etc.	Contract amount, etc., exceeding one year	Fair value
Appropriation treatment for exchange forward contracts	Currency swap(s) Received in JPY - paid in USD	Long-term loans receivable	5,581	5,123	(670)  (Note)
Total			5,581	5,123	(670)

Note The fair value of currency swap transactions is treated as appropriation for exchange forward contracts to long-term loans receivable and is not included in "Financial instruments, 2. Fair value of financial instruments and related matters."

(2) Interest rate related  
As of March 31, 2022

(Millions of yen)

Method of hedge accounting	Class of transaction	Main hedged item(s)	Contract amount, etc.	Contract amount, etc., exceeding one year	Fair value
Integration of interest rate and currency swaps (Special treatment / appropriation treatment)	Interest rate and currency swap(s) Variable receipt / fixed payment Received in USD / paid in JPY	Long-term borrowings	1,852	1,852	(Note)

Note The fair value of interest rate and currency swaps accounted for as a single unit (special treatment / appropriation treatment) is included in the fair value of the relevant long-term borrowings because they are accounted for as a single unit with the long-term borrowings that are the hedged items. The "Practical Solution on the Treatment of Hedge Accounting for Financial Instruments that Reference LIBOR" (ASBJ Practical Issues Task Force No. 40, March 17, 2022) is applied to these hedging relationships.

As of March 31, 2021

(Millions of yen)

Method of hedge accounting	Class of transaction	Main hedged item(s)	Contract amount, etc.	Contract amount, etc., exceeding one year	Fair value
Integration of interest rate and currency swaps (Special treatment / appropriation treatment)	Interest rate and currency swap(s) Variable receipt / fixed payment Received in USD / paid in JPY	Long-term borrowings	1,852	1,852	(Note)

Note The fair value of interest rate and currency swaps accounted for as a single unit (special treatment / appropriation treatment) is included in the fair value of the relevant long-term borrowings because they are accounted for as a single unit with the long-term borrowings that are the hedged items. The "Practical Solution on the Treatment of Hedge Accounting for Financial Instruments that Reference LIBOR" (ASBJ Practical Issues Task Force No. 40, September 29, 2020) is applied to these hedging relationships.

As of March 31, 2022

(Thousands of U.S. dollars)

Method of hedge accounting	Class of transaction	Main hedged item(s)	Contract amount, etc.	Contract amount, etc., exceeding one year	Fair value
Integration of interest rate and currency swaps (Special treatment / appropriation treatment)	Interest rate and currency swap(s) Variable receipt / fixed payment Received in USD / paid in JPY	Long-term borrowings	15,132	15,132	(Note)

Note The fair value of interest rate and currency swaps accounted for as a single unit (special treatment / appropriation treatment) is included in the fair value of the relevant long-term borrowings because they are accounted for as a single unit with the long-term borrowings that are the hedged items. The "Practical Solution on the Treatment of Hedge Accounting for Financial Instruments that Reference LIBOR" (ASBJ Practical Issues Task Force No. 40, March 17, 2022) is applied to these hedging relationships.

## (3) Commodities

As of March 31, 2022

Not applicable

As of March 31, 2021

(Millions of yen)

Method of hedge accounting	Class of transaction	Main hedged item(s)	Contract amount, etc.	Contract amount, etc., exceeding one year	Fair value
Principle method of accounting	Commodity price swap(s) Variable receipt / fixed payment	Nickel purchase(s)	87	-	(19)

Note Method used to measure fair value  
Fair value is based on prices, etc., provided by financial institutions, etc., with which the Company does business.

## Retirement Benefit Plans

### 1. Outline of current retirement benefit plans

Certain domestic consolidated subsidiaries have defined benefit plans, such as corporate pension fund plan and lump-sum retirement benefit plans, and have established retirement benefit trusts. Certain overseas consolidated subsidiaries also have defined benefit plans.

In addition, certain consolidated subsidiaries have adopted defined contribution pension plans.

### 2. Defined benefit plans

#### (1) Reconciliation of the beginning and ending balance of the retirement benefit obligations

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Retirement benefit obligations balance at beginning of period	48,646	47,499	397,467
Service cost	2,014	2,057	16,456
Interest cost	103	93	842
Actuarial gains (losses) accrued	(1,873)	1,105	(15,304)
Retirement benefits paid	(2,950)	(2,127)	(24,103)
Increase due to merger	–	33	–
Increase due to new consolidation	3,382	–	27,633
Other	48	(17)	392
Retirement benefit obligations balance at end of period	49,371	48,646	403,391

#### (2) Reconciliation of the beginning and ending balance of plan assets

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Plan assets at beginning of period	68,003	56,350	555,625
Expected return on assets	1,097	854	8,963
Actuarial gains (losses) accrued	5,976	8,641	48,828
Employer contribution	1,407	3,854	11,496
Retirement benefits paid	(2,713)	(1,765)	(22,167)
Increase due to new consolidation	3,605	–	29,455
Other	55	68	449
Plan assets at end of period	77,433	68,003	632,674

### (3) Reconciliation of retirement benefit obligations and plan assets at the end of the period to retirement benefit liability and retirement benefit asset recognized in the consolidated balance sheet

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Retirement benefit obligations of funded plans	45,248	44,846	369,703
Plan assets	(77,433)	(68,003)	(632,674)
	(32,185)	(23,157)	(262,971)
Retirement benefit obligations of unfunded plans	4,122	3,799	33,679
Net liabilities and assets recognized in the consolidated balance sheet	(28,062)	(19,357)	(229,283)
Retirement benefit liability	4,892	4,562	39,971
Retirement benefit asset	(32,954)	(23,920)	(269,254)
Net liabilities and assets recognized in the consolidated balance sheet	(28,062)	(19,357)	(229,283)

Note: Certain consolidated subsidiaries use the simplified method to calculate retirement benefit obligations.

### (4) Amount of retirement benefit expenses and their breakdown

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Service cost (Note)	2,014	2,057	16,456
Interest cost	103	93	842
Expected return on assets	(1,097)	(854)	(8,963)
Amortization of past service cost	(112)	(162)	(915)
Amortization of actuarial gains (losses)	729	1,448	5,956
Retirement benefit expenses related to defined benefit plan	1,636	2,582	13,367

Note: Retirement benefit expenses of the consolidated subsidiaries using the simplified method are included in "service cost."

### (5) Amounts recognized in other comprehensive income for the years ended March 31, 2022 and 2021 were as follows:

	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Past service cost	(112)	(162)	(915)
Actuarial gains (losses)	8,578	8,983	70,087
Total	8,465	8,821	69,164



**(6) Amounts recognized in accumulated other comprehensive income as of March 31, 2022 and 2021 were as follows:**

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Unrecognized past service cost	306	419	2,500
Unrecognized actuarial gains (losses)	12,610	4,031	103,031
Total	12,916	4,451	105,531

**(7) Matters related to plan assets**

**(i) Breakdown of plan assets**

The following table shows the main categories of plan assets by percent of total plan assets.

	As of March 31, 2022	As of March 31, 2021
Equity securities	46%	41%
General account	24	26
Bonds	13	14
Investment trust(s)	10	8
Cash and deposits	5	7
Short-term assets	1	2
Other	1	2
Total	100	100

Note Total plan assets include 36% of the retirement benefit trusts established in corporate pension plans for the previous fiscal year and 37% of that for the current fiscal year.

**(ii) Method used to determine the expected long-term rate of return on plan assets**

To determine the expected long-term rate of return on plan assets, the Company considers the current and projected allocation of plan assets and the current and expected long-term rate of return from the various assets comprising the plan assets.

**(8) Actuarial basis of accounting**

Principal actuarial basis

	As of March 31, 2022	As of March 31, 2021
Discount rate	(0.0)-0.1%	(0.0)-0.1%
Expected long-term rate of return on assets	0.7-2.0%	0.7-2.0%

The projected rate of salary increase is based on the salary increase index of service points and qualification points calculated on the last day of the fiscal year.

**3. Defined contribution plan**

Required contributions to the defined contribution plan by the Company and its consolidated subsidiaries were ¥538 million in the previous fiscal year and ¥572 million (USD \$4,674 thousand) in the current fiscal year.

**Stock Options, etc.**

**Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)**

Not applicable

**Year ended March 31, 2021 (April 1, 2020 to March 31, 2021)**

Not applicable

**Income Taxes**

**1. Significant components of deferred tax assets and liabilities**

	(Millions of yen)		(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Deferred tax assets			
Accrued bonuses	1,523	1,423	12,444
Enterprise tax payable	298	285	2,435
Unrealized gain	452	107	3,693
Loss on valuation of inventories	1,376	730	11,243
Retirement benefit liability	3,820	4,118	31,212
Allowance for doubtful accounts	163	537	1,332
Impairment losses	2,117	1,216	17,297
Investment securities	255	261	2,084
Tax loss carryforwards (Note 2)	10,421	12,721	85,146
Other	2,840	3,384	23,205
Subtotal of deferred tax assets	23,270	24,786	190,130
Valuation allowance for tax loss carryforwards (Note 2)	(9,415)	(11,735)	(76,926)
Valuation allowance for total deductible temporary differences, etc.	(4,772)	(4,453)	(38,990)
Subtotal of valuation allowance (Note 1)	(14,188)	(16,189)	(115,925)
Total deferred tax assets	9,082	8,597	74,205
Deferred tax liabilities			
Reserve for tax purpose reduction entry of non-current assets	(8)	(10)	(65)
Valuation difference on available-for-sale securities	(6,876)	(7,369)	(56,181)
Valuation excess of property	(1,175)	(1,270)	(9,600)
Undistributed earnings of foreign affiliates	(7,298)	(6,534)	(59,629)
Retirement benefit asset	(10,091)	(7,333)	(82,450)
Other	(1,204)	(626)	(9,837)
Total deferred tax liabilities	(26,654)	(23,144)	(217,779)
Net deferred tax assets (liabilities)	(17,572)	(14,547)	(143,574)

Notes 1. The amount of valuation allowance decreased by ¥2,000 million (USD \$16,341 thousand). The decrease was mainly due to a ¥3,393 million (USD \$27,723 thousand) decrease in valuation allowance for loss carryforwards at a consolidated subsidiary due to the partial expiration of loss carryforwards and a ¥1,073 million (USD \$8,767 thousand) increase in valuation allowance for loss carryforwards at another consolidated subsidiary in the current fiscal year.

2. Tax loss carryforwards and deferred tax assets by carryforward period

## As of March 31, 2022

(Millions of yen)

	One year or less	One to two years	Two to three years	Three to four years	Four to five years	Over five years	Total
Tax loss carryforwards (a)	3,754	2,284	871	121	801	2,588	10,421
Valuation allowance	(3,754)	(2,284)	(871)	(121)	(801)	(1,581)	(9,415)
Deferred tax assets	–	–	–	–	–	1,006	(b) 1,006

(a) Tax loss carryforwards are multiplied by the statutory tax rate.

(b) Deferred tax assets of ¥1,006 million were recognized for tax loss carryforwards of ¥10,421 million (multiplied by the statutory tax rate). No valuation allowance is recognized for the portion of such tax loss carryforwards that are deemed recoverable based on expected future taxable income and other factors.

## As of March 31, 2021

(Millions of yen)

	One year or less	One to two years	Two to three years	Three to four years	Four to five years	Over five years	Total
Tax loss carryforwards (a)	3,624	3,819	2,284	735	114	2,143	12,721
Valuation allowance	(3,475)	(3,754)	(2,284)	(735)	(86)	(1,398)	(11,735)
Deferred tax assets	148	64	–	–	27	744	(b) 986

(a) Tax loss carryforwards are multiplied by the statutory tax rate.

(b) Deferred tax assets of ¥986 million were recognized for tax loss carryforwards of ¥12,721 million (multiplied by the statutory tax rate). No valuation allowance is recognized for the portion of such tax loss carryforwards that are deemed recoverable based on expected future taxable income and other factors.

## As of March 31, 2022

(Thousands of U.S. dollars)

	One year or less	One to two years	Two to three years	Three to four years	Four to five years	Over five years	Total
Tax loss carryforwards (a)	30,672	18,662	7,117	989	6,545	21,146	85,146
Valuation allowance	(30,672)	(18,662)	(7,117)	(989)	(6,545)	(12,918)	(76,926)
Deferred tax assets	–	–	–	–	–	8,220	(b) 8,220

(a) Tax loss carryforwards are multiplied by the statutory tax rate.

(b) Deferred tax assets of USD \$8,220 thousand were recognized for tax loss carryforwards of USD \$85,146 thousand (multiplied by the statutory tax rate). No valuation allowance is recognized for the portion of such tax loss carryforwards that are deemed recoverable based on expected future taxable income and other factors.

## 2. Significant components of the difference between the statutory tax rate and the effective tax rate

	As of March 31, 2022	As of March 31, 2021
Statutory tax rate	30.5%	30.5%
(Adjustments)		
Expenses not deductible for income tax purposes, such as entertainment expenses	0.4	0.3
Inhabitant per capita taxes	0.4	0.3
Increase/decrease in valuation allowance	(11.4)	5.5
Lower income tax rates applicable to income in certain foreign countries	(2.4)	(4.0)
Increase/decrease in undistributed earnings of foreign affiliates	4.0	3.1
Amortization of goodwill	1.1	1.6
Gain on bargain purchase	(1.1)	–
Share of profit of entities accounted for using equity method	(4.4)	(3.0)
Expiration of tax loss carryforwards	18.1	3.4
Expiration of foreign tax credit carryforwards	1.7	2.5
Unrecognized tax effects on eliminated intercompany unrealized profit	(0.8)	1.2
Foreign withholding taxes, etc.	3.7	2.7
Tax credit for R&D, etc.	(2.9)	(3.2)
Consolidation adjustments for loss/gain on sales of investments in subsidiaries	(0.9)	–
Other	(1.4)	(0.3)
Effective tax rate	34.6	40.5



## Business Combinations

### Business combination through acquisition

#### 1. Outline of business combination

##### (1) Name and business of acquired company

Name of acquired company : Sanken Densetsu Co., Ltd.

Description of business : Development, manufacture, sales, construction planning, delivery, installation, wiring work, on-site adjustment testing, maintenance, inspection, battery replacement and other work and repair of power supply equipment products

##### (2) Reason for business combination

In the market environment surrounding our industrial batteries and power supplies business, while demand for emergency power supplies is expected to grow due to the new construction and expansion of data centers as a result of the spread of IoT and national resilience policies, competition is intensifying against the backdrop of aggressive market entry by competitors and is expected to intensify in the future. Therefore, we have determined that we can strengthen our competitiveness and achieve sustainable growth by combining the technological and developmental capabilities that Sanken Densetsu and the GS Yuasa Group have cultivated.

##### (3) Date of business combination

May 1, 2021

##### (4) Legal structure of the business combination

Purchase of shares with cash

##### (5) Name of company after the business combination

GS Yuasa Infrastructure Systems Co., Ltd.

##### (6) Share of voting rights acquired

100%

##### (7) Main grounds for determining the acquiring company

Cash acquisition of shares by the Company's consolidated subsidiary GS Yuasa International Ltd.

#### 2. Period of the acquired company's results included in the consolidated financial statements

May 1, 2021 to March 31, 2022

#### 3. Acquisition costs of the acquired company and consideration by class

		(Millions of yen)	(Thousands of U.S. dollars)
Consideration for acquisition	Cash	3,235	26,432
Acquisition cost		3,235	26,432

#### 4. Description and amounts of major relevant costs for the acquisition

Advisory fees, etc.: ¥199 million (USD \$1,626 thousand)

#### 5. Amount and cause of gain on bargain purchase

##### (1) Amount of gain on bargain purchase

¥710 million (USD \$5,801 thousand)

##### (2) Cause of gain

Since the acquisition cost was less than the net amount allocated to the assets and liabilities received, the difference was recognized as a gain on bargain purchase.

#### 6. Amount of assets acquired and liabilities assumed on the date of the business combination

	(Millions of yen)	(Thousands of U.S. dollars)
Current assets	8,016	65,496
Non-current assets	518	4,232
Total assets	8,535	69,736
Current liabilities	4,149	33,900
Non-current liabilities	440	3,595
Total liabilities	4,589	37,495

#### 7. Estimated amount and method used to calculate the effect of the business combination on the consolidated statement of income for the current fiscal year as if the business combination had been completed at the beginning of the fiscal year

Omitted as immaterial

## Revenue recognition

### 1. Disaggregation of revenue from contracts with customers

Net sales of the Company and its consolidated subsidiaries consist primarily of revenue recognized from contracts with customers, broken down by geographic region of the Company and its consolidated subsidiaries as follows.

#### Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

(Millions of yen)

	Reportable segment					Total	Other	Total
	Automotive Batteries			Industrial Batteries and Power Supplies	Automotive Lithium-ion Batteries			
	Japan	Overseas	Subtotal					
Major regional markets								
Japan	80,979	76	81,055	85,348	45,765	212,169	15,068	227,237
Asia	488	97,879	98,368	6,770	–	105,138	253	105,392
Europe	27	48,135	48,162	257	1,872	50,293	888	51,181
North America	–	9,621	9,621	5,635	–	15,257	314	15,571
Other	–	31,030	31,030	1,452	–	32,483	17	32,500
Revenue from contracts with customers	81,494	186,743	268,237	99,465	47,637	415,341	16,542	431,883
Other revenues	–	–	–	–	–	–	249	249
Revenues from external customers	81,494	186,743	268,237	99,465	47,637	415,341	16,791	432,133

Note "Other" comprises businesses that are not included in any of the reportable segments, such as the special batteries business.

(Thousands of U.S. dollars)

	Reportable segment					Total	Other	Total
	Automotive Batteries			Industrial Batteries and Power Supplies	Automotive Lithium-ion Batteries			
	Japan	Overseas	Subtotal					
Major regional markets								
Japan	661,647	621	662,268	697,345	373,928	1,733,548	123,115	1,856,663
Asia	3,987	799,730	803,726	55,315	–	859,041	2,067	861,116
Europe	221	393,292	393,513	2,100	15,295	410,924	7,255	418,180
North America	–	78,609	78,609	46,041	–	124,659	2,566	127,224
Other	–	253,534	253,534	11,864	–	265,406	139	265,545
Revenue from contracts with customers	665,855	1,525,803	2,191,658	812,689	389,223	3,393,586	135,158	3,528,744
Other revenues	–	–	–	–	–	–	2,034	2,034
Revenues from external customers	665,855	1,525,803	2,191,658	812,689	389,223	3,393,586	137,193	3,530,787

Note "Other" comprises businesses that are not included in any of the reportable segments, such as the special batteries business.

### 2. Understanding revenue from contracts with customers

For a fundamental understanding of revenue, see: "Basis of preparation of consolidated financial statements, 4. Accounting policies, (6) Standards for recognition of principal revenues and expenses."

### 3. Understanding the amount of revenue in the current and subsequent fiscal years

#### (1) Remaining balance, etc., of contract assets and liabilities

The balances of receivables, contract assets and contract liabilities arising from contracts with customers were as follows.

	(Millions of yen)	(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2022
Receivables from contracts with customers (balance at beginning of period)	73,347	599,289
Receivables from contracts with customers (balance at end of period)	86,187	704,200
Contract assets (balance at beginning of period)	5,962	48,713
Contract assets (balance at end of period)	6,375	52,088
Contract liabilities (balance at beginning of period)	1,780	14,544
Contract liabilities (balance at end of period)	2,181	17,820

Contract assets are rights to consideration received in exchange for satisfaction of a portion of the performance obligations at the balance sheet date for the sale and installation of batteries and power supply equipment, excluding receivables. Upon completion of installation, etc., conditions other than the passage of time are resolved and the assets are transferred to receivables. Contract assets are transferred to receivables arising from contracts with customers when the rights of the Company and its consolidated subsidiaries become unconditional. Compensation for such installation work, etc., is invoiced at the time of fulfillment of the performance obligations in accordance with the terms of the contract and is generally received within one year.

Contract liabilities primarily relate to advances received from customers under the terms of contracts for the sale of batteries and power supplies, lighting fixtures, and other battery and electrical equipment to customers for which revenue is recognized upon the satisfaction of performance obligations. Contract liabilities are reversed upon the recognition of revenue.

The amount of revenue recognized in the current fiscal year that was included in the contract liability balance at the beginning of the period was ¥1,148 million (USD \$9,380 thousand). Changes in contract assets resulted primarily from revenue recognition and transfers to receivables. Changes in contract liabilities resulted primarily from receipt of advances received and recognition of revenue.

The amount of revenue recognized in the current fiscal year from performance obligations that were satisfied (or partially satisfied) in prior periods was not material.

#### (2) Transaction price allocated to remaining performance obligations

The Company and its consolidated subsidiaries apply the practical expedient method in noting the transaction price allocated to the remaining performance obligations and do not include contracts with an initial expected contract term of one year or less in notes. The aggregate transaction price allocated to unfulfilled performance obligations as of the end of the current fiscal year, and the period over which revenue is expected to be recognized were as follows. The maximum period over which revenue is expected to be recognized is 21 years or less.

	(Millions of yen)	(Thousands of U.S. dollars)
	As of March 31, 2022	As of March 31, 2022
One year or less	13,096	107,002
Exceeding one year	16,853	137,699
Total	29,949	244,701



## Segment and other information

### [Segment information]

#### 1. Overview of reportable segments

The Company's reportable segments are components of the Company about which separate financial information is available. These segments are subject to periodic examinations to enable the Company's Board of Directors to decide how to allocate resources and assess performance.

The GS Yuasa Group consists of segments based on business units. The reportable segments comprised Automotive Batteries-Japan, Automotive Batteries-Overseas, Industrial Batteries and Power Supplies, and Automotive Lithium-ion Batteries.

The Automotive Batteries-Japan segment consists of the manufacturing and marketing of lead-acid batteries for automobiles. The Automotive Batteries-Overseas segment consists of the manufacturing and marketing of batteries overseas. The Industrial Batteries and Power Supplies segment consists of the manufacturing and marketing of industrial batteries and power supplies. The Automotive Lithium-ion Batteries segment consists of the manufacturing and marketing of lithium-ion batteries for automobiles.

#### 2. Measurement of net sales, profit/loss, assets, and other amounts by reportable segment

Accounting methods applied in the reportable segments are largely consistent with those presented in the Notes under "Basis of preparation of consolidated financial statements."

Reportable segment profit is based on operating profit before goodwill amortization.

Intersegment sales and transfers are based mainly on market price and cost of goods manufactured.

As described in "Changes in accounting policies," the Company has applied the Accounting Standard for Revenue Recognition and relevant revised ASBJ regulations beginning with the consolidated financial statements for the current fiscal year, and has changed its accounting method for revenue recognition, thus changing its method for calculating profit or loss by business segment in the same manner.

As a result of this change, compared with the amounts that would have been reported using the previous method, the Automotive Batteries-Japan segment decreased by ¥2,140 million (USD \$17,485 thousand) in net sales and ¥118 million (USD \$964 thousand) in segment profit, Industrial Batteries and Power Supplies increased by ¥538 million (USD \$4,396 thousand) in net sales and ¥111 million (USD \$907 thousand) in segment profit, and net sales and segment profit of Other decreased by ¥9 million (USD \$74 thousand) and ¥9 million (USD \$74 thousand), respectively.

#### 3. Net sales, profit/loss, assets, and other amounts by reportable segment

Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

	Reportable segment						Other (Note)	Total
	Automotive Batteries			Industrial Batteries and Power Supplies	Automotive Lithium-ion Batteries	Total		
	Japan	Overseas	Subtotal					
Net sales								
Revenues from external customers	81,494	186,743	268,237	99,465	47,637	415,341	16,791	432,133
Transactions with other segments	1,349	3,929	5,278	16,741	8,956	30,976	(30,976)	–
Total	82,844	190,672	273,516	116,206	56,594	446,318	(14,184)	432,133
Segment profit	5,878	9,965	15,843	5,775	1,654	23,273	579	23,853
Segment assets	61,202	186,413	247,616	72,920	62,938	383,474	97,288	480,763
Other items								
Depreciation/amortization	2,862	4,908	7,770	1,624	3,280	12,675	5,531	18,207
Investments in entities accounted for using equity method	1,286	34,003	35,290	456	–	35,746	3,630	39,377
Increase in property, plant and equipment, and intangible assets	3,796	5,279	9,076	1,347	10,972	21,395	7,180	28,575

Notes 1. "Other" comprises a) businesses that are not included in any of the reportable segments, such as special batteries business, and b) segment profit adjustment.

2. Adjustments were as follows:

(1) Adjustment for segment profit was ¥(857) million, which included ¥37 million elimination of intersegment transactions and ¥(894) million of unallocated corporate expenses. The main component of these unallocated corporate expenses was general and administrative expenses not attributable to reportable segments.

(2) Adjustment for segment assets was ¥83,569 million, which included ¥(117,095) million elimination of intersegment receivables and payables, and ¥200,664 million of unallocated corporate assets. The main components of these unallocated corporate assets were working funds, long-term investment funds, assets allocated to administrative departments and some laboratory facilities.

(3) Adjustment for depreciation/amortization was ¥4,143 million, consisting of depreciation and amortization charges for corporate assets.

(4) Adjustment for increase in property, plant and equipment, and intangible assets was ¥6,766 million, consisting of the acquisition price of property, plant and equipment, and intangible assets classified as corporate assets.

3. The difference between the total segment profit in the table above and the operating profit of ¥22,664 million on the consolidated statements of income represents amortization of goodwill and other intangible assets of ¥(1,188) million. These goodwill and other intangible assets included identifiable assets acquired on the effective date of the business combination.

(Millions of yen)

Year ended March 31, 2021 (April 1, 2020 to March 31, 2021)

(Millions of yen)

	Reportable segment						Other (Note)	Total
	Automotive Batteries			Industrial Batteries and Power Supplies	Automotive Lithium-ion Batteries	Total		
	Japan	Overseas	Subtotal					
Net sales								
Revenues from external customers	83,639	165,296	248,936	84,037	35,950	368,924	17,587	386,511
Transactions with other segments	1,252	2,879	4,132	11,921	7,050	23,104	(23,104)	–
Total	84,892	168,176	253,068	95,958	43,001	392,028	(5,517)	386,511
Segment profit(loss)	8,669	12,225	20,895	6,890	(852)	26,932	136	27,069
Segment assets	59,759	167,901	227,660	56,593	52,640	336,894	95,018	431,913
Other items								
Depreciation/amortization	3,137	4,467	7,604	1,688	3,525	12,818	5,212	18,031
Investments in entities accounted for using equity method	1,256	31,855	33,112	288	–	33,401	3,146	36,547
Increase in property, plant and equipment, and intangible assets	2,660	4,327	6,987	1,398	4,245	12,631	6,473	19,104

Notes 1. "Other" comprises a) businesses that are not included in any of the reportable segments, such as special batteries business, and b) segment profit adjustment.

2. Adjustments were as follows:

- (1) Adjustment for segment profit (loss) was ¥(2,263) million, which included ¥(1,364) million elimination of intersegment transactions and ¥(898) million of unallocated corporate expenses. The main component of these unallocated corporate expenses was general and administrative expenses not attributable to reportable segments.
- (2) Adjustment for segment assets was ¥81,407 million, which included ¥(100,470) million elimination of intersegment receivables and payables, and ¥181,878 million of unallocated corporate assets. The main components of these unallocated corporate assets were working funds, long-term investment funds, assets allocated to administrative departments and some laboratory facilities.
- (3) Adjustment for depreciation/amortization was ¥3,826 million, consisting of depreciation and amortization charges for corporate assets.
- (4) Adjustment for increase in property, plant and equipment, and intangible assets was ¥5,877 million, consisting of the acquisition price of property, plant and equipment, and intangible assets classified as corporate assets.

3. The difference between the total segment profit (loss) in the table above and the operating profit of ¥24,810 million on the consolidated statements of income represents amortization of goodwill and other intangible assets of ¥(2,258) million. These goodwill and other intangible assets included identifiable assets acquired on the effective date of the business combination.

Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

(Thousands of U.S. dollars)

	Reportable segment						Other (Note)	Total
	Automotive Batteries			Industrial Batteries and Power Supplies	Automotive Lithium-ion Batteries	Total		
	Japan	Overseas	Subtotal					
Net sales								
Revenues from external customers	665,855	1,525,803	2,191,658	812,689	389,223	3,393,586	137,193	3,530,787
Transactions with other segments	11,022	32,102	43,124	136,784	73,176	253,093	(253,093)	–
Total	676,885	1,557,905	2,234,790	949,473	462,407	3,646,687	(115,892)	3,530,787
Segment profit	48,027	81,420	129,447	47,185	13,514	190,154	4,731	194,893
Segment assets	500,057	1,523,106	2,023,172	595,800	514,241	3,133,213	794,902	3,928,123
Other items								
Depreciation/amortization	23,384	40,101	63,486	13,269	26,800	103,562	45,192	148,762
Investments in entities accounted for using equity method	10,507	277,825	288,341	3,726	–	292,066	29,659	321,734
Increase in property, plant and equipment, and intangible assets	31,016	43,133	74,156	11,006	89,648	174,810	58,665	233,475

Notes 1. "Other" comprises a) businesses that are not included in any of the reportable segments, such as special batteries business, and b) segment profit adjustment.

2. Adjustments were as follows:

- (1) Adjustment for segment profit was USD \$(7,002) thousand, which included USD \$302 thousand elimination of intersegment transactions and USD \$(7,305) thousand of unallocated corporate expenses. The main component of these unallocated corporate expenses was general and administrative expenses not attributable to reportable segments.
- (2) Adjustment for segment assets was USD \$682,809 thousand, which included USD \$(956,737) thousand elimination of intersegment receivables and payables, and USD \$1,639,546 thousand of unallocated corporate assets. The main components of these unallocated corporate assets were working funds, long-term investment funds, assets allocated to administrative departments and some laboratory facilities.
- (3) Adjustment for depreciation/amortization was USD \$33,851 thousand, consisting of depreciation and amortization charges for corporate assets.
- (4) Adjustment for increase in property, plant and equipment, and intangible assets was USD \$55,282 thousand, consisting of the acquisition price of property, plant and equipment, and intangible assets classified as corporate assets.

3. The difference between the total segment profit in the table above and the operating profit of USD \$185,179 thousand on the consolidated statements of income represents amortization of goodwill and other intangible assets of USD \$(9,707) thousand. These goodwill and other intangible assets included identifiable assets acquired on the effective date of the business combination.



**[Information associated with reportable segments]****Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)****1. Information for each product and service**

A description is omitted because the product and service categories are the same as the reportable segment categories.

**2. Information for each region****(1) Net sales**

(Millions of yen)

Japan	Asia	Europe and North America	Other	Total
227,486	105,392	66,753	32,500	432,133

Note Net sales are based on the location of customers and are classified by country or region.

(Thousands of U.S. dollars)

Japan	Asia	Europe and North America	Other	Total
1,858,698	861,116	545,412	265,545	3,530,787

Note Net sales are based on the location of customers and are classified by country or region.

**(2) Property, plant and equipment**

(Millions of yen)

Japan	China	Asia (other)	Europe and North America	Other	Total
99,023	10,058	22,737	7,025	4,162	143,007

(Thousands of U.S. dollars)

Japan	China	Asia (other)	Europe and North America	Other	Total
809,078	82,180	185,775	57,398	34,006	1,168,453

**3. Information for each main customer**

Revenues from external customers are omitted because no specific customer accounted for 10% or more of the net sales in the consolidated statements of income.

Year ended March 31, 2021 (April 1, 2020 to March 31, 2021)

**1. Information for each product and service**

A description is omitted because the product and service categories are the same as the reportable segment categories.

**2. Information for each region****(1) Net sales**

(Millions of yen)

Japan	Asia	Europe and North America	Other	Total
205,430	95,893	57,394	27,792	386,511

Note Net sales are based on the location of customers and are classified by country or region.

**(2) Property, plant and equipment**

(Millions of yen)

Japan	China	Asia (other)	Europe and North America	Other	Total
88,791	14,702	20,757	6,554	3,724	134,530

**3. Information for each main customer**

Revenues from external customers are omitted because no specific customer accounted for 10% or more of the net sales in the consolidated statements of income.

## [Information about impairment losses of non-current assets for each reportable segment]

## Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

	(Millions of yen)					
	Automotive Batteries-Japan	Automotive Batteries-Overseas	Industrial Batteries and Power Supplies	Automotive Lithium-ion Batteries	Other	Total
Impairment losses	104	4,943	10	–	721	5,779

## Year ended March 31, 2021 (April 1, 2020 to March 31, 2021)

	(Millions of yen)					
	Automotive Batteries-Japan	Automotive Batteries-Overseas	Industrial Batteries and Power Supplies	Automotive Lithium-ion Batteries	Other	Total
Impairment losses	–	–	–	2,760	–	2,760

## Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

	(Thousands of U.S. dollars)					
	Automotive Batteries-Japan	Automotive Batteries-Overseas	Industrial Batteries and Power Supplies	Automotive Lithium-ion Batteries	Other	Total
Impairment losses	850	40,387	82	–	5,891	47,218

## [Amortization and unamortized balance of goodwill for each reportable segment]

## Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

	(Millions of yen)					
	Automotive Batteries-Japan	Automotive Batteries-Overseas	Industrial Batteries and Power Supplies	Automotive Lithium-ion Batteries	Other	Total
Amortization during the period	659	–	–	–	–	659
Balance at end of period	–	–	–	–	–	–

## Year ended March 31, 2021 (April 1, 2020 to March 31, 2021)

	(Millions of yen)					
	Automotive Batteries-Japan	Automotive Batteries-Overseas	Industrial Batteries and Power Supplies	Automotive Lithium-ion Batteries	Other	Total
Amortization during the period	1,319	16	–	–	–	1,335
Balance at end of period	659	–	–	–	–	659

## Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

	(Thousands of U.S. dollars)					
	Automotive Batteries-Japan	Automotive Batteries-Overseas	Industrial Batteries and Power Supplies	Automotive Lithium-ion Batteries	Other	Total
Amortization during the period	5,384	–	–	–	–	5,384
Balance at end of period	–	–	–	–	–	–

## [Information about gain on bargain purchase for each reportable segment]

## Year ended March 31, 2022 (April 1, 2021 to March 31, 2022)

In the Industrial Batteries and Power Supplies segment, a material gain on bargain purchase was recognized through the acquisition of all the shares of Sanken Densetsu Co., Ltd. (company name changed to GS Yuasa Infrastructure Systems Co., Ltd. on May 1, 2021) and the company's subsequent consolidation as a subsidiary. The total gain on bargain purchase recorded in the current fiscal year due to this transaction was ¥710 million (USD \$5,801 thousand).

## Year ended March 31, 2021 (April 1, 2020 to March 31, 2021)

Not applicable



## Related party(ies) information

### 1. Related party transactions

Not applicable

### 2. Notes on parent company and significant affiliates

Not applicable

## Per share information

Item	(Yen)		(U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Net assets per share	2,675.70	2,509.08	21.86
Basic earnings per share	105.23	141.91	0.86

Notes 1. Diluted earnings per share is not provided here, as there are no residual securities.

2. Calculation of basic earnings per share was as follows:

3. As stated in "Changes in accounting policies," the Company has adopted the Accounting Standard for Revenue Recognition (ASBJ Statement No. 29, March 31, 2020) and relevant revised ASBJ regulations and followed the transitional treatment stipulated in the proviso of Paragraph 84 of the Accounting Standard for Revenue Recognition. As a result, net assets per share for the current fiscal year decreased by ¥7.33 (USD \$0.06), and basic earnings per share increased by ¥0.68 (USD \$0.01).

Item	(Millions of yen)		(Thousands of U.S. dollars)
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Basic earnings per share			
Profit attributable to owners of parent	8,468	11,455	69,189
Amount not attributable to common stockholders	—	—	—
Profit attributable to common stockholders of parent	8,468	11,455	69,189
Average number of common stock shares during term (thousands of shares)	80,475	80,720	

Note The Company has introduced a performance-linked share-based payment system for its directors (excluding outside directors) and has set up an Officer Stock Grant Trust. The Company's own shares held by the trust are included in the number of treasury shares presented in the consolidated financial statements. In line with this, for the calculation of basic earnings per share, the number of the Company's own shares held by the trust was included in the number of treasury shares that is subtracted from the average number of common stock shares during the term. In addition, for the calculation of net assets per share, the number of the Company's own shares held by the trust was included in the number of treasury shares that is deducted from the total number of shares issued at the end of the period. The average number of treasury shares during the term deducted in the calculation of basic earnings per share was 73,948 shares in the previous fiscal year and 68,247 shares in the current fiscal year. For the calculation of net assets per share, the number of treasury shares deducted at the end of the period was 69,900 shares in the previous fiscal year and 67,200 shares in the current fiscal year.

## Significant subsequent events

### Business combination through acquisition

GS Yuasa International Ltd. (Headquarters: Minami-ku, Kyoto; hereinafter referred to as "GS Yuasa"), a consolidated subsidiary of the Company, entered into a basic agreement with joint venture partner Inci Holding A.Ş. (Headquarters: İzmir Province; hereinafter referred to as "IH") to acquire additional shares in Inci GS Yuasa Akü Sanayi ve Ticaret Anonim Şirketi (Headquarters: Manisa Province; hereinafter referred to as "IGYA"), an equity-method affiliate in the Republic of Turkey, and signed a stock purchase and sale agreement on April 28, 2022.

As a result, the Company acquired an additional 10% the issued shares of IGYA held by IH and made IGYA a consolidated subsidiary.

## 1. Outline of business combination

### (1) Name and business of acquired company

Name of acquired company: Inci GS Yuasa Akü Sanayi ve Ticaret Anonim Şirketi

Description of business: Manufacture and sale of lead-acid batteries for automobiles and forklifts

### (2) Reason for business combination

GS Yuasa and IH started the IGYA joint venture in 2015. A new plant manufacturing lead-acid batteries for automobiles started operations in January 2019, and manufacturing and sales were expanded mainly for high-performance lead-acid batteries targeting environmentally-friendly applications such as idling stop systems and fuel-efficient vehicles for which demand was expected to increase sharply in Europe.

By making IGYA a consolidated subsidiary, we aim to expand sales of lead-acid batteries for automobiles by positioning IGYA as a production and supply base for Europe and the Middle East. Along with this, in the forklift battery business centered on Europe, we plan to strengthen the business in the future by selling lithium-ion batteries in addition to existing lead-acid batteries.

### (3) Date of business combination

April 1, 2022 (Deemed acquisition date)

May 24, 2022 (Share acquisition date)

### (4) Legal structure of the business combination

Purchase of shares with cash

### (5) Name of company after the business combination

Unchanged.

### (6) Share of voting rights to be acquired

Share of voting rights owned immediately before the acquisition: .....50%

Share of voting rights acquired on the business combination date: .....10%

Share of voting rights owned after the acquisition: .....60%

### (7) Main grounds for determining the acquiring company

Cash acquisition of shares by the Company's consolidated subsidiary GS Yuasa.

## 2. Acquisition costs of the acquired company and consideration by class

Item	(Millions of yen)	(Thousands of U.S. dollars)
	Fair value of common stock shares of IGYA held before the business combination	5,993
Cash paid for additional acquisition	1,198	9,788
Acquisition costs	7,192	58,763

## 3. Difference between the acquisition costs of the acquired company and total amount of acquisition costs of each transaction

Gain on step acquisitions ¥1,010 million (USD \$8,252 thousand)

## 4. Goodwill to be recognized, reason for recognition, and amortization method and period

### 1) Goodwill to be recognized

¥4,121 million (USD \$33,671 thousand)

The goodwill to be recognized is calculated on a provisional basis as the distribution of acquisition costs has not been completed.

### 2) Reason for recognition

The goodwill is risen from a rational estimate of future excess earnings power that is expected from future business development.

### 3) Amortization method and period

Depreciated using the straight-line method over five years.

## Consolidated supplemental schedules

### [Schedule of bonds payable]

(Millions of yen)

Company name	Issue	Date of issue	Balance at beginning of period	Balance at end of period	Interest rate (%)	Secured/unsecured	Maturity
GS Yuasa Corporation	1st unsecured bonds	September 13, 2017	10,000	10,000	0.44	Unsecured	September 13, 2027
GS Yuasa Corporation	2nd unsecured bonds	December 10, 2018	10,000	10,000	0.20	Unsecured	December 8, 2023
Total	-	-	20,000	20,000	-	-	-

(Thousands of U.S. dollars)

Company name	Issue	Date of issue	Balance at beginning of period	Balance at end of period	Interest rate (%)	Secured/unsecured	Maturity
GS Yuasa Corporation	1st unsecured bonds	September 13, 2017	81,706	81,706	0.44	Unsecured	September 13, 2027
GS Yuasa Corporation	2nd unsecured bonds	December 10, 2018	81,706	81,706	0.20	Unsecured	December 8, 2023
Total	-	-	163,412	163,412	-	-	-

Note The redemption schedule for the five years following the consolidated fiscal year-end date is as follows.

(Millions of yen)

One year or less	One to two years	Two to three years	Three to four years	Four to five years
-	10,000	-	-	-

(Thousands of U.S. dollars)

One year or less	One to two years	Two to three years	Three to four years	Four to five years
-	81,706	-	-	-

### [Schedule of borrowings]

(Millions of yen)

Categories	Balance at beginning of period	Balance at end of period	Average interest rate(%)	Repayment deadline
Short-term borrowings	6,112	15,459	1.75	-
Commercial papers	-	2,000	(0.00)	-
Current portion of long-term borrowings	7,327	3,322	2.39	-
Current portion of lease liabilities	1,768	1,701	2.13	-
Long-term borrowings (Excluding current portion)	31,980	41,696	0.81	2023 to 2028
Lease liabilities (Excluding current portion)	6,041	6,100	2.14	2023 to 2042
Total	53,230	70,280	-	-

(Thousands of U.S. dollars)

Categories	Balance at beginning of period	Balance at end of period
Short-term borrowings	49,939	126,309
Commercial papers	-	16,341
Current portion of long-term borrowings	59,866	27,143
Current portion of lease liabilities	14,446	13,898
Long-term borrowings (Excluding current portion)	261,296	340,681
Lease liabilities (Excluding current portion)	49,359	49,841
Total	434,921	574,230

Notes 1. The "average interest rate" is the weighted average interest rate on the balance at the end of the period.

2. The aggregate annual maturities of long-term borrowings and lease liabilities (excluding the current portion) within five years of the consolidated fiscal year-end date are as follows.

(Millions of yen)

	One to two years	Two to three years	Three to four years	Four to five years
Long-term borrowings	11,556	9,697	8,098	9,111
Lease liabilities	745	680	785	471

(Thousands of U.S. dollars)

	One to two years	Two to three years	Three to four years	Four to five years
Long-term borrowings	94,419	79,230	66,166	74,442
Lease liabilities	6,087	5,556	6,414	3,848

### [Schedule of asset retirement obligations]

Since the amount of asset retirement obligations at the beginning and end of the current fiscal year was 1/100 or less of the total liabilities and net assets at the beginning and end of the current fiscal year, the description is omitted pursuant to Article 92-2 of the Regulations for Consolidated Financial Statements.





## Independent auditor's report

To the Board of Directors of GS Yuasa Corporation:

### Opinion

We have audited the accompanying consolidated financial statements of GS Yuasa Corporation ("the Company") and its consolidated subsidiaries (collectively referred to as "the Group"), which comprise the consolidated balance sheet as at March 31, 2022, the consolidated statements of income, comprehensive income, changes in net assets and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at March 31, 2022, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

### Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Japan, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

#### Appropriateness of the amount of impairment loss recognized on long-lived assets of Tianjin GS Battery Co., Ltd.

The key audit matter	How the matter was addressed in our audit
As described in Note "Consolidated statement of income *7. Impairment losses" to the consolidated financial statements, the Company recognized in the consolidated statement of income an impairment loss of ¥4,943 million on long-lived assets held by its consolidated subsidiary, Tianjin GS Battery Co., Ltd. (hereinafter, the "Subsidiary"), under the Automotive Batteries-Overseas segment.	In order to assess the appropriateness of the amount of impairment loss recognized on long-lived assets of the Subsidiary, we requested the component auditor of the Subsidiary to perform an audit. Then we evaluated the report of the component auditor as to whether sufficient and appropriate audit evidence was obtained from the following procedures, among others:

The Subsidiary prepares its financial statements in accordance with International Financial Reporting Standards (IFRS). Whenever there is an impairment indicator for a cash-generating unit (CGU) to which long-lived assets belong, the CGU is tested for impairment. In the impairment testing, when the recoverable amount of the CGU is less than the carrying amount, the carrying amount is reduced to the recoverable amount, and the resulting decrease in the carrying amount is recognized as an impairment loss. The recoverable amount is the higher of either the value in use or the fair value less cost of disposal.

The Subsidiary is expected to recognize recurring operating losses because its performance has deteriorated due to the intensification of competition and such conditions would constitute an impairment indicator. Therefore, the impairment test was performed using the fair value less cost of disposal as the recoverable amount.

In estimating the fair value, a high degree of expertise regarding the valuation is required to select and apply the applicable valuation technique and measure the fair value.

We, therefore, determined that our assessment of the appropriateness of the amount of impairment loss recognized on long-lived assets of the Subsidiary was the most significant in our audit of the consolidated financial statements for this fiscal year, and accordingly, a key audit matter.

#### (1) Internal control testing

Test of the design and operating effectiveness of certain of the Subsidiary's internal controls relevant to the impairment loss on long-lived assets

#### (2) Assessment of the reasonableness of the estimated fair value

Assessment of the following regarding estimate of fair value less cost of disposal by involving valuation specialist within the network firms of the component auditor:

- Assessment of the competence, capabilities, and objectivity of the Subsidiary's expert based on their experience and qualifications, membership status in professional organizations and interests in the Subsidiary
- Assessment of the appropriateness of the valuation techniques applied by the Subsidiary's expert and of the fair value measurement by inquiring of the expert, inspecting the valuation results prepared by the expert and comparing them with external data

### Other Information

The other information comprises the information included in the GS Yuasa Report 2022, but does not include the consolidated financial statements, and our auditor's reports thereon. Management is responsible for the preparation and presentation of the other information. Corporate auditors and the board of corporate auditors are responsible for overseeing the directors' performance of their duties with regard to the design, implementation and maintenance of the reporting process for the other information.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

### Responsibilities of Management and Corporate Auditors and the Board of Corporate Auditors for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern in accordance with accounting principles generally accepted in Japan and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Corporate auditors and the board of corporate auditors are responsible for overseeing the directors' performance of their duties with regard to the design, implementation and maintenance of the Group's financial reporting process.

### Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in Japan will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of our audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, while the objective of the audit is not to express an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate whether the presentation and disclosures in the consolidated financial statements are in accordance with accounting standards generally accepted in Japan, the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with corporate auditors and the board of corporate auditors regarding, among other matters, the planned scope and timing of the audit, significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide corporate auditors and the board of corporate auditors with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with corporate auditors and the board of corporate auditors, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

### Convenience Translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2022 are presented solely for convenience. Our audit also included the translation of yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note "Basis of preparation of consolidated financial statements" to the consolidated financial statements.

### Interest required to be disclosed by the Certified Public Accountants Act of Japan

We do not have any interest in the Group which is required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.

Motohiro Tanaka  
Designated Engagement Partner  
Certified Public Accountant

Tetsuo Yamada  
Designated Engagement Partner  
Certified Public Accountant

KPMG AZSA LLC  
Kyoto Office, Japan  
September 20, 2022

### Notes to the Reader of Independent Auditor's Report:

This is a copy of the Independent Auditor's Report and the original copies are kept separately by the Company and KPMG AZSA LLC.



# Corporate Information (As of March 31, 2022)

## Corporate Information

<b>Corporate Name</b>	<b>GS Yuasa Corporation</b> Head Office 1, Inobanba-cho, Nishinosho, Kisshoin, Minami-ku, Kyoto 601-8520, Japan Tel: +81-75-312-1211 Tokyo Office 1-7-13, Shiba-koen, Minato-ku, Tokyo 105-0011, Japan Tel: +81-3-5402-5800
<b>Business</b>	GS Yuasa Corporation devises and coordinates management strategy for all companies in its Group to maximize their corporate value.
<b>Establishment</b>	April 1, 2004
<b>Capital Stock</b>	¥33.0 billion
<b>Number of Employees</b>	Consolidated: 13,571

## Group companies

Japan	
GS Yuasa International Ltd.	GS Yuasa Lighting Service Co., Ltd.
GS Yuasa Battery Ltd.	GS Yuasa Socie Ltd.
GS Yuasa Energy Co., Ltd.	GS Yuasa Chemical Co., Ltd.
GS Yuasa Technology Ltd.	GS Yuasa Ibaraki Co., Ltd.
Lithium Energy Japan Ltd.	GS Yuasa Environmental Science Laboratory Co., Ltd.
Blue Energy Co., Ltd.	Yuasa Membrane Systems Co., Ltd.
GS Yuasa Infrastructure Systems Co., Ltd.	GS Yuasa Iwaki Co., Ltd.
GS Yuasa Fieldings Ltd.	GS Yuasa Moldings Co., Ltd.
Hokkaido GS Yuasa Service Co., Ltd.	GS Yuasa Azumino Co., Ltd.
GS Yuasa Innovation Co., Ltd.	
Overseas	
<b>USA</b> GS Yuasa Energy Solutions, Inc. GS Yuasa Lithium Power, Inc. Yuasa Battery, Inc.	<b>THAILAND</b> GS Yuasa Asia Technical Center Ltd. Yuasa Battery (Thailand) Pub. Co., Ltd. Siam GS Battery Co., Ltd. GS Yuasa Siam Industry Ltd. GS Yuasa Siam Sales Ltd.
<b>UK</b> GS Yuasa Battery Europe Ltd.	<b>MALAYSIA</b> GS Yuasa Battery Malaysia Sdn. Bhd.
<b>HUNGARY</b> GS Yuasa Hungary Ltd.	<b>VIETNAM</b> GS Battery Vietnam Co., Ltd.
<b>TURKEY</b> İnci GS Yuasa Akü Sanayi ve Ticaret Anonim Şirketi	<b>INDONESIA</b> PT. Yuasa Battery Indonesia PT. GS Battery PT. Trimitra Baterai Prakasa PT. Yuasa Industrial Battery Indonesia
<b>CHINA</b> Yuasa Battery (Guangdong) Co., Ltd. Yuasa Battery (Shunde) Co., Ltd. Tianjin GS Battery Co., Ltd. Tianjin Toho Lead Recycling Co., Ltd. GS Battery (China) Co., Ltd. Shanghai GS Toptiger Motive Power Co., Ltd.	<b>PAKISTAN</b> Atlas Battery Ltd.
<b>TAIWAN</b> Taiwan Yuasa Battery Co., Ltd. GS Battery Taiwan Co., Ltd.	<b>INDIA</b> Tata AutoComp GY Batteries Private Limited
	<b>AUSTRALIA</b> Century Yuasa Batteries Pty Ltd.

# External Evaluation

## Inclusion in ESG investment constituents

- MSCI (Morgan Stanley Capital International) Japan ESG Select Leaders Index\*1  
2022 CONSTITUENT MSCI JAPAN ESG SELECT LEADERS INDEX  
The Company's rating: **A**  
(seven ratings: AAA, AA, A, BBB, BB, B and CCC)  
(As of July 2022)
- MSCI Japan Empowering Women (WIN) Select Index  
2022 CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)
- FTSE4Good Index Series  
FTSE4Good FTSE Blossom Japan
- FTSE Blossom Japan Index\*2  
FTSE Blossom Japan Sector Relative Index
- S&P / JPX Carbon Efficient Index
- Selected as an FY2021 "Nadeshiko Brand" for the first time  
NADESHIKO BRAND 2022

## CSR & sustainability evaluations, etc.

Utilization of human resources	Environment	Corporate governance	Sociability
<b>AA</b>	<b>AAA</b>	<b>AA</b>	<b>AA</b>

(Five ratings: AAA, AA, A, B and C)  
(As of July 2022)

- EcoVadis Business Sustainability Ratings  
**Gold rank**  
(Four ranks: platinum, gold, silver, and bronze)  
(As of July 2022)

- DBJ (Development Bank of Japan) Employees' Health Management Rated  
**The highest rank**  
"particularly excellent in terms of initiatives for employees' health"(2018)  
DBJ健康格付 2018

- 2022 Certified Health & Productivity Management Outstanding Organizations Recognition Program  
Awarded for **six consecutive years**  
Certification of the Company and three Group companies  
健康経営優良法人 2022

- Kurumin Mark (Ministry of Health, Labour and Welfare)  
**Platinum Kurumin**  
"high-level initiatives undertaken to support childcare" (June 2020)

- CDP  
**A-**(A minus)  
(Eight ratings: A, A-, B, B-, C, C-, D, D-)  
(as of July 2022)

## IR evaluations

- Government Pension Investment Fund (GPIF)  
**Excellent Integrated Reports**  
Selected by GPIF's Asset Managers for two consecutive year
- Gomez IR Site Ranking 2021 (BroadBand Security, Inc.)  
Outstanding Company: **Silver Prize** for two consecutive years (December 2021)
- FY2021 All Japanese Listed Companies' Website Ranking (Nikko Investor Relations Co., Ltd.)  
Overall ranking: **AAA Website for first time** (December 2021)
- The 2021 Internet IR Award (Daiwa Investor Relations Co., Ltd.)  
**Commendation Award** for two consecutive years (December 2021)

## Product Evaluations

- Presented by Minister of Education, Culture, Sports, Science and Technology  
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
- Toyota Motor Corporation  
**Technology & Development Award**\*4  
Lithium-ion battery for hybrid vehicles "EHW4S"

\*1 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.

\*2 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 FTSE4Good and FTSE Blossom Japan criteria, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series and FTSE Blossom Japan Index. Created by the global index provider FTSE Russell, the FTSE4Good Index Series and FTSE Blossom Japan Index are designed to measure the performance of companies and Japanese companies demonstrating strong Environmental, Social, and Governance (ESG) practices. The FTSE4Good and FTSE Blossom Japan indices are used by a wide variety of market participants to create and assess responsible investment funds and other products.

\*3 Received by GS Yuasa Technology Ltd.

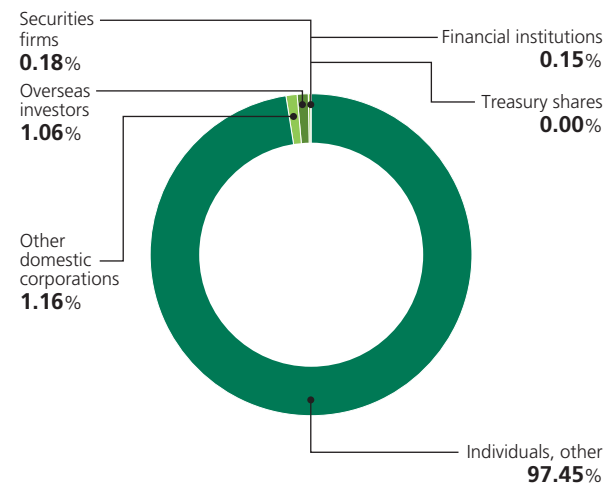
\*4 Received jointly by GS Yuasa International Ltd. and Blue Energy Co., Ltd.

# Stock and Investor Information (As of March 31, 2022)

## Stock Information

Fiscal Year-End	March 31
Number of Shares Authorized	280,000,000
Number of Shares Issued	80,599,442
Shares per Trading Unit	100
Number of Shareholders	35,288
Transfer Agent	Sumitomo Mitsui Trust Bank, Limited
Listed Securities Exchange	Tokyo Stock Exchange Prime Market
Method of Public Notice	Notification is given electronically on the Company's website. However, if a public announcement cannot be made electronically, it will be placed in the Nihon Keizai Shimbun newspaper.

## Shareholdings by Type of Shareholder

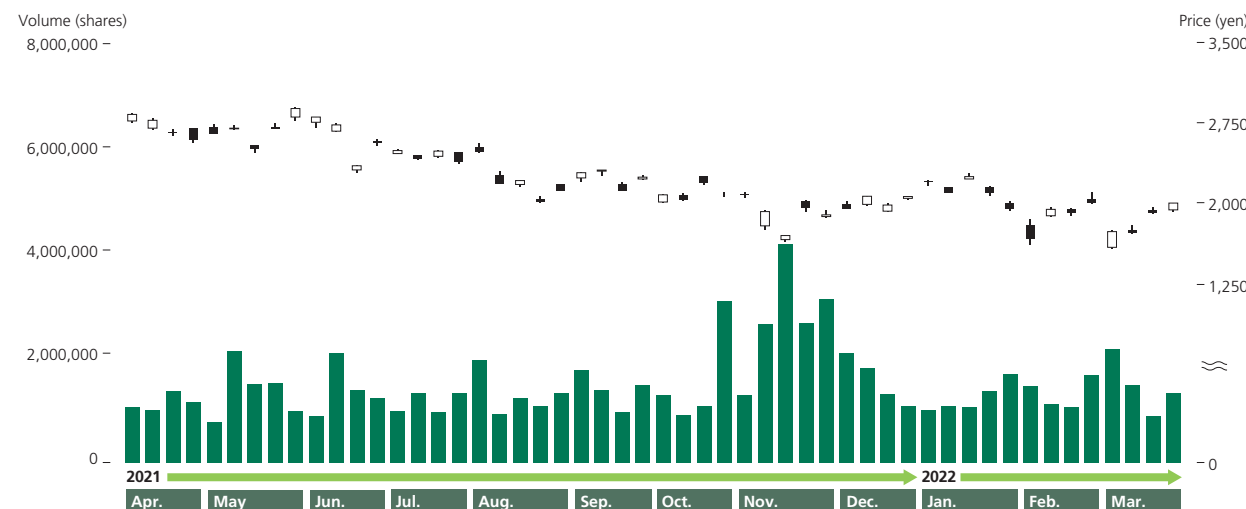


## Principal Shareholders

Name	Number of Shares Held (thousands)	As a Proportion of Shares Issued* (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	14,621	18.16
Custody Bank of Japan, Ltd. (Trust Account)	5,633	7.00
Meiji Yasuda Life Insurance Company	2,800	3.48
Toyota Motor Corporation	2,236	2.78
MUFG Bank, Ltd.	1,865	2.32
Nippon Life Insurance Company	1,789	2.22
BNYMSANV RE BNYMSANVDUBRE BNYMGO UCITS ETF SOLUTIONS PLC	1,567	1.95
The Bank of Kyoto, Ltd.	1,548	1.92
Sumitomo Mitsui Trust Bank, Limited	1,470	1.83
Sumitomo Mitsui Banking Corporation	1,421	1.77

\* Investment ratios are calculated based on the number of shares (80,507,232) after deducting treasury shares from the number of shares issued.

## Stock Price and Trading Volume



# Overall Picture of Information Disclosure

## Business and financial information

Booklet PDF Website

### GS Yuasa Report

This report is the Group's integrated reporting tool. It summarizes initiatives for value creation, business models, and medium- to long-term strategies, primarily for investors.

- ▶ <https://www.gs-yuasa.com/en/ir/annualreport.php>
- ▶ <https://www.gs-yuasa.com/en/ir/online-annualreport.php>

## Sustainability and ESG information

QR codes for PDF version and Digital Edition (HTML) of the GS Yuasa Report.

Website

### Investor Relations

On this website, we disseminate a variety of information, including financial materials and financial highlights, in a timely manner.

- ▶ <https://www.gs-yuasa.com/en/ir/>

PDF

### Investors' Guide

The guide is a brief and easy-to-understand summary of basic information including an overview of the Company, financial results, and ESG information.

- ▶ <https://www.gs-yuasa.com/en/ir/investorsguide.php>

PDF

### Financial Report for Shareholders

Japanese only

We issue quarterly for shareholders a report of business performance information, details of initiatives, and other information.

- ▶ <https://www.gs-yuasa.com/jp/ir/report.php>

PDF

### Factbook

This material is a collection of financial information and quantitative data on changes in business performance for the previous 11 fiscal years.

- ▶ <https://www.gs-yuasa.com/en/ir/factbook.php>

Website

### Special Website for Individual Investors

Japanese only

Explanations of GS Yuasa's business activities and strengths presented in the form of six questions.

- ▶ <https://www.gs-yuasa.com/jp/ir/individual/>

Website

### Sustainability

An explanation of our policy and initiatives relating to sustainability.

- ▶ <https://www.gs-yuasa.com/en/csr/>

PDF

### Sustainability Report

A summary of sustainability-related initiatives in PDF format.

- ▶ <https://www.gs-yuasa.com/en/csr/archive.php>

Website

### Response to Climate Change (TCFD)

Disclosure of climate-related information in accordance with the TCFD framework.

- ▶ <https://www.gs-yuasa.com/en/ir/tcfd.php>

Website

### Diversity & Inclusion

Japanese only

A summary of GS Yuasa's diversity-related initiatives.

- ▶ <https://www.gs-yuasa.com/jp/diversity/>

## Other Information on the Website

### Solving societal issues with batteries.

A presentation of the Company's business activities that contribute to the creation of a sustainable society.

- ▶ <https://www.gs-yuasa.com/en/company/solvingsocietalissues/>

## 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.