

# Current Status of GS Yuasa Corporation



GS Yuasa Corporation  
(TSE : 6674)

## Corporate Profile

1. Corporate Profile .....	4
2. Business Areas .....	5
3. Global Expansion .....	6

## Vision 2035 (Long-Term Vision)

1. History of GS Yuasa .....	8
2. Business Environment surrounding GS Yuasa .....	9
3. Vision 2035 .....	10
- “Innovation and Growth” of Our Business .....	11
- Point of “Innovation and Growth” .....	12
- Road Map of Research and Development .....	13
- Growth Story of Our Business .....	14
4. GY 2050 Carbon Neutrality Target .....	15

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

1. Sixth Mid-Term Management Plan Policies and Issues .....	17
2. Management Target .....	18
3. Segment Results and Strategies .....	19
- Changes of FY2022 Results and Sixth Mid-Term Management Plan Target .....	20
- Automotive Batteries (Japan) .....	21
- Automotive Batteries (Overseas) .....	22
- Automotive Batteries .....	23
- Industrial Batteries and Power Supplies .....	24
- Automotive Lithium-ion Batteries .....	27
- Specialized Batteries and Others .....	31
4. Financial Policy, Capital Allocation .....	32
- Public Offerings and Parallel Third-Party Allotment .....	33
- Background and Rationale of Financing / Use of Proceeds .....	34
5. Medium-term Environmental Target (FY2023-2025) .....	35

# Corporate Profile

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# 1. Corporate Profile

- **Corporate name** GS Yuasa Corporation  
\*Holding company
- **Established** April 1, 2004  
\*Merger between Japan Storage Battery Co., Ltd. (established in 1917)  
and Yuasa Corporation (established in 1918)
- **Head office** 1, Inobanba-cho, Nishinosho, Kisshoin, Minami-ku, Kyoto
- **Capital** 52.8 billion yen
- **Consolidated net sales (FY2023)** 517.7 billion yen
- **Number of employees** Group Consolidated 14,317 (As of March 31, 2023)
- **Listed-Financial Instrument Exchange** Tokyo stock exchange (TSE : 6674)



President and Representative Director  
Osamu Murao



**The Detroit electric vehicle**  
imported from the USA by Genzo Shimadzu,  
founder of Japan Storage Battery Co., Ltd.

# 2. Business Areas

We have **five** business segments, starting with automotive.

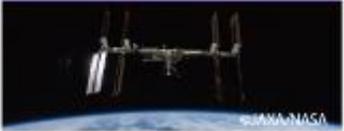
### Automotive lithium-ion batteries



- Lithium-ion batteries for eco-friendly vehicles
- Industrial lithium-ion batteries (manufacturing only)



### Specialized Batteries and Others



- International Space Station (ISS), satellites, aircrafts, specialized batteries for submarines etc.



### Automotive batteries (Japan)



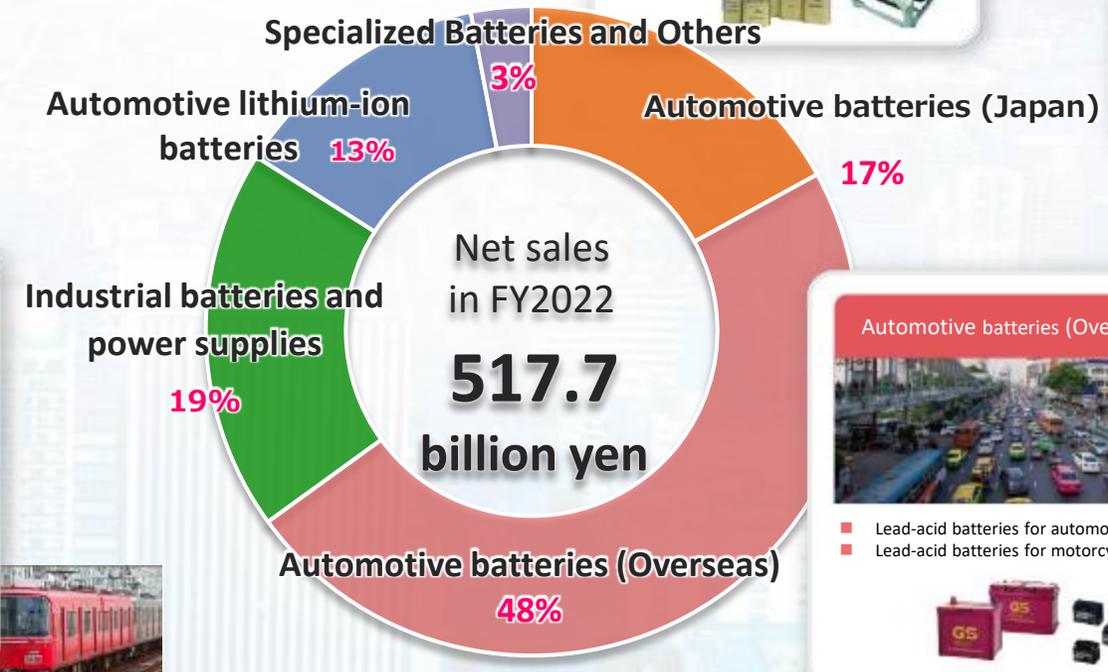
- Lead-acid batteries for automobiles
- Lead-acid batteries for motorcycles



### Industrial batteries and power supplies



- Batteries and power supplies for electric backup of public infrastructure facilities, lithium-ion batteries
- Lead-acid batteries for forklift
- Lighting equipment



### Automotive batteries (Overseas)

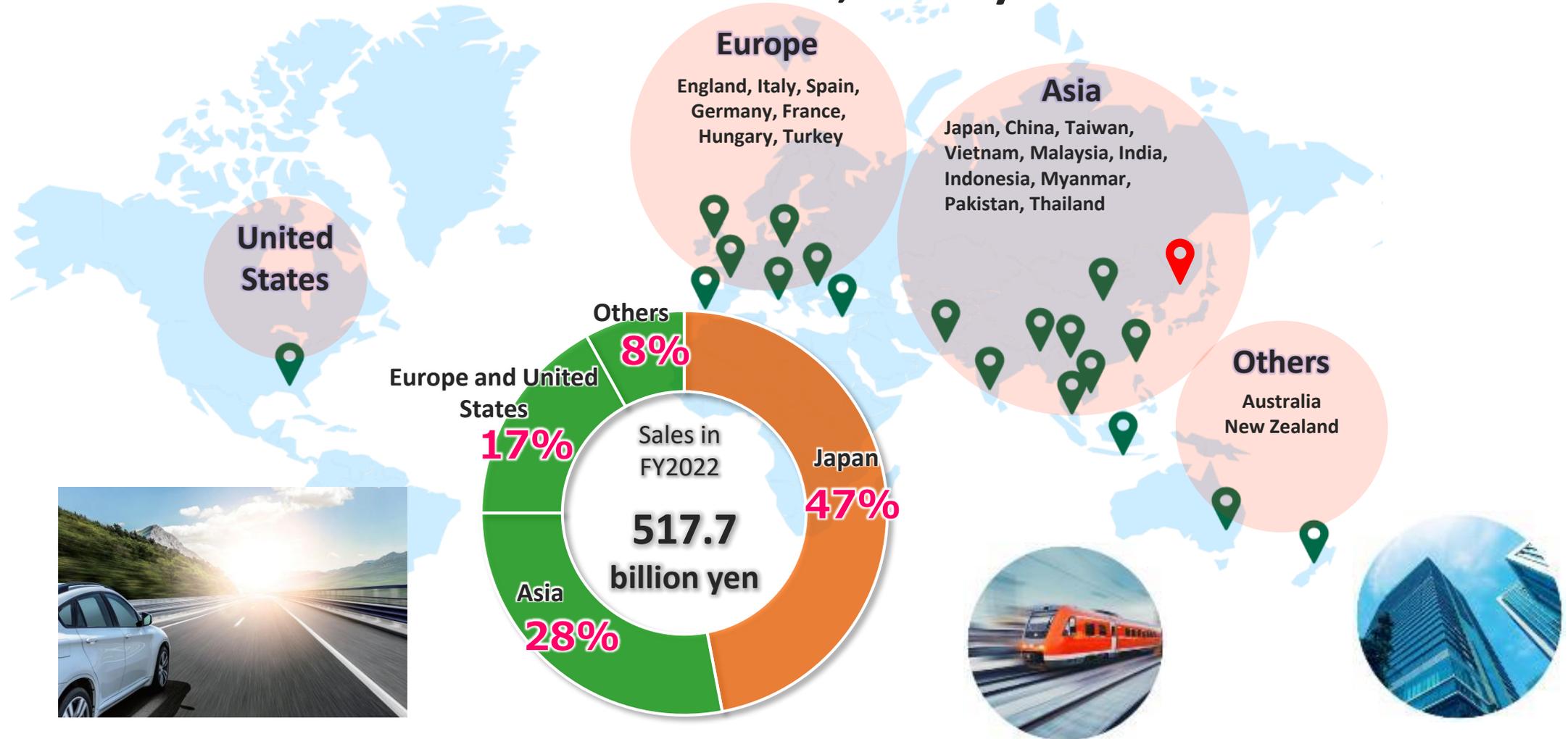


- Lead-acid batteries for automobiles
- Lead-acid batteries for motorcycles



# 3. Global Expansion

We have business in **19** countries **37** sites, mainly in Southeast Asia.



(as of March 2023)

## **Vision 2035** (Long-Term Vision)

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# 1. History of GS Yuasa



## GS (Japan Storage Battery)



**Inventor's spirit**  
contribute to society  
by developing high  
quality products

Founder of Japan  
Storage Battery Co., Ltd.  
**Genzo Shimadzu**



**Contributing to the steady supply of electric power and the development of public infrastructure**

1900s  
Manufacture of large-capacity storage batteries for auxiliary power



**Challenging spirit**  
develop new  
businesses ahead of  
time

Founder of Yuasa Storage  
Battery Co., Ltd.  
**Shichizaemon Yuasa**

## YUASA (Yuasa Corporation)



**Contributing to the development of the automotive industry**

1910s  
Manufacture of automotive lead-acid batteries



**Ushering in a new EV era**

2000s  
Supply of lithium-ion batteries for the i-MiEV, the world's first mass-produced EV



Honda "FIT HYBRID"



Mitsubishi Motors "Eclipse Cross PHEV"

2010s  
Supply of lithium-ion batteries for PHEVs to Mitsubishi Motors Corporation

**Contributing to electrification of Japanese automakers**

2010s  
Supply of lithium-ion batteries for HEVs to Honda Motor Co., Ltd.



TOYOTA "Harrier"

2020s  
Supply of lithium-ion batteries for HEVs to Toyota Motor Corporation

**Contributing to the promotion of clean energy**



2000s  
Development of renewable energy storage systems



**Contributing to the realization of decarbonized society**

2020s  
Delivery of a world-class storage battery facility for wind power generation

**Supporting the development of aircrafts**



2000s  
Receiving orders of lithium-ion battery system for Boeing 787 in the U.S.

**Support safety from deep sea to outer space under harsh conditions**



2010s  
Installation of lithium-ion batteries on the International Space Station



2010s  
Mass production of Japan's first lithium-ion batteries for submarines

**Toward the next 100 years**

2004  
**Corporate Merger**

## 2. Business Environment surrounding GS Yuasa

### Environment surrounding GS Yuasa

#### Mobility

- Acceleration of electrification toward zero emissions
- Advancing levels of self-driving cars
- Acceleration of shift from ownership to use (e.g., car sharing)

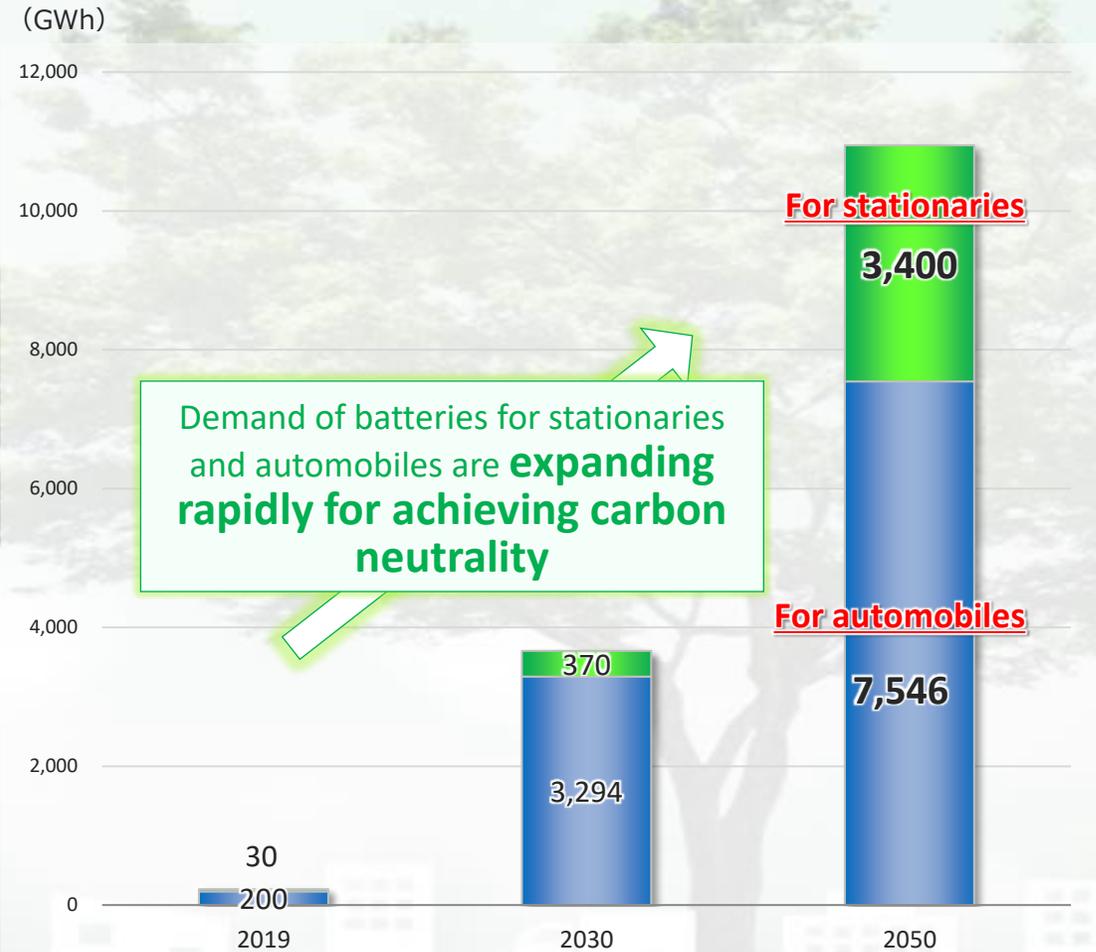
#### Public Infrastructure

- As the introduction of renewable energy expands, the importance of storage batteries to control fluctuations and adjust supply and demand also expands. Demand for energy management is also expanding
  - Increasing importance of backup for electric power, information, and communication infrastructure, etc.

#### Specialized Batteries

- Expanding space utilization
- Expanding marine resource exploration

### Forecast of storage batteries installation (Global)



Source: Prepared by the Company based on data from IRENA Global Renewables outlook 2020 "Energy Transformation 2050"

# 3. Vision 2035

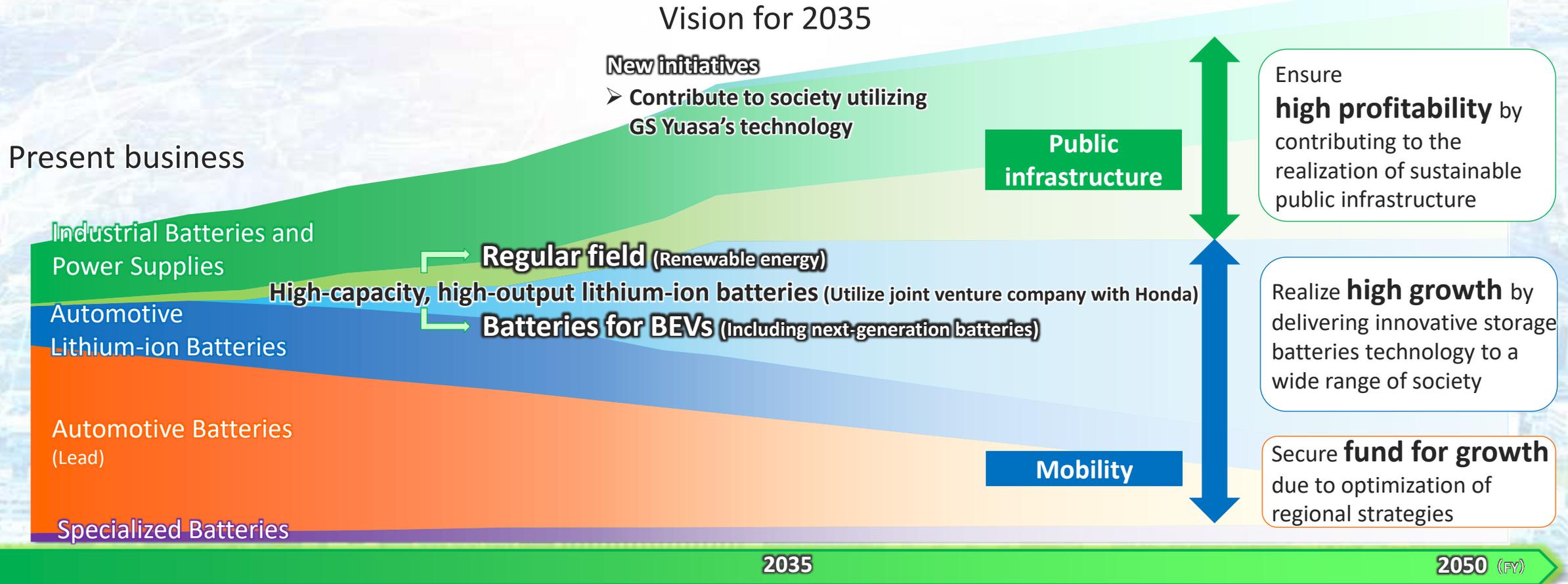
## Vision of GS Yuasa in 2035

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

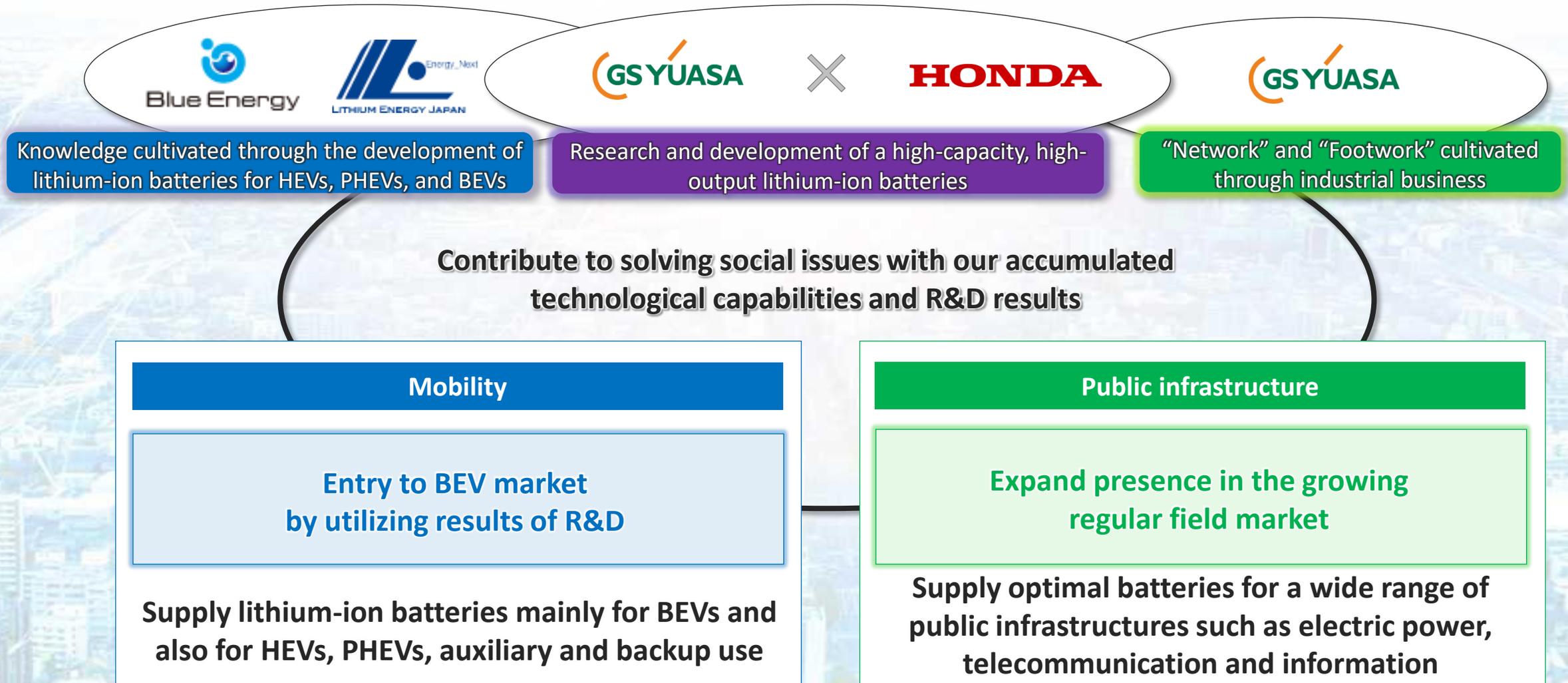


# 3. Toward Achieving Vision 2035 (“Innovation and Growth” of Our Business)

## Reform business structure adapting to changes in the market environment

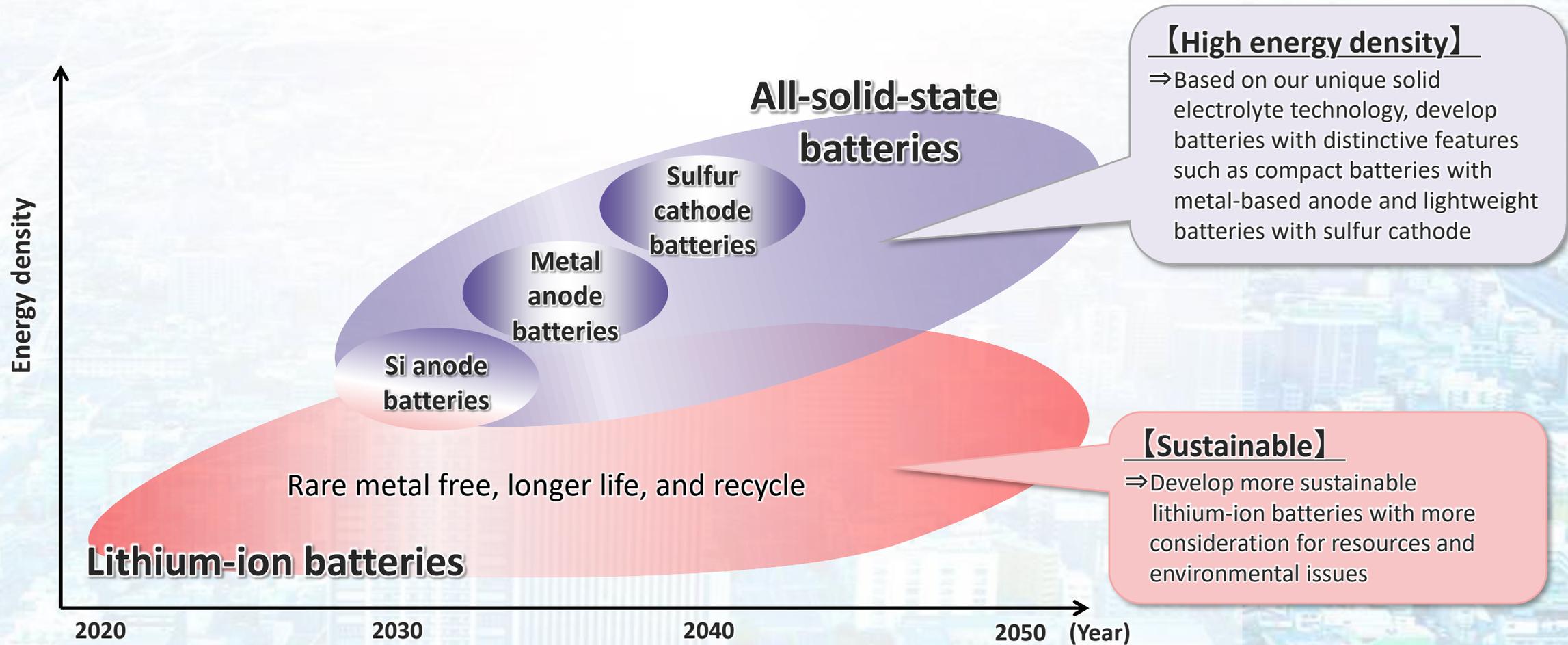


### 3. Toward Achieving Vision 2035 (Point of “Innovation of Growth”)

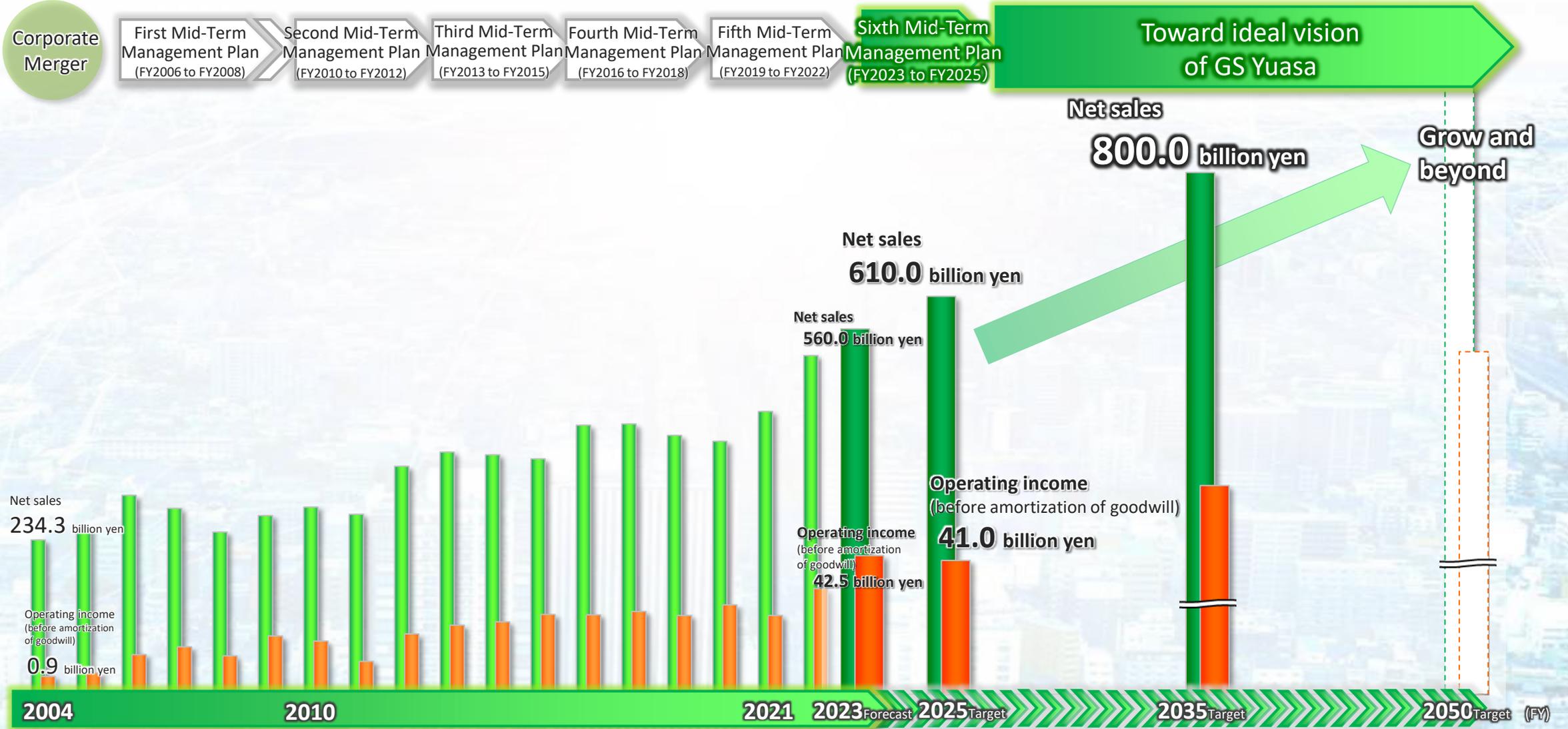


### 3. Toward Achieving Vision 2035 (Road map of Research and Development)

Contribute to the realization of carbon neutrality through research, development and commercialization of next-generation batteries



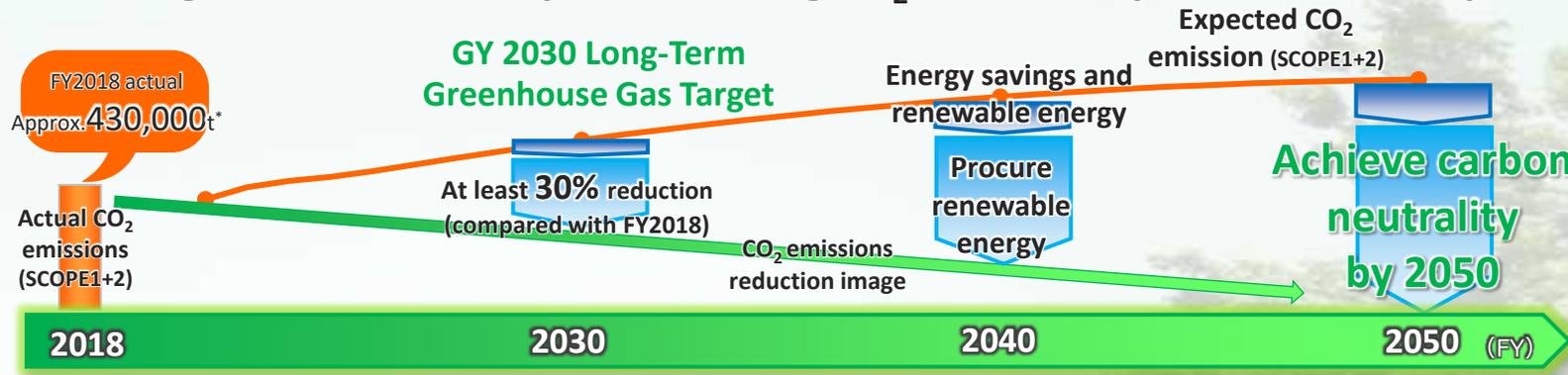
# 3. Toward Achieving Vision 2035 (Growth Story of Our Business)



Note: Scale of operating income graph is adjusted.

# 4. GY 2050 Carbon Neutrality Target

We are committed to people, society and the global environment through achieving Carbon Neutrality and reducing CO<sub>2</sub> emission by environmentally considered products



**Promote energy-saving measures**

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

**Promote of generating renewable energy**

- ① Maximize introduction in all offices and plants in Japan and overseas
- ② Introduce own products (ESS, etc.) and conduct a demonstration experiment

**Procure renewable energy**

- ① Purchase electric power that uses renewable energy
- ② Procure reports of renewable energy

**Contribute to reducing CO<sub>2</sub> emissions through expanding sales of environmentally considered products**

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

**Reduce further CO<sub>2</sub> emissions by products**

**Reducing CO<sub>2</sub> emissions by products**  
FY2021  
**At least 8 million t**

\* GS Yuasa Group's CO<sub>2</sub> emissions aggregation standards have been changed, and in FY2018, we are undergoing third-party verification again.  
 1) Recalculated using the 2018 emission coefficient obtained from the Ministry of the Environment and IEA  
 2) Adopted the control standard as the calculation standard, and consolidated subsidiaries that can be directly influenced are included in the scope of calculation.

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

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# 1. Sixth Mid-term Management Plan Policies and Issues

## Sixth Mid-Term Management Policy

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

### Implementation Measures

#### ① Development of batteries for BEVs

##### Measures

- Development of a high-capacity, high-output lithium-ion batteries by utilizing joint venture company with Honda
- Establishment of production and supply systems of batteries for BEVs to expand mobility and public infrastructure business

#### ② Reinforcement of earning capacity in existing business

##### Measures

- Thorough value-added creation and improvement in profitability
- Maximization of profits due to unparalleled superiority in Industrial Batteries and Power Supplies Business in Japan
- Transformation of regional strategy including review of business in China, maximization of profits by concentrating resources at main sites

#### ③ DX / new business

##### Measures

- DX promotion to enable business structure transformation
- Creation of new business that contribute to solving social issues

## 2. Management Targets

### Management Plan Period

Three years from April 2023 to March 2026

### Mid-Term Management Targets (targets for FY2025)

	Fifth Mid-Term Management Final Result (FY2022 Actual)	Sixth Mid-Term Management Target (FY2025 Target)	Change	[Reference] FY2023 Forecast
Net sales	517.7 billion yen	<b>610.0</b> billion yen	+17.8 %	560.0 billion yen
Operating income	32.1 billion yen	<b>41.0</b> billion yen	+27.7 %	42.5 billion yen
ROE (Return on equity)	6.5 %	<b>8 % or more</b>	+1.5 %	-
ROIC (Return on invested capital)	11.4 %	<b>10 % or more</b>	-	-
Total return ratio	27.9 %	<b>30 % or more</b>	+2.1 %	26.6 %
Domestic lead price quote	347,000 yen/t	<b>342,000</b> yen/t	-	381,000 yen/t
LME	2,105 US\$/t	<b>2,000</b> US\$/t	-	2,200 US\$/t
Exchange rate	136 yen/US\$	<b>140</b> yen/US\$	-	145 yen/US\$

Notes:1. ROE is based on net income before the amortization of goodwill, and ROIC is relative to operating income before the amortization of goodwill.

2. ROIC is calculated as operating income before amortization of goodwill, etc. ÷ invested capital (fixed assets (excluding goodwill, etc.) + working capital). Invested capital is the average of the beginning and end of the period.

# 3. Segment Results

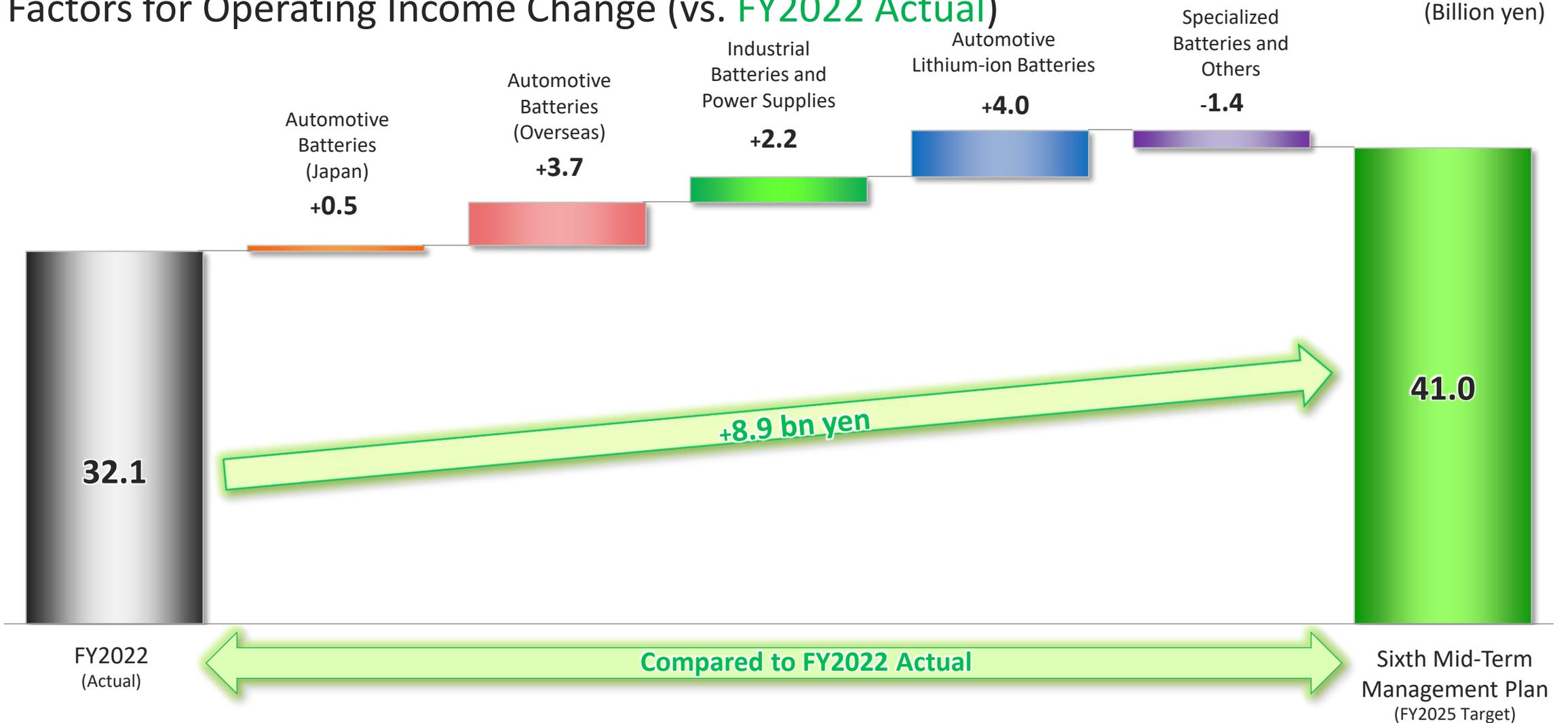
(Billion yen)

		FY2022 Actual		FY2025 Target		Change		[Reference] FY2023 Projected	
		Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: PP)	Net sales	Operating income (Op. income ratio: PP)
Automotive Batteries	Japan	87.8	6.5 (7.5)	100.0	7.0 (7.0)	+12.2	+0.5 (-0.5)	95.0	7.0 (7.4)
	Overseas	247.3	13.3 (5.4)	240.0	17.0 (7.1)	-7.3	+3.7 (+1.7)	247.0	17.5 (7.1)
Industrial Batteries and Power Supplies		99.2	8.8 (8.9)	140.0	11.0 (7.9)	+40.8	+2.2 (-1.0)	110.0	11.0 (10.0)
Automotive Lithium-ion Batteries		65.4	2.0 (3.0)	110.0	6.0 (5.5)	+44.6	+4.0 (+2.5)	88.0	4.5 (5.1)
Specialized Batteries and Others		18.0	1.4 (7.7)	20.0	0.0 (-)	+2.0	-1.4 (-)	20.0	2.5 (12.5)
Total		517.7	32.1 (6.2)	610.0	41.0 (6.7)	+92.3	+8.9 (+0.5)	560.0	42.5 (7.6)

Note: Operating income is operating income before amortization of goodwill and operating income ratio is operating income ratio before amortization of goodwill.

### 3. Segment Results (Changes of FY2022 Actual and Sixth Mid-Term Management Plan Target)

#### Factors for Operating Income Change (vs. FY2022 Actual)



Note: Operating income is operating income before amortization of goodwill.

# 3. Segment Results and Strategies (Automotive Batteries (Japan))

## Automotive Batteries (Japan)

### Business Policy

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

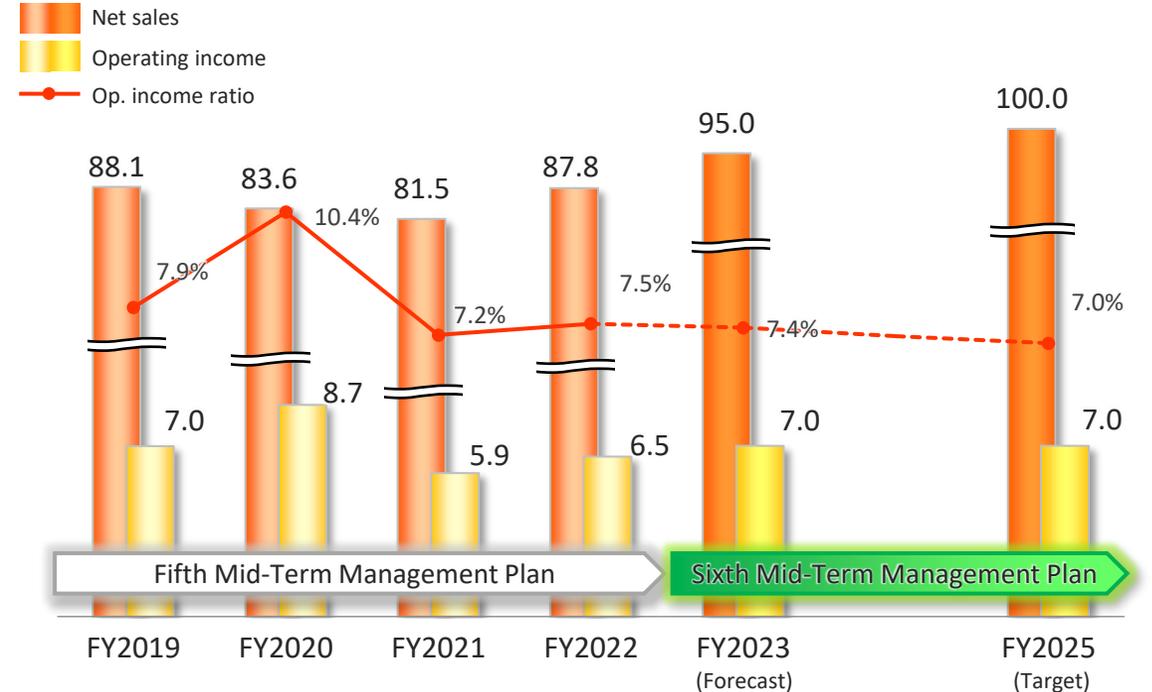
### Strategies and Important Tasks

- [Production]
  - Establish supply system that enables both rapid response to demand fluctuations and inventory reduction
- [Sales - For new automobiles]
  - Improve profit ratio due to optimal price revision such as raw material prices
- [Sales - For replacement]
  - Rebuilt marketing strategies and maintain high market share
  - Improve efficiency utilizing IoT and DX

### SWOT

<b>Strengths</b> <ul style="list-style-type: none"> <li>• Technology and quality cultivated by response to new automobiles</li> <li>• Brand (domestic No.1 share)</li> </ul>	<b>Weaknesses</b> <ul style="list-style-type: none"> <li>• Impact on production due to change in volume of new vehicles</li> </ul>
<b>Opportunities</b> <ul style="list-style-type: none"> <li>• Expand market of high value-added products</li> </ul>	<b>Threats</b> <ul style="list-style-type: none"> <li>• Cost competition due to commoditization</li> <li>• Rising costs due to response to environment</li> </ul>

### Net sales, Operating income and Op. ratio (Billion yen)



### Factors for Operating Income Change (Sixth Mid-Term Management Plan)

For new automobiles



For replacement



Note: Operating income is operating income before amortization of goodwill and operating income ratio is operating income ratio before amortization of goodwill.

# 3. Segment Results and Strategies (Automotive Batteries (Overseas))

## Automotive Batteries (Overseas)

### Business Policy

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

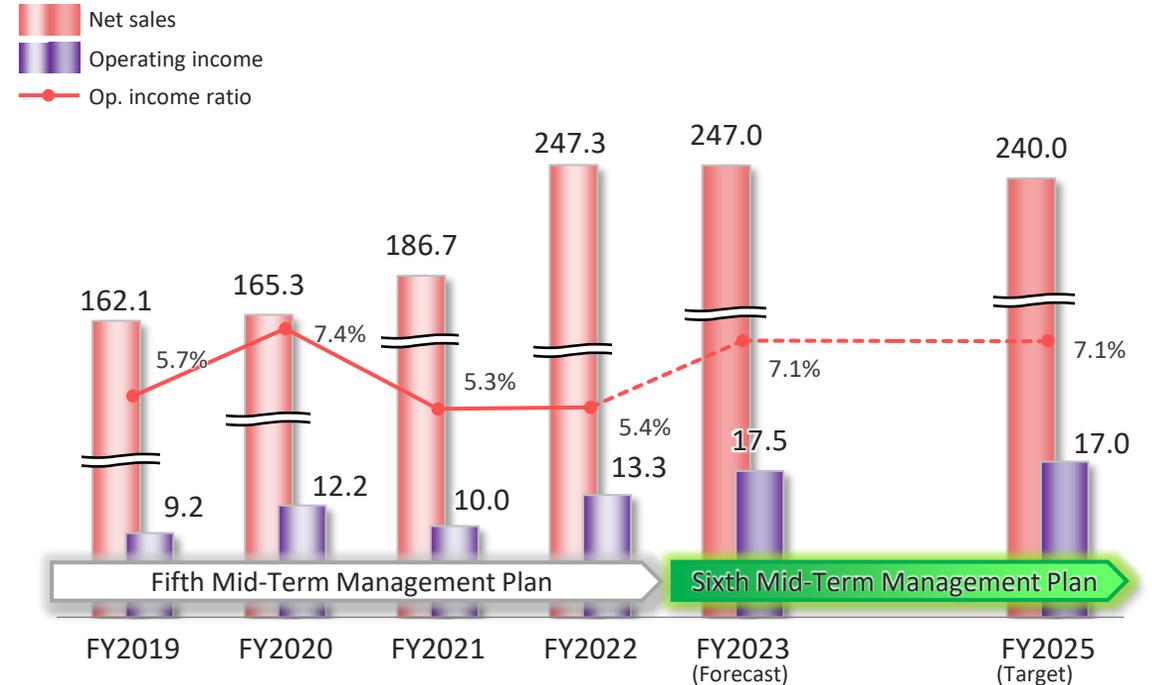
### Strategies and Important Tasks

- [Southeast Asia]
  - Maximize profit by strengthening sales in ASEAN area
- [China] • Promote fundamental review of business
- [Europe] • Supply steadily to Europe utilizing Turkish site and expand sales to the Middle and Near East or North Africa
- [Other (Australia)] • Strengthen production base and expand market share of replacement batteries

### SWOT

<b>Strengths</b> <ul style="list-style-type: none"> <li>• High technology and quality</li> <li>• No.1 share in ASEAN and brand</li> </ul>	<b>Weaknesses</b> <ul style="list-style-type: none"> <li>• Decentralization of resources</li> <li>• Sales ability in area without sites</li> </ul>
<b>Opportunities</b> <ul style="list-style-type: none"> <li>• Progress of motorization in emerging countries</li> <li>• Expansion of auxiliary batteries market</li> </ul>	<b>Threats</b> <ul style="list-style-type: none"> <li>• Decrease in starting batteries due to electrification</li> </ul>

### Net sales, Operating income and Op. ratio (Billion yen)



### Factors for Operating Income Change (Sixth Mid-Term Management Plan)



Note: Operating income is operating income before amortization of goodwill and operating income ratio is operating income ratio before amortization of goodwill.

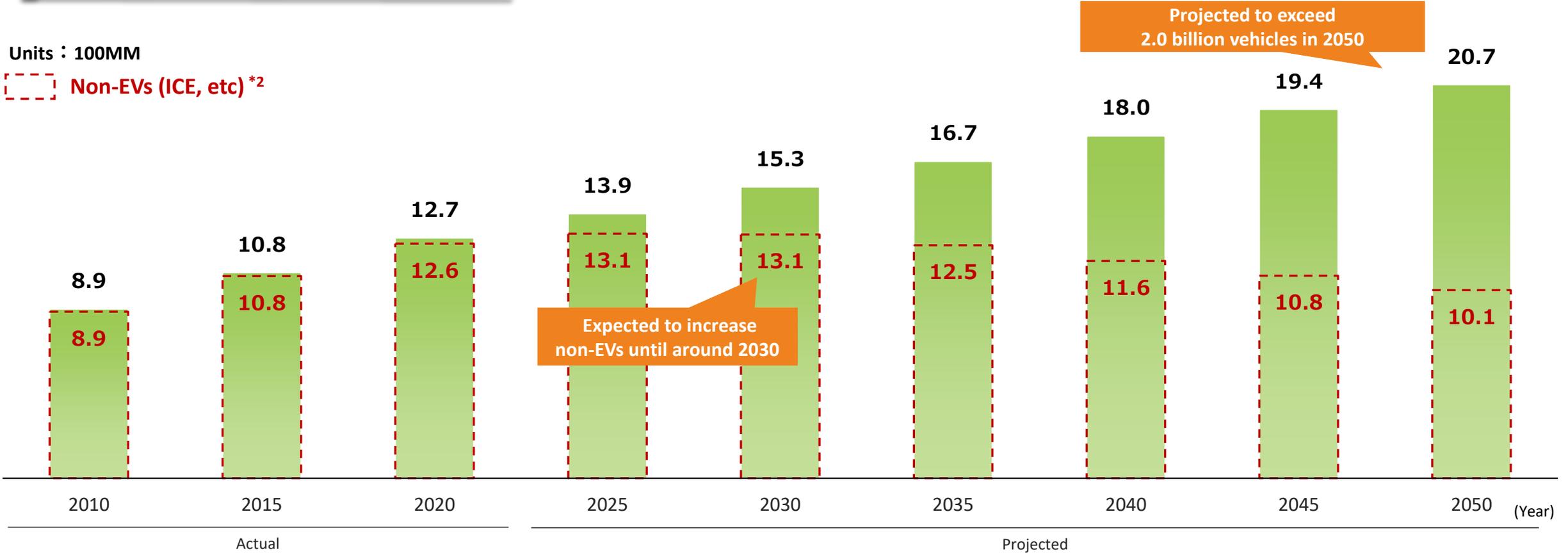
# 3. Segment Results and Strategies (Automotive Batteries)

## Strategies of Automotive Batteries

Lead-acid batteries business, supported by its superior positioning, will continue to generate stable cash flows primarily from replacement batteries

Units : 100MM

  Non-EVs (ICE, etc) \*2



**【Demand for lead-acid batteries】 Replacement use for ICE + Auxiliary use for EVs**

Notes : EVs in this chart includes HEVs, PHEVs and BEVs  
 Source: Prepared by us based on data from Wood Mackenzie "No. of Road Vehicles (Car Parc)" (as of 10<sup>th</sup> Oct, 2023)

# 3. Segment Results and Strategies (Industrial Batteries and Power Supplies)

## Industrial Batteries and Power Supplies

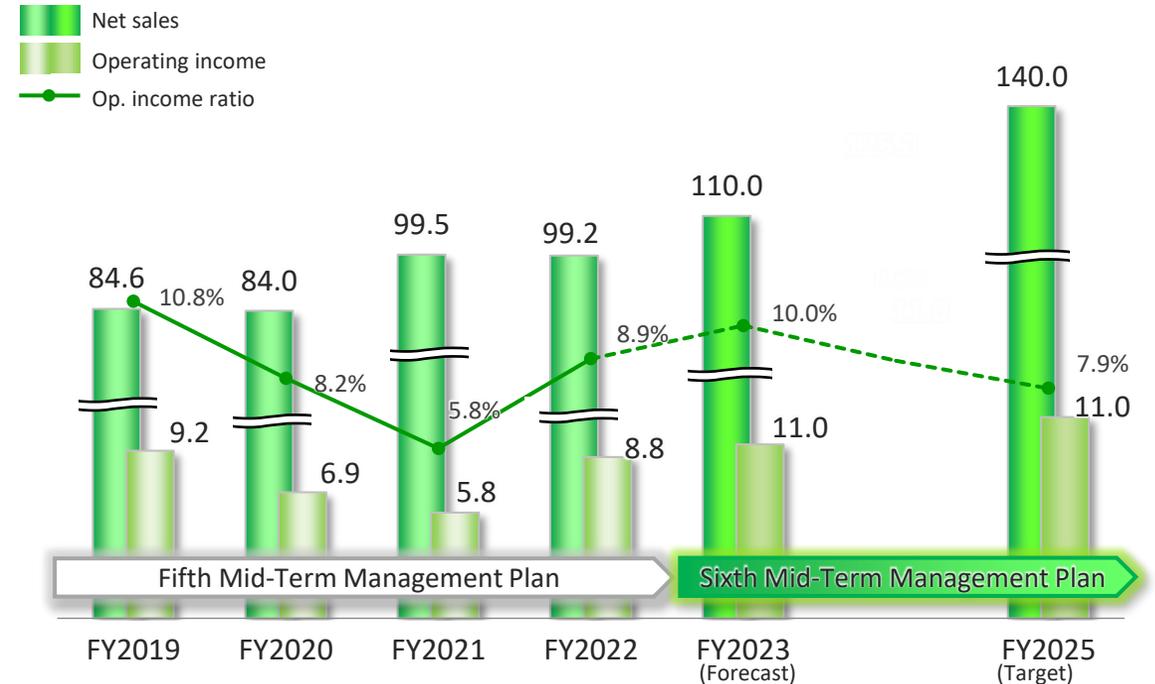
### Business Policy

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

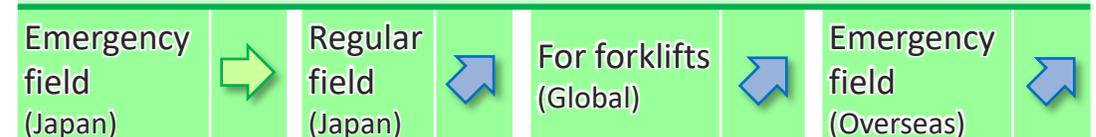
### Strategies and Important Tasks

- [Emergency field (Japan)]
  - Expand our remote monitoring services
  - Maximize profit by utilizing unparalleled superiority
- [Regular field (Japan)]
  - Setting the stage for a second pillar of business
- [Emergency field (Overseas)]
  - Strengthen competitive ability by expanding product lineup

### Net sales, Operating income and Op. ratio (Billion yen)



### Factors for Operating Income Change (Sixth Mid-Term Management Plan)



### SWOT

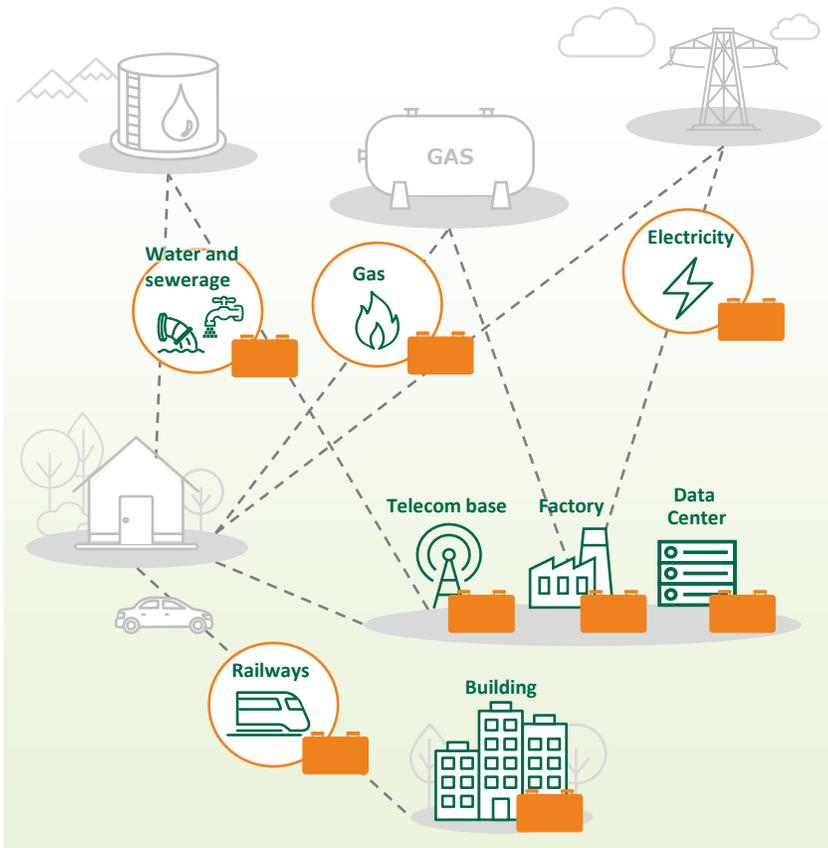
Strengths	• High presence in Japan	Weaknesses	• Low market share in overseas
Opportunities	• Expansion of renewable energy market	Threats	• Entering renewable energy market by global competitors

# 3. Segment Results and Strategies (Industrial Batteries and Power Supplies)

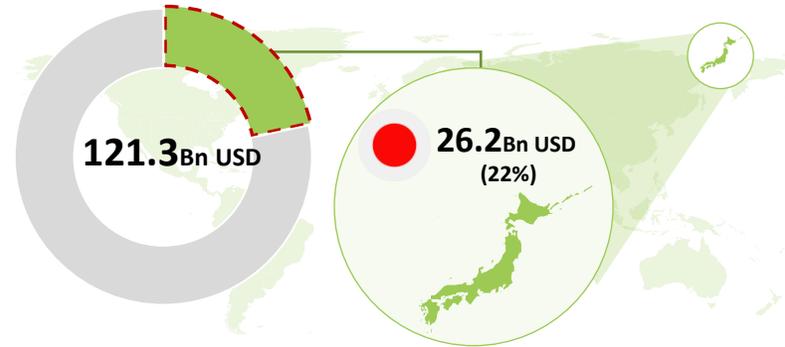
## Strategies of Emergency Field

Growing demand for backup batteries and power supplies backed by the national resilience policy and expansion of the data center service market driven by IoT

### Backup Batteries & Power Supplies Supporting Public Infrastructure



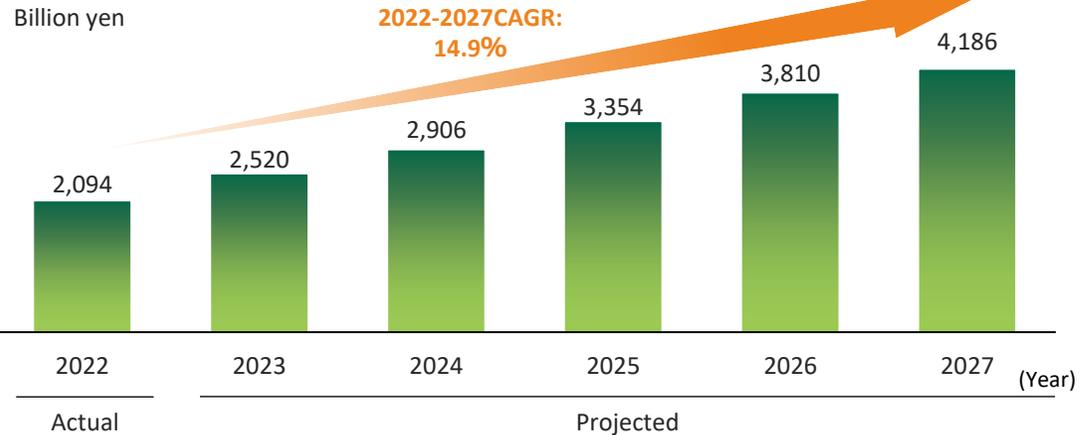
### Damage amount of natural disasters since 2019



Expected Demand Growth for backup business for National Resilience

Source: Prepared by us based on data from Cabinet Office "White Paper on Disaster Management 2020"

### Projected Growth of Domestic Data Center Service Market

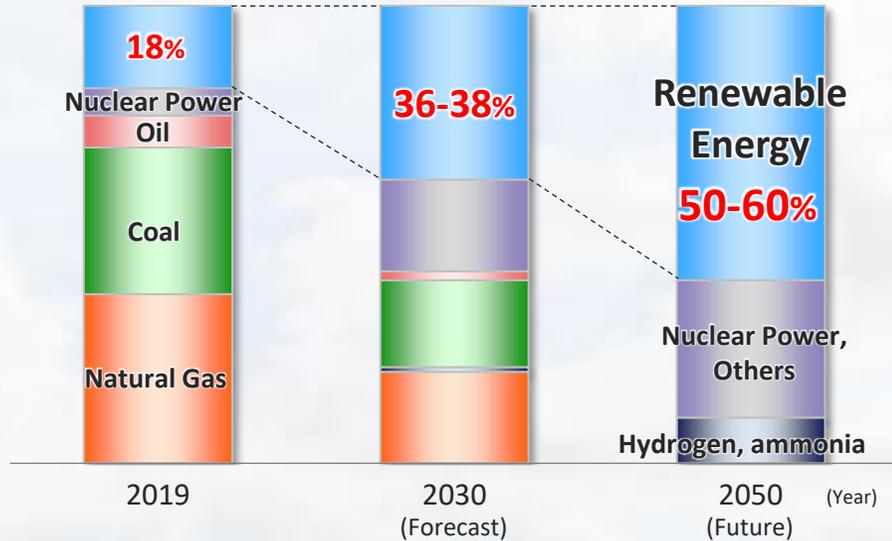


Source: Prepared by us based on data from IDC Japan "Domestic Data center service market forecast, 2023 - 2027"

# 3. Segment Results and Strategies (Industrial Batteries and Power Supplies)

## Strategies of Regular Field

### Power Supply Composition Forecast in Japan



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

### FY2023 Estimated Budget for Renewable Energies

- Project to accelerate the introduction of renewable energy through the introduction of grid storage batteries, etc. and rationalization of the power distribution network, etc. **Budget request 10.0 billion yen**
- Subsidy to promote demand-side-led introduction of solar power generation **16.5 billion yen**

### Growing importance of storage batteries

For achieving carbon neutrality in 2050, the importance of energy storage systems (ESS) is increasing.

Subsidies related to renewable energies are expanding on the demand-side, grid connection, etc.

Utilize expanding opportunities

Regular field

Increase capacity approx. **3 times**

(compared to FY2022)

(Capacity target approx. 300MWh)

### Sixth Mid-term Management Plan Period (FY2023-25)



Strengthen competitive ability and improve customer satisfaction

Promote development of PCS with large capacity

Container-integrated ESS (Energy Storage Systems)

Establish all-in-one business

Storage batteries + Remote monitoring service (STARELINK Service)

All-in-one business by using storage batteries + remote monitoring service + PCS with large capacity

# 3. Segment Results and Strategies (Automotive Lithium-ion Batteries)

## Automotive Lithium-ion Batteries

### Business Policy

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

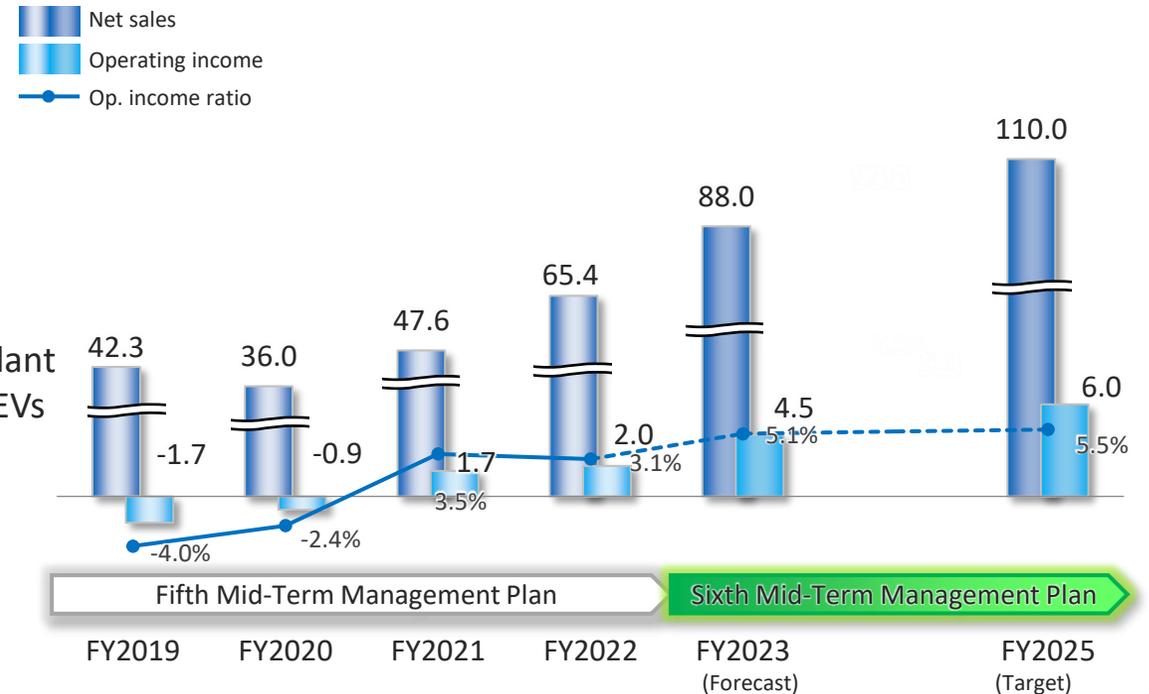
### Strategies and Important Tasks

- [HEV, PHEV]
  - Improve yield rate and plant utilization rate
  - Establish further increasing production system of Blue Energy No.2 plant
  - Strengthen development and production systems of batteries for PHEVs
- [BEV]
  - Strengthen development systems of batteries for BEVs
  - Prepare for entering market of batteries for BEVs
- [Auxiliary and backup use]
  - Development of products / preparation of production

### SWOT

<b>Strengths</b> <ul style="list-style-type: none"> <li>• Connection with automakers in Japan</li> <li>• High utilization rate of BEC and LEJ</li> </ul>	<b>Weaknesses</b> <ul style="list-style-type: none"> <li>• Corporate scale compared to manufacturers in China and Korea</li> <li>• Concentration of production sites in Japan</li> </ul>
<b>Opportunities</b> <ul style="list-style-type: none"> <li>• Expand demand for HEVs by automakers in Japan</li> <li>• Expand demand for BEV batteries</li> </ul>	<b>Threats</b> <ul style="list-style-type: none"> <li>• Concerns about stable procurement of raw materials</li> <li>• Legal regulation</li> <li>• High market share by foreign manufacturers</li> </ul>

### Net sales, Operating income and Op. ratio (Billion yen)



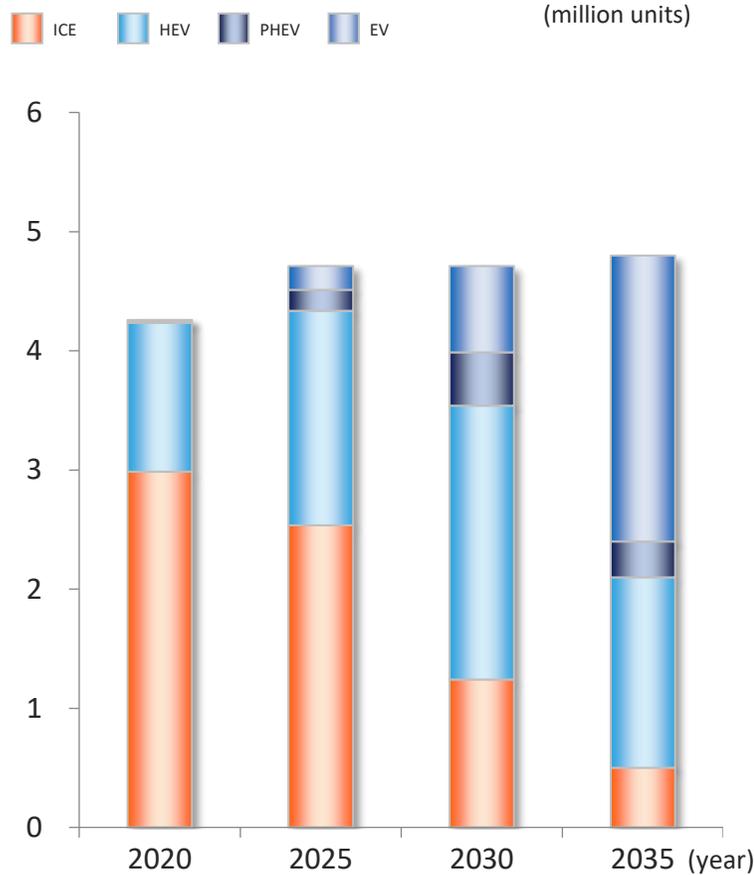
### Factors for Operating Income Change (Sixth Mid-Term Management Plan)

HEV, PHEV	➡	BEV, Auxiliary and backup use	—
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# 3. Segment Results and Strategies (Automotive Lithium-ion Batteries)

## Strategies of batteries for HEVs

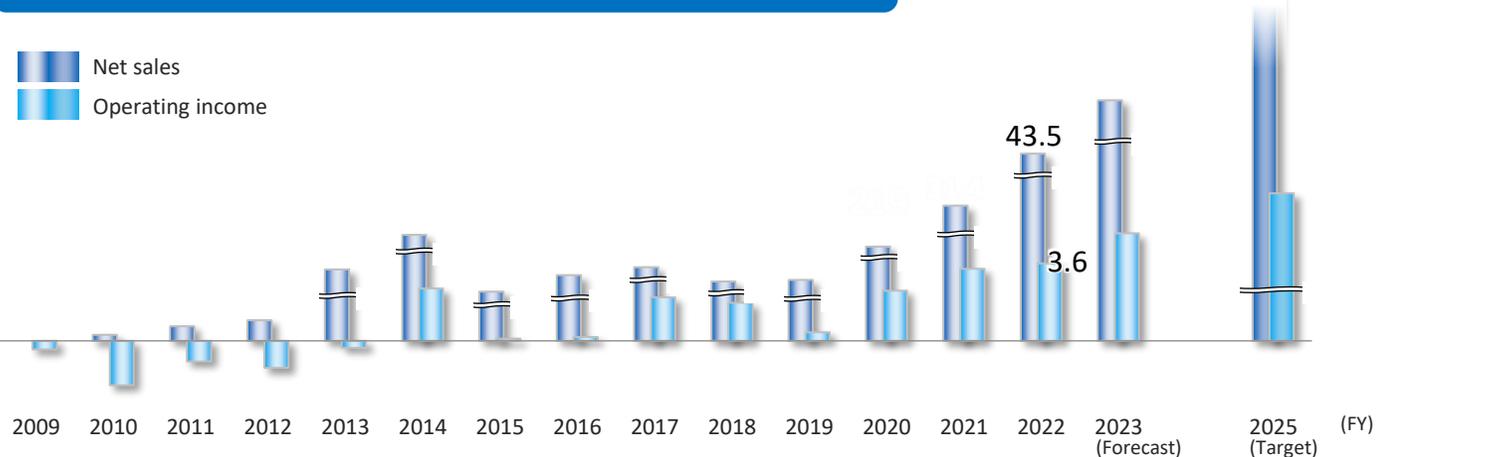
### Forecast of sales of new vehicles in Japan



Note: Our estimate by reference to documents of securities companies

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

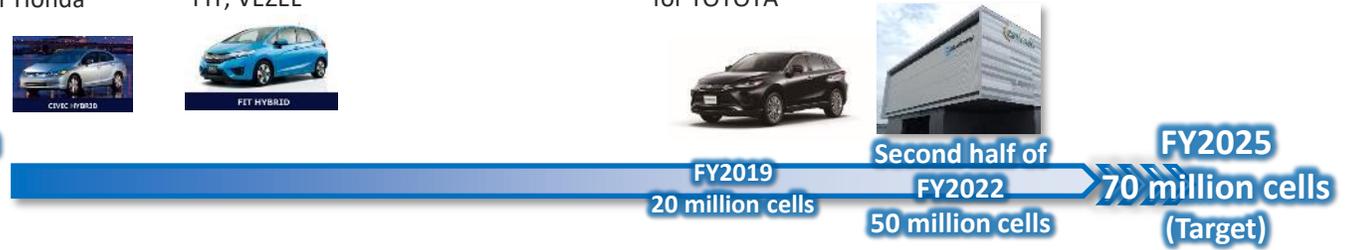
Net sales  
Operating income



FY2009 : Establishment of Blue Energy  
 FY2011 : Start of installation for Honda  
 FY2013 : Adoption to FIT, VEZEL  
 FY2020 : Start of installation for TOYOTA  
 FY2022 : Start of operation of second plant



Blue Energy  
Production capacity (Annual)



Growing demand of **LiB for HEVs**  
 Increase in HEVs until 2030s especially for Japanese automakers' vehicles

Expand production ability of BEC No.2 plant  
**70 million cells / year** during Sixth Mid-Term Management Plan period  
**Expand sales significantly**

### 3. Segment Results and Strategies (Automotive Lithium-ion Batteries)

Regarding the Signing of a Joint Venture Agreement to Establish New Company, Honda • GS Yuasa EV Battery R&D Co., Ltd.



#### Overview of new company

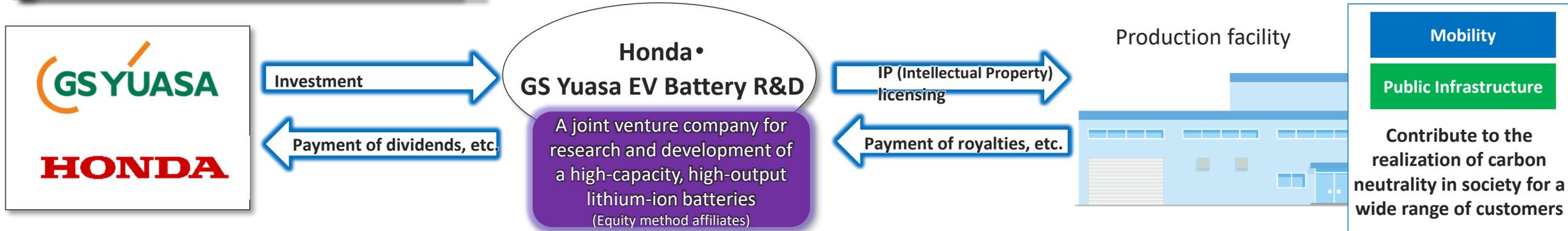
Name	Honda • GS Yuasa EV Battery R&D Co., Ltd.
Address	1, Inobanba-cho, Nishinosho, Kisshoin, Minami-ku, Kyoto
Capital	Amount of capital at establishment: 2 billion yen Amount of capital reserve at establishment: 2 billion yen
Investors	GS Yuasa International Ltd. 50%, Honda Motor Co., Ltd. 50%

#### A broad scope of collaborations

- Research and development of a high-capacity, high-output lithium-ion battery, primarily for EV use, and the required production methods
- Establishment and management of intellectual properties including patents related to the joint research and development
- Planning for products that utilize technologies resulting from the joint research and development, and planning for the required sales channels
- Designing of an efficient production operation including the supply chain for key raw materials

# 3. Segment Results and Strategies (Automotive Lithium-ion Batteries)

## Strategies of batteries for BEVs



## Utilization of subsidies

(Supply Security Plan for Storage Batteries)

<b>Business name</b>	GS Yuasa International Ltd., Honda Motor Co., Ltd., Blue Energy Co., Ltd.		
<b>Total amount</b>	Approx. 434.1 billion yen	<b>Amount of subsidy</b>	Approx. 158.7 billion yen (maximum)
<b>Production scale</b>	20GWh (in Japan)		
<b>Articles</b>	Automotive and stationary lithium-ion batteries		
<b>Contents</b>	Conduct R&D on high-capacity, high-output storage batteries and develop manufacturing technologies for mass production. Also, invest in mass production and start operation of production line in April 2027. (Full-scale mass production will begin in October 2027). The production line will be launched sequentially through 2030, and mass production will begin.		



Image of production capacity

## FY2023

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

- Establish a joint venture company for research and development (Honda • GS Yuasa EV Battery R&D)
- Research and development of a high-capacity, high-output lithium-ion batteries
- Prepare production for batteries for BEVs and ESS (Consider in Shiga Prefecture, etc.)

### <FY2027>

- Start operation from April
- Started full-scale mass production from October

### <-FY2030>

- Set up production lines sequentially

### <-FY2035>

- Aim to increase production ability to exceed 20GWh

# 3. Segment Results and Strategies (Specialized Batteries and Others)

## Specialized Batteries and Others

### Business Policy

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

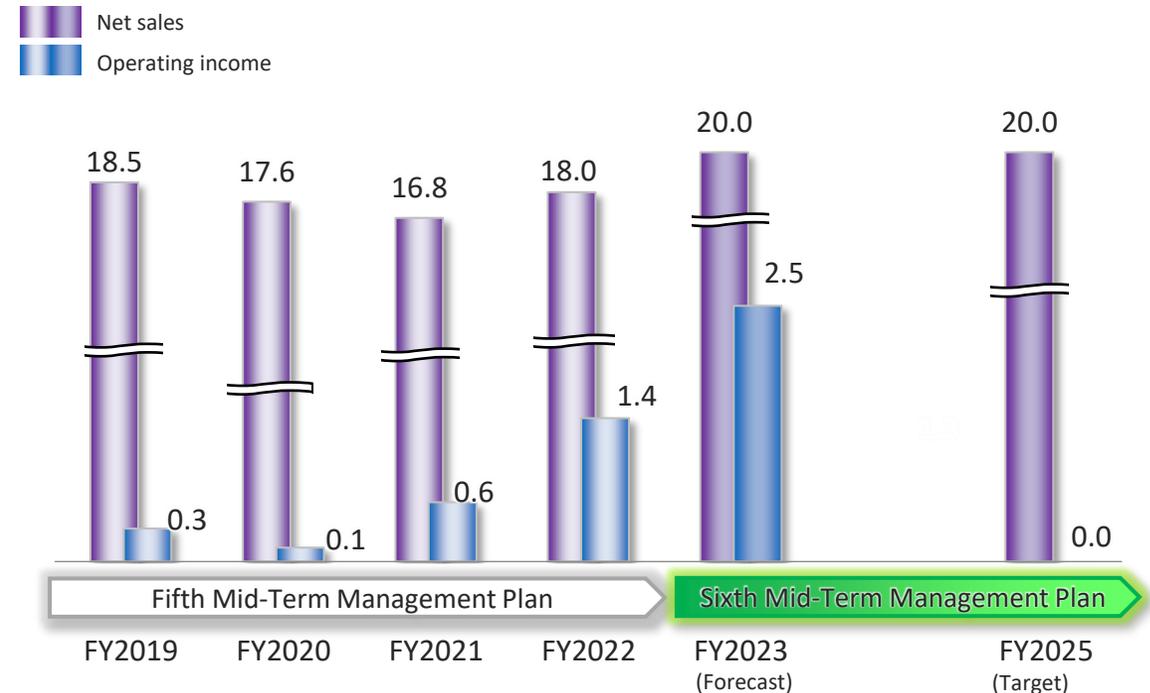
### Strategies and Important Tasks

- [Specialized batteries business]
  - Improve profitability due to efforts to strengthen the foundation of the defense industry
  - Development of next-generation LiB for submarines
  - Response to expand sales of LiB for aircrafts
  - Expand sales of LiB for satellites
- [Others]
  - Increase in environmental response costs
  - Increase in costs for DX and creation of new business

### SWOT

Strengths	<ul style="list-style-type: none"> <li>• The only one specialized batteries manufacturers in Japan</li> <li>• High technology and reliability</li> </ul>	Weaknesses	<ul style="list-style-type: none"> <li>• Delay in digitalization</li> <li>• Aging equipment</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>• Formulation of the Three Principles on Defense Equipment Transfer</li> <li>• Expansion of new market such as for space use</li> </ul>	Threats	<ul style="list-style-type: none"> <li>• Higher costs due to increased development difficulty</li> <li>• Increased social responsibility</li> </ul>

### Net sales, Operating income and Op. ratio (Billion yen)



### Factors for Operating Income Change (Sixth Mid-Term Management Plan)

LiB for submarines



LiB for aircrafts



# 4. Financial Policy and Capital Allocation

## Financial Policy

- Maintain a shareholders' equity ratio of 40% or more while investing in growth in mobility and public infrastructure
- Target of total return ratio before amortization of goodwill, etc. is 30% or more (achieve both investment in growth and stable dividends to shareholders)

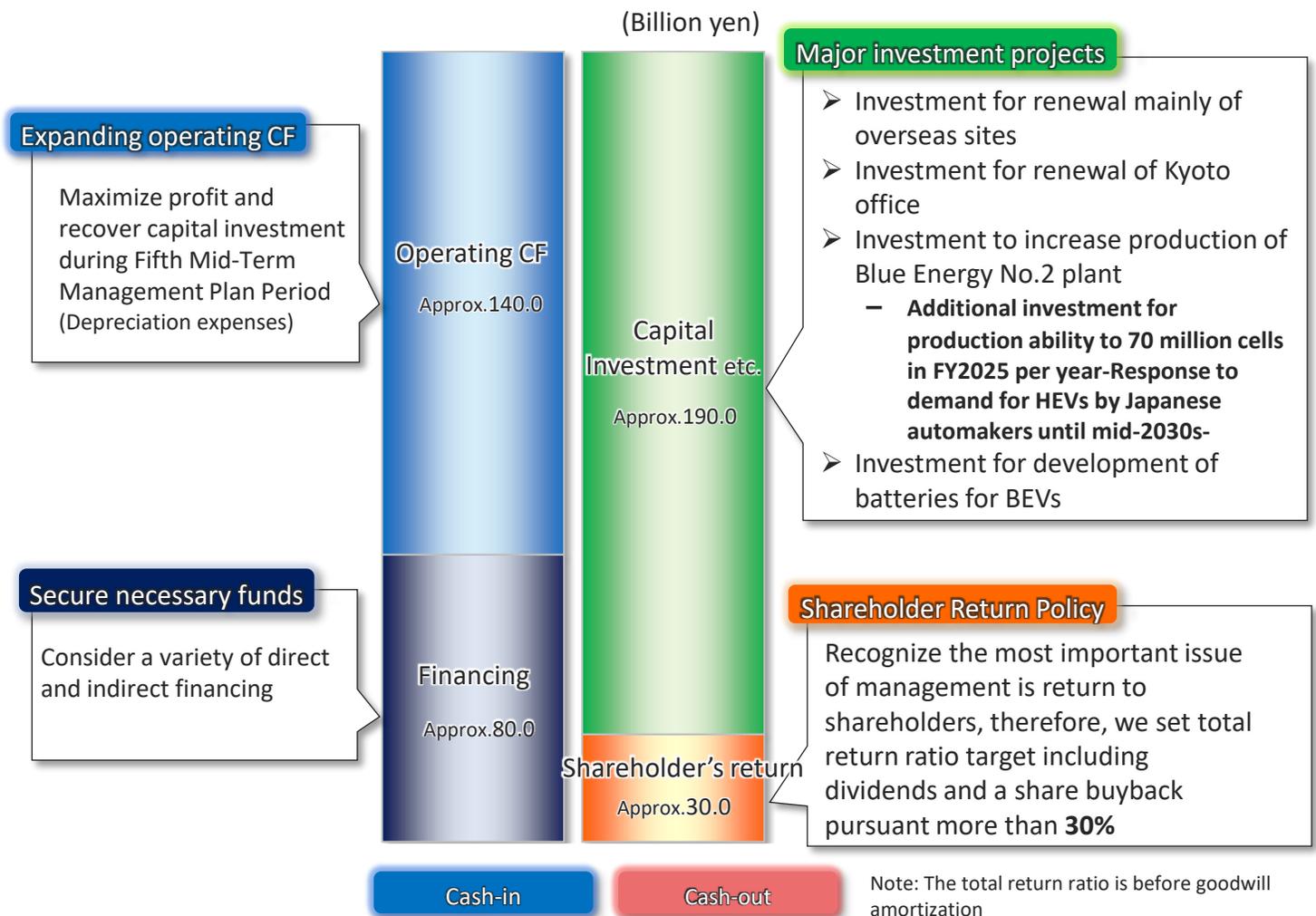
	FY2025 targets (Apr. 2025 – Mar. 2026)
Interest-bearing debt to operating cash flow ratio*1	Approx. 3 years
Total return ratio*2	30 % or more
Equity ratio	maintain 40 % or more

\*1 Interest-bearing debts (including lease obligations) / operating cash flow

\*2 The total return ratio for FY2025 is before goodwill amortization

	Sixth Mid-Term Management Plan 3-year total
Operating cash flow	¥140.0 bn
Investing cash flow	-¥190.0 bn
Free cash flow	-¥50.0 bn

## Capital Allocation (FY2023-2025)



# 4. Financial Policy and Capital Allocation (Public Offerings and Parallel Third-Party Allotment)



Number of outstanding shares	80,599,442 shares  100,446,442 shares (+19,847,000 shares)
Procurement funds	Approx. <b>39.6</b> Billion Yen

## Overview of Parallel Third-Party Allotment

Allottee / Number of shares to be allotted
<b>Honda Motor Co., Ltd. / 2,497,700 shares</b>

Through the collaboration with Honda, build a solid supply chain of LiBs for BEVs in Japan

Contribute to broader use of BEVs in Japan and aim to enhance enterprise value

## Collaborations with Honda

HEVs Area	<ul style="list-style-type: none"> <li>Start of installation for Honda from FY 2011. Expand sales to other Japanese OEM Result : Approx. <b>2.7 million units</b> (as of October 31<sup>st</sup>, 2023)</li> <li>Production capacity (BEC) : Second half of FY2022 <b>50 million cells/year</b>  FY2025 <b>70 million cells/year</b></li> </ul>
BEVs Area	<ul style="list-style-type: none"> <li>FY2023 : “<b>Honda • GS Yuasa EV Battery R&amp;D Co., Ltd.</b>” for the purpose of R&amp;D of high-capacity, high-output LiBs, started the business from August</li> <li>FY2027 : Planning to start operation of production line</li> <li>Production Capacity : FY2030 <b>20GWh/year</b> (GS Yuasa, Honda, BEC)</li> </ul>

# 4. Financial Policy and Capital Allocation (Background and Rationale of Financing / Use of Proceeds)



Allocating proceeds to strengthen balance sheet for further growth opportunities, as well as for capital expenditure and R&D investment in BEVs market expanding rapidly according to changes in the external environment and for capital expenditure in HEVs market, mid- to long-term growth drivers



**Capital Expenditure in LiBs for BEVs**

Target: BEC

**30.0 billion yen**



**R&D investment in LiBs <sup>\*1</sup> for BEVs and Next-gen Batteries**

Targets: Honda · GS Yuasa EV Battery R&D and GS Yuasa

**8.0 billion yen**



**Capital Expenditure in LiBs for HEVs**

Target: BEC

**Allocating the remaining**

Notes

1. Also used for ESS use

# 5. Medium-term Environmental Target (FY2023-2025)

Accelerate the reduction of environmental impact from our business activities and **expand our contribution to the circular economy**

**Reduction of CO<sub>2</sub> emissions** **15% or more** (compared with FY2018)

- Implementation of energy conservation measures through energy visualization
- In-house consumption of renewable energies through the introduction of solar power generation equipment
- Replacement of old equipment with energy-saving equipment



Solar power generation facility of Ritto office

**Reducing water use**

**15% or more**  
(compared with FY2018)

**Percentage of environmentally considered products in total sales**

**45% or more**

**Increasing usage rate of recycled lead**

**70% or more**

Although this document has been prepared with information believed to be correct, GS Yuasa Corporation does not guarantee the accuracy or the completeness of such information. Also, the information herein contains forward-looking statements regarding the Company's plans, outlooks, strategies and results for the future. All the forward-looking statements are based on judgments derived from information available to the Company at the time of release. Certain risks and uncertainties could cause the Company's actual results to differ materially from any projections presented herein.



## Reference

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## External ratings of Sustainability activities

### Sustainability evaluations

( As of September 30, 2023 )

	ESG rating by MSCI (U.S.) <sup>*1</sup>	ESG rating by FTSE (English) <sup>*2</sup>	CSR assessment by Toyo Keizai Inc. <sup>*3</sup>				CDP (English) assessments <sup>*4</sup>
			HR utilization	Environment	Corporate governance	Sociality	
2023	BBB	3.8	AAA	AAA	AA	AAA	A-
2022	BBB	3.6	AA	AAA	AA	AA	A-
2021	A	3.6	AAA	AAA	AA	AA	B
2020	A	3.4	AA	AAA	AA	AA	B
2019	A	3.2	AA	AA	AA	AA	B

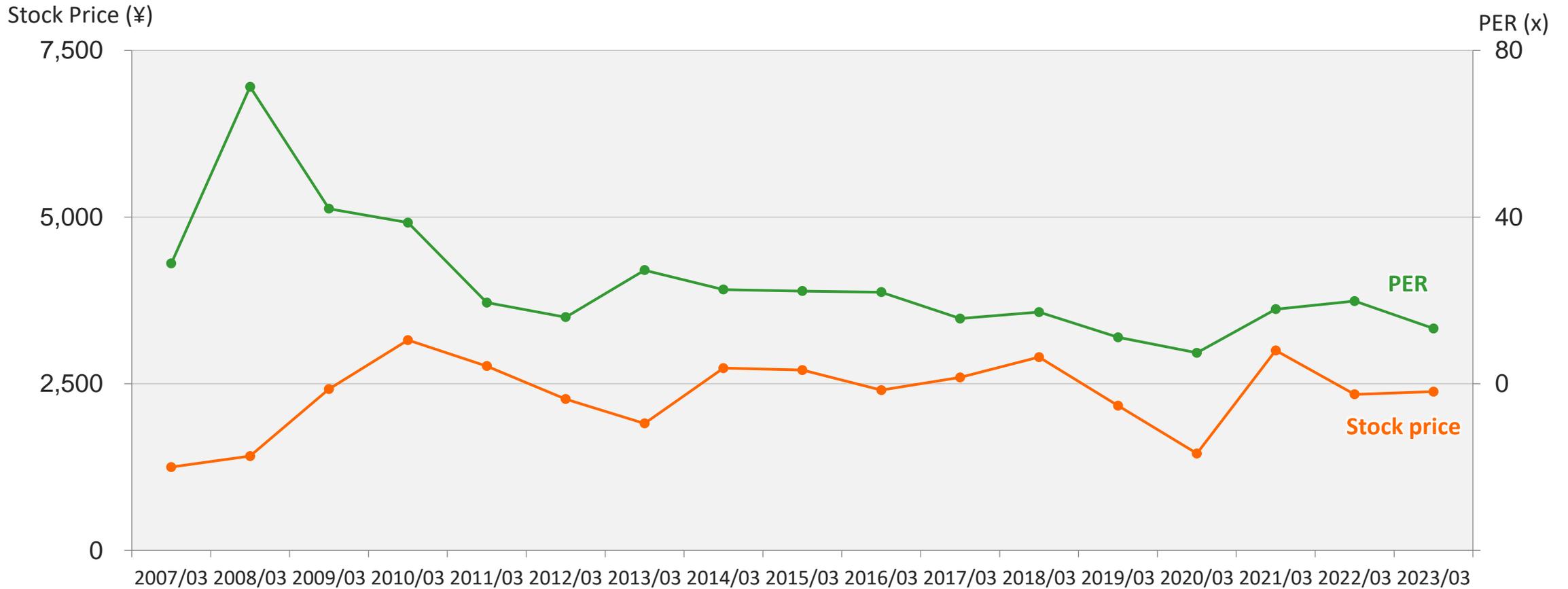
\*1: ESG rating of MSCI (U.S.) is done by Japan ESG Select Leaders Index and is seven-grade evaluation of AAA, AA, A, BBB, BB, B and CCC. (Rating Update : around June)

\*2: ESG rating of FTSE (English) is five-grade evaluation of 1, 2, 3, 4, 5. (Rating Update : around June)

\*3: Toyo Keizai Inc.'s CSR assessment is five-grade evaluation of AAA, AA, A, B and C. (Rating Update : around November)

\*4: CDP (English) is eight-grade evaluation of A, A-, B, B-, C, C-, D, D-. (Rating Update : around September)

## Stock Price, Price to Earnings Ratio (PER)



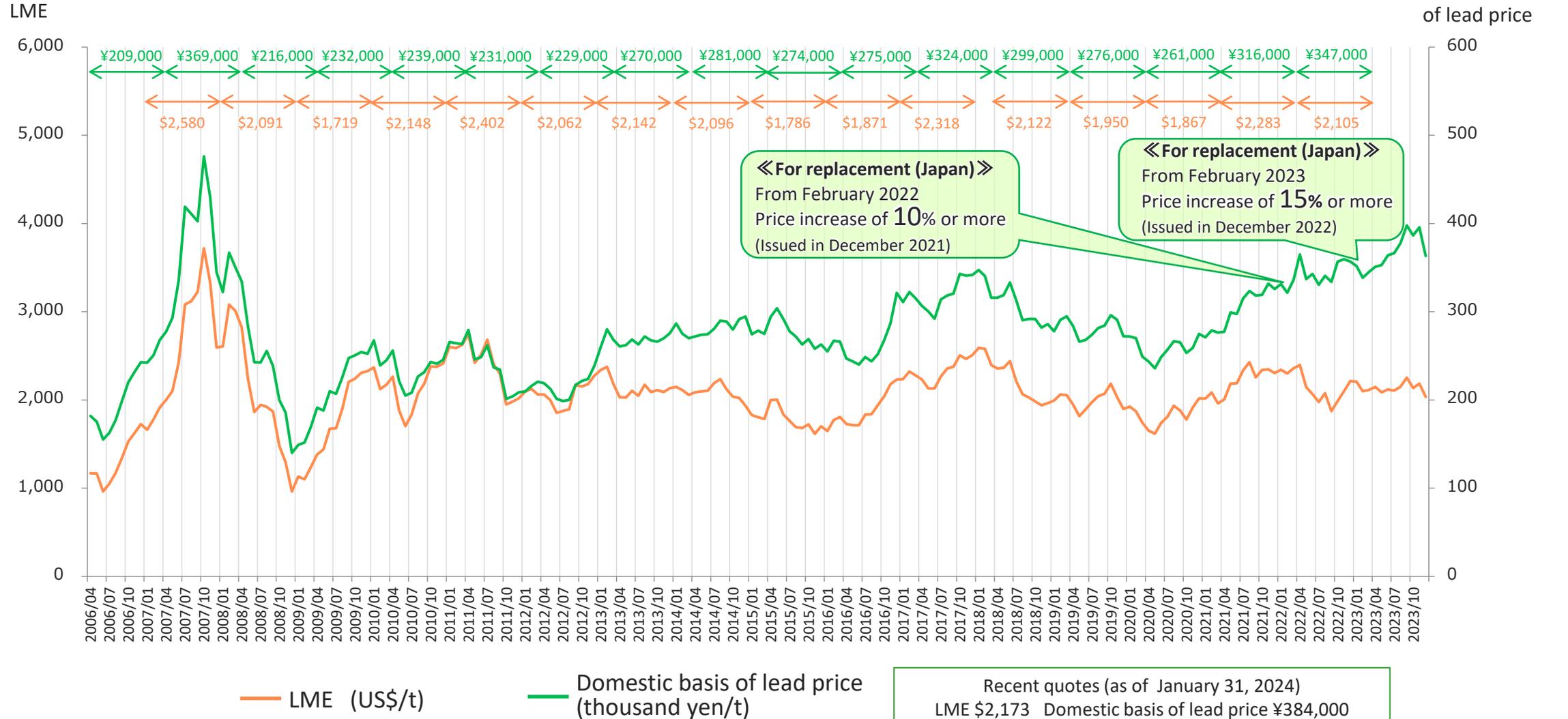
- Notes: 1. Closing price on the last trading day of March.  
 2. PER is based on profit before amortization of goodwill.  
 3. GS Yuasa carried out a five-to-one reverse stock split of its common stock upon changing the number of shares per trading unit from 1,000 to 100 shares (effective date Oct. 1, 2018), and Stock Price and PER take into account the share consolidation.

	Fiscal year	2018	2019	2020	2021	2022
Operating income ratio	(%)	6.1	6.1	7.0	5.5	6.2
Return on equity (ROE)	(%)	9.0	9.0	7.2	4.6	6.5
Return on invested capital (ROIC)	(%)	11.3	10.9	12.0	9.7	11.4
Earnings per share (EPS)	(¥)	194.58	195.92	167.72	118.02	179.47
Dividend per share	(¥)	50	50	50	50	50
Purchase of treasury stock (amount planned for the next fiscal year)	(¥bn)	1.4	1.5	0.0	0.0	0.0
Total return ratio	(%)	34.3	34.9	29.8	42.4	27.9

	Fiscal year	2018	2019	2020	2021	2022
Total borrowings	(¥bn)	66.9	64.5	65.4	82.5	103.7
D/E ratio	(x)	0.42	0.42	0.41	0.50	0.55
Equity ratio	(%)	46.4	45.8	46.8	44.8	42.6
Debt to cash flow ratio	(year)	2.2	2.2	2.2	7.0	3.7

- Notes: 1. The above indices for FY2016 onward are based on profit before amortization of goodwill (operating income, profit).  
 2. ROIC is calculated as follows: Operating income before amortization of goodwill ÷ invested capital (fixed assets [excl. goodwill amortization] + working capital). Invested capital is the average of amount at beginning and end of term.  
 3. GS Yuasa carried out a five-to-one reverse stock split of its common stock upon changing the number of shares per trading unit from 1,000 to 100 shares (effective date Oct. 1, 2018), and EPS and Dividend per share take into account the share consolidation.

## Raw Materials Prices



## Quarterly Results by Segment

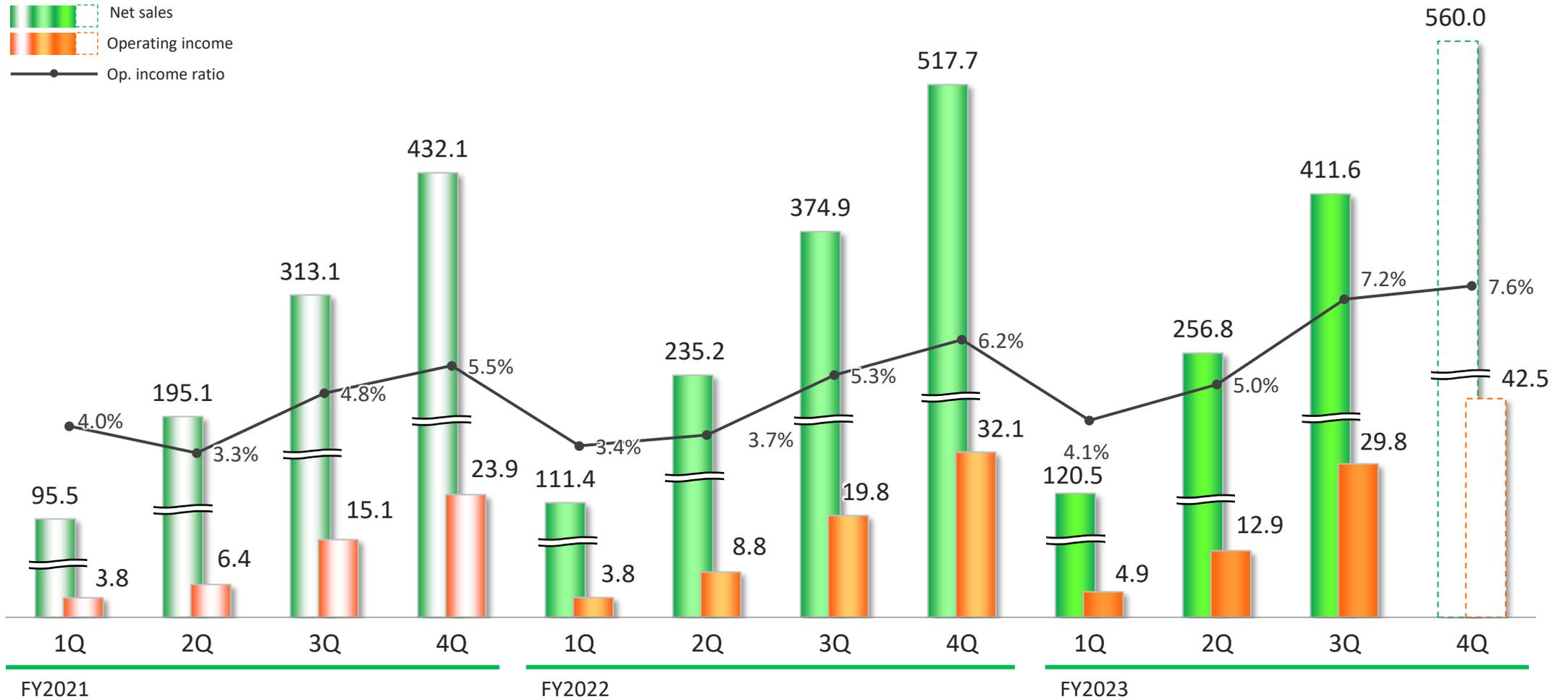
(Billion yen)

		FY2022										FY2023											
		1Q (Apr-Jun)		2Q (Jul-Sep)		3Q (Oct-Dec)		4Q (Jan-Mar)		Full (Apr-Mar)			1Q (Apr-Jun)		2Q (Jul-Sep)		3Q (Oct-Dec)		4Q (Jan-Mar)		Full-year Forecast (Apr-Mar)		
		Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: %)	EBITDA (EBITDA Margin: %)	Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: %)	EBITDA (EBITDA Margin: %)
Auto motiv e Batter ies	Japan	17.7	1.0 (5.4)	20.0	0.8 (4.0)	25.5	2.5 (9.7)	24.7	2.3 (9.4)	87.8	6.5 (7.5)	9.2 (10.5)	19.6	1.0 (5.2)	21.5	1.1 (5.3)	27.8	3.0 (10.9)	-	-	95.0	7.0 (7.4)	-
	Over seas	60.0	3.0 (5.0)	61.9	3.1 (5.0)	65.1	4.1 (6.3)	60.4	3.1 (5.2)	247.3	13.3 (5.4)	20.1 (8.1)	58.4	2.8 (4.7)	67.1	4.8 (7.2)	65.2	5.8 (8.8)	-	-	247.0	17.5 (7.1)	-
Industrial Batteries and Power Supplies		17.0	-0.5 (-3.1)	22.5	1.1 (5.1)	26.4	2.7 (10.2)	32.1	5.3 (16.5)	99.2	8.8 (8.9)	10.6 (10.6)	17.9	0.2 (0.8)	21.6	1.2 (5.6)	34.2	5.1 (14.8)	-	-	110.0	11.0 (10.0)	-
Automotive Lithium-ion Batteries		12.4	0.4 (3.1)	15.0	-0.2 (△1.3)	17.9	0.8 (4.4)	20.1	1.0 (5.0)	65.4	2.0 (3.0)	6.1 (9.3)	19.5	0.4 (2.2)	21.1	0.3 (1.4)	22.4	1.7 (7.6)	-	-	88.0	4.5 (5.1)	-
Specialized Batteries and Others		4.4	0.0 (0.2)	4.5	0.1 (2.9)	4.4	0.9 (19.7)	5.6	0.5 (9.6)	18.0	1.4 (7.7)	7.1 (39.4)	5.2	0.6 (10.9)	5.0	0.5 (9.7)	5.1	1.3 (25.5)	-	-	20.0	2.5 (12.5)	-
Total		111.4	3.8 (3.4)	123.8	4.9 (4.0)	139.7	11.0 (7.9)	142.9	12.3 (8.6)	517.7	32.1 (6.2)	53.0 (10.2)	120.5	4.9 (4.1)	136.3	8.0 (5.9)	154.8	16.9 (10.9)	-	-	560.0	42.5 (7.6)	64.5 (11.5)

Note 1 : Operating income is operating income before amortization of goodwill and Op. income ratio is Op. income ratio before amortization of goodwill. EBITDA is operating income before amortization of goodwill + depreciation.  
 2 : Some consolidated subsidiaries in the "Industrial Batteries and Power Supplies" segment were transferred to the "Specialized Batteries and Others" segment in fiscal 2023. In conjunction with this change, figures for 3<sup>rd</sup> quarter of fiscal 2022 were restated according to the modified segments.

## Net Sales, Operating Income, Op. Income Ratio

(Billion yen)



Note: Operating income is operating income before amortization of goodwill and op. income ratio is op. income ratio before amortization of goodwill.

# [Reference] Forecast for FY2023

	FY2022 Actual	FY2023 Forecast	Change	(Billion yen) (YoY%)
Net Sales	517.7	560.0	+42.3	(+8.2%)
Operating income (Operating income ratio)	31.5 6.1%	42.0 7.5%	+10.5 +1.4P	(+33.3%)
Operating income before amortization of goodwill (Operating income ratio before amortization of goodwill)	32.1 6.2%	42.5 7.6%	+10.4 +1.4P	
Ordinary income	24.2	38.0	+13.8	(+57.0%)
Profit (Profit ratio )	13.9 2.7%	21.0 3.8%	+7.1 +1.1P	(+51.1%)
Profit before amortization of goodwill (Profit ratio before amortization of goodwill)	14.4 2.8%	21.5 3.8%	+7.1 +1.0P	
Domestic lead price quote	¥346,600/t	¥381,000/t	+¥34,400/t	
LME	\$US 2,105/t	\$US 2,200/t	+\$US 95/t	
Exchange rate	¥136.00/\$US	¥145.00/\$US	+¥9.00/\$US	
Dividend	50 yen/share	60 yen/share (plan)	+10 yen/share	
Purchase of treasury stock (amount planned for the next fiscal year)	-	-	-	
Total return ratio	27.9%	26.6%	-1.3P	
ROE (return on equity)	6.5%	-	-	
Return on invested capital (ROIC)	11.4%	-	-	

Notes: 1. ROE and total return ratio are based on profit before amortization of goodwill.

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

# [Reference] FY2023 Third Quarter Financial Results



	FY2022 Apr. - Dec.	FY2023 Apr. - Dec.	Change	(YoY%)	(Billion yen) [Reference] Forecast for FY2023 (Estimated for Feb. 2024)
Net sales	374.9	<b>Record</b> 411.6	+36.7	(+9.8%)	560.0
Gross profit	81.5	93.1	+11.6		-
Operating income	19.0	<b>Record</b> 29.4	+10.4	(+54.7%)	42.0
(Operating income ratio)	5.1%	7.1%	+2.0P		7.5%
Operating income before amortization of goodwill	19.8	<b>Record</b> 29.8	+10.0		42.5
(Operating income ratio before amortization of goodwill)	5.3%	7.2%	+1.9P		7.6%
Ordinary income	16.1	<b>Record</b> 29.0	+12.9	(+80.3%)	38.0
Extraordinary income	1.6	3.7	+2.1		-
Extraordinary loss	0.5	3.8	+3.3		-
Profit before income taxes	17.2	28.9	+11.7		-
Income taxes	5.7	6.1	+0.4		-
Profit attributable to non-controlling interests	3.6	5.1	+1.5		-
Profit	7.8	<b>Record</b> 17.7	+9.9	(+126.0%)	21.0
(Profit ratio)	2.1%	4.3%	+2.2P		3.8%
Profit before amortization of goodwill	8.6	<b>Record</b> 18.1	+9.5		21.5
(Profit ratio before amortization of goodwill)	2.3%	4.4%	+2.1P		3.8%
Domestic lead price quote (¥10,000/t)	34.71	37.29	+2.58		38.1
LME (US\$/t)	2,093	2,136	+43		2,200
Exchange rate (¥/US\$)	136.85	143.78	+6.93		145.00

# [Reference] Forecast for FY2023 (By Segment)

(Billion yen)

		FY2022 Actual		FY2023 Forecast		Change	
		Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: pp)
Automotive Batteries	Japan	87.8	6.5 (7.5)	95.0	7.0 (7.4)	+7.2	+0.5 (-0.1)
	Overseas	247.3	13.3 (5.4)	247.0	17.5 (7.1)	-0.3	+4.2 (+1.7)
Industrial Batteries and Power Supplies		99.2	8.8 (8.9)	110.0	11.0 (10.0)	+10.8	+2.3 (+1.1)
Automotive Lithium-ion Batteries		65.4	2.0 (3.0)	88.0	4.5 (5.1)	+22.6	+2.5 (+2.1)
Specialized Batteries and Others		18.0	1.4 (7.7)	20.0	2.5 (12.5)	+2.0	+1.1 (+4.8)
Total		517.7	32.1 (6.2)	560.0	42.5 (7.6)	+42.3	+10.4 (+1.4)

### Assumption of financial forecast (Apr. – Mar.)

- Production of automobiles is expected to increase due to mitigation of semiconductor shortage
- Regarding trends in lead price, LME is progressing stable but domestic lead prices are expected to remain high due to the impact of yen depreciation (LME:2,093US\$/t ⇒ 2,136US\$/t, Domestic basis of lead price: ¥347,000/t ⇒ ¥373,000/t)
- Regarding foreign exchanges, the yen is expected to continue to weaken (¥136.85/US\$ ⇒ ¥143.78/US\$)
- Continue to revise selling price due to rising raw material price, etc.

Note : Operating income is operating income before amortization of goodwill and operating income ratio is operating income ratio before amortization of goodwill.

# [Reference] FY2023 Third Quarter Financial Results (By Segment)



(Billion yen)

		FY2022 Apr. - Dec.		FY2023 Apr. - Dec.		Change		[Reference] Forecast for FY2023 (Estimated for Feb. 2024)	
		Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: %)	Net sales	Operating income (Op. income ratio: pp)	Net sales	Operating income (Op. income ratio: %)
Automotive Batteries	Japan	63.1	4.2 (6.7)	<b>68.9</b>	<b>5.2</b> (7.6)	+5.8	+1.0 (+0.9)	95.0	7.0 (7.4)
	Overseas	186.9	10.2 (5.5)	<b>190.7</b>	<b>13.4</b> (7.0)	+3.8	+3.2 (+1.5)	247.0	17.5 (7.1)
Industrial Batteries and Power Supplies		65.9	3.3 (5.0)	<b>73.7</b>	<b>6.4</b> (8.7)	+7.8	+3.1 (+3.7)	110.0	11.0 (10.0)
Automotive Lithium-ion Batteries		45.2	1.0 (2.2)	<b>62.9</b>	<b>2.4</b> (3.9)	+17.7	+1.4 (+1.7)	88.0	4.5 (5.1)
Specialized Batteries and Others		13.6	1.1 (7.9)	<b>15.4</b>	<b>2.4</b> (15.4)	+1.8	+1.3 (+7.5)	20.0	2.5 (12.5)
Total		374.9	19.8 (5.3)	<b>411.6</b>	<b>29.8</b> (7.2)	+36.7	+10.0 (+1.9)	560.0	42.5 (7.6)

## FY2023 Apr. - Dec. Result

- Production of automobiles increased due to the recovery of the supply chain
- Regarding trends in lead price, LME is progressing stable but domestic lead prices remained high due to the impact of yen depreciation (LME:2,093US\$/t in FY2022⇒2,136US\$/t, domestic basis of lead price:¥347,000/t in FY2022⇒¥373,000/t)
- The yen continues to weaken against the U.S. dollar (¥136.85 /US\$ in FY2022⇒¥143.78 /US\$ )

Note 1 : Operating income is operating income before amortization of goodwill and operating income ratio is operating income ratio before amortization of goodwill.

2 : Some consolidated subsidiaries in the "Industrial Batteries and Power Supplies" segment were transferred to the "Specialized Batteries and Others" segment in fiscal 2023. In conjunction with this change, figures for 3<sup>rd</sup> quarter of fiscal 2022 were restated according to the modified segments.