

Automotive Batteries

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Review of the Fifth Mid-Term Management Plan

Reforms for high profitability in Japan, selection and concentration of resources overseas

The automotive batteries business accounts for approximately 60% of the Group's sales, and market characteristics of each region vary greatly in Japan and overseas.

In Japan, automobile ownership has peaked as a result of the declining population, and changes in the business environment are becoming more prominent in conjunction with electrification. To respond to these conditions, during the Fifth Mid-Term Management Plan period, we pursued reforms intended to achieve high profitability, revised the prices of products for new automobiles, and focused on sales of high-value-added products for replacement. In terms of production, we took measures to eliminate the imbalance in production volumes at our four domestic production sites (Gunma, Osadano, Kyoto, and Hamanako) including GS Yuasa Energy Co., Ltd., which was established through the transfer of the lead-acid batteries business from Panasonic Corporation, and to raise production efficiency while achieving complementation among models. During the Sixth Mid-Term Management Plan period, we will continue to pursue stable production and supplies while achieving a balance between products for new automobiles and for replacement. In addition, we generated synergy effects with GS Yuasa Energy. I believe that exchanges of human resources developed under different corporate cultures also produced significant results in terms of creating new ideas concerning production systems and the execution of business.

Overseas, we conducted business activities with the aim of expanding our market shares by focusing on two core measures—selecting business sites for concentration of resources and optimization of production and sale structures. In Southeast Asia, where we have high market shares, we reinforced sales with a focus on high-value-added products, and we achieved strong results by accelerating measures for achieving high profitability. In Europe, our site in Turkey became a consolidated subsidiary in 2022, and we also reinforced supply capacity in undeveloped regions including the Middle East and North Africa. In China, the business

environment has changed drastically since the start of the Fifth Mid-Term Management Plan period, competition has intensified, and business conditions remain challenging as a result of the recording of impairment losses in fiscal 2021 and equity method losses in fiscal 2022. In North America, we focused on production and sales of batteries for power sports, but the market environment is changing, and we are aware that we need to reexamine our sales routes.

In Japan and overseas, during the Sixth Mid-Term Management Plan, we will make steady responses to issues that became apparent during the Fifth Mid-Term Management Plan period.

Measures to Achieve Vision 2035 and the Sixth Mid-Term Management Plan

Reforms for more robust systems in line with changes in the business environment

In the recently-announced Vision 2035, we anticipate a challenging market environment for lead-acid batteries in light of the electrification trend. The term of the Sixth Mid-Term Management Plan will be an extremely important period for examining how the positioning of lead-acid batteries will change amidst the electrification trend as well as in which regions demand will increase.

Amidst changes in the lead-acid battery market, it is necessary that we refine even further our technology development capabilities for continuously providing high-performance products, manufacturing and production technology capabilities for continuously ensuring stable product quality, and technical service capabilities for supporting product safety in the market. There are no goals in manufacturing, and consequently, we will continue to refine our on-site capabilities and work to achieve even more ambitious targets.

A major target of the Sixth Mid-Term Management Plan is the implementation of reforms to transform systems so that they can reliably generate profits no matter what changes occur in the market, that is, to create robust systems. We will raise profitability by concentrating management assets in high-efficiency areas.

Japan Expanding sales of high-value-added products and reinforcing the *Koto-zukuri* (service creation) business

In Japan, specific measures will include negotiating with automakers so that we can secure appropriate profits commensurate with the volume of products for new vehicles. With regard to replacement products, we will continue our efforts to create stronger sales structures and slimmer organizations. I too have personally experienced battery problems, and I want customers to use high-quality products, so we will expand sales by clearly conveying the appeals of high-value-added products.

We will also strengthen the *Koto-zukuri* (service creation) business as a means of facilitating increased sales of our products by buyers including car dealers. Until now, we have developed services for repair shops and automobile dealers in inspection and service situations for suggesting replacement depending on the storage battery status. In the future, we plan to accumulate data on storage batteries through such inspections and services and make data visible in various formats so that we can provide support to dealers to enable them to make easy-to-understand recommendations to users on the appropriate time for battery replacement and avoiding battery problems. By reinforcing the *Koto-zukuri* business in this way, we hope to provide even greater peace of mind to customers.

Overseas Pursuing increased market shares and maximization of profits through selection and concentration of management resources

Our policy for overseas is to concentrate management resources in high profit efficiency regions. Motorization will initially advance in Southeast Asia in conjunction with economic growth, and we expect that markets will continue to grow steadily in the future. Thailand will continue to function as a core site, and we will develop production structures with annual capacity of 5 million units. In Vietnam and Indonesia, we plan to expand sales in line with robust market demand while closely monitoring fixed expenses

and rising prices. We also plan to make investments for automation and labor-saving in production. In Europe, it will be important to use our site in Turkey to reinforce production and sales activities while steadily developing new products. In Australia, we will leverage our local production strengths and reinforce sales of high-value-added products to increase market share. And in China, which is undergoing drastic change and markets are extremely challenging, we will closely monitor demand for lead-acid batteries and rebuild our strategies.

Fulfilling our responsibilities as a source of funds for growth by the Group

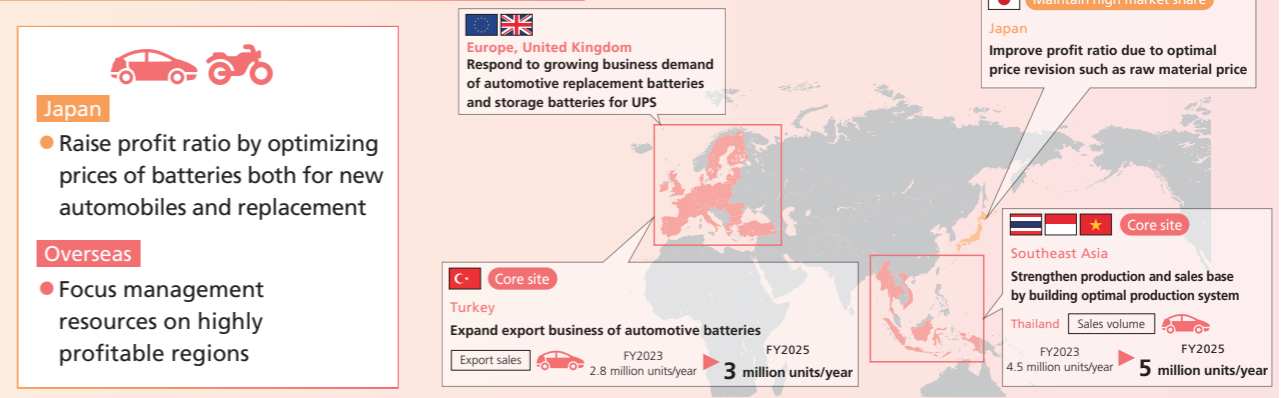
Local production for local consumption is crucial for lead-acid batteries. Because of this, when making decisions on how to produce and sell products in what regions, as the responsible director, I believe that it is important to view things from a local perspective, and I try to visit local sites as much as possible.

Reinforcing human capital is also important. As part of our rank-specific human resource development programs, we will create mechanisms that enable the employees who carry out management plans on the front lines to demonstrate their capabilities to the maximum degree, including assigning assistant manager (section leader) and manager class employees who work in Japan to overseas sites so that they can gain management sensibilities that include local perspectives and implementing human resource exchanges between domestic and overseas divisions through job rotations.

Improving profitability is a major target under the Sixth Mid-Term Management Plan. The automotive batteries business has long supported the Company's growth, but there are no groundbreaking methods for increasing profits. For this reason, I tell employees that I want everyone to work with the mindset of shaving off one second or one yen. I believe that the steady implementation of such efforts will lead to improved ROIC, and I hope to spread this idea throughout the Company.

The profits of the Automotive Batteries Business Unit are a source of funds for further growth by the entire Group. We will fulfill our responsibilities with an awareness of this role.

Main Points of the Sixth Mid-Term Management Plan



Automotive Batteries (Japan)

Sixth Mid-Term Management Plan

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

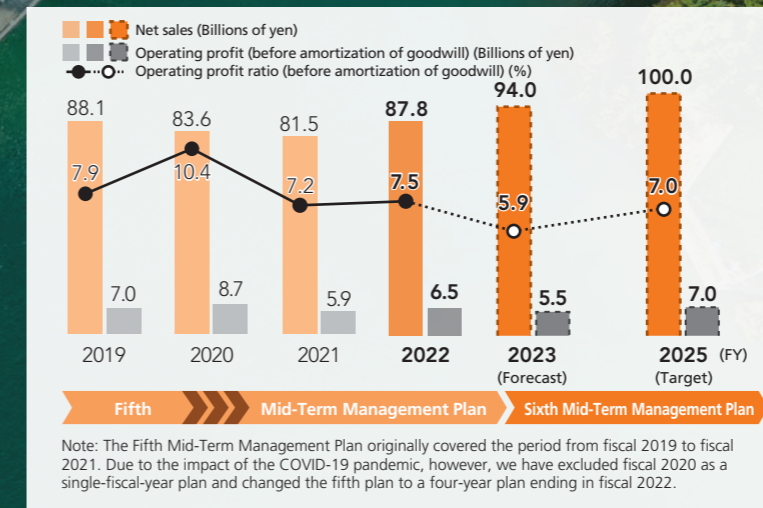
Sales: For new automobiles

- 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 by using IT and other means

Net Sales, operating income, operating profit ratio



SWOT

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

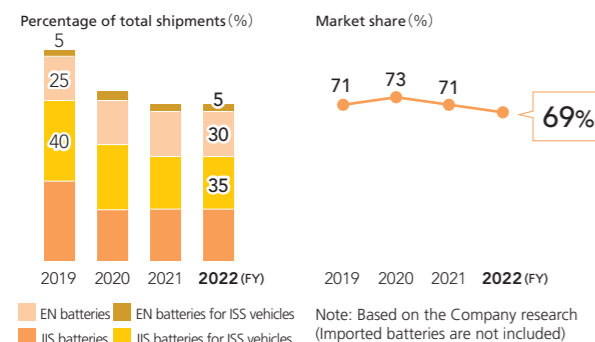
Review of the Fifth Mid-Term Management Plan

During the term of the Fifth Mid-Term Management Plan period, we took measures to increase profit ratios and reinforce sales of high-value-added products. In addition to creating synergistic effects with GS Yuasa Energy, which was established as a result of transfer of the lead-acid battery business from Panasonic Corporation, we expanded sales of high-value-added products.

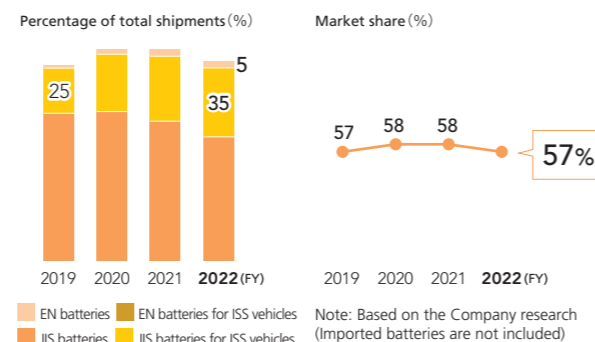
To respond to soaring prices for raw materials, we reflected costs in sales prices for batteries for new automobiles by entering into contracts that provide for changes in sales prices according to the domestic lead price quote (a lead price slide system). For replacement batteries, we raised prices 10% or more in February 2022 and 15% or more in February 2023.

Achievements and issues	
Achievements	<ul style="list-style-type: none"> Created synergistic effects with GS Yuasa Energy Expanded sales of European Norm (EN) batteries for new automobiles Increased demand for replacement batteries for ISS vehicles
Issues	<ul style="list-style-type: none"> Revise sales price due to soaring raw material prices

Batteries for new automobiles shipped as a percentage of total shipments/the Company's market share



Batteries for replacement shipped as a percentage of total shipments/the Company's market share



TOPIC

Creating synergistic effects with GS Yuasa Energy

Since the business transfer, GS Yuasa Energy has reported cumulative operating profit of approximately 20.1 billion yen, generated profit that greatly exceeds the cumulative amount of goodwill amortization, and made substantial contributions to increasing market share in the domestic automotive lead-acid battery business. Synergistic effects were also created through reciprocal supply of storage batteries and joint purchasing.



Exterior of GS Yuasa Energy

Outlook for the Sixth Mid-Term Management Plan Period

During the term of the Sixth Mid-Term Management Plan, demand for batteries for new automobiles is expected to recover from the reduced production by automakers due to the COVID-19 pandemic and semiconductor shortage and to increase as a result of reflecting high raw materials costs in sales prices.

For new automobiles

- Increase due to recovery of production by automakers

For replacement

- Flat due to the recovery in demand for batteries for new automobiles

Outlook for fiscal 2023

In fiscal 2023, an increase in the sales volume of batteries for new automobiles is expected as effects from the shortage of semiconductors ease, and effects from passing higher costs to sales prices are also expected. Although sales volumes of batteries for replacement are expected to decline due to the recovery of new automobiles sales, progress will be made in reflecting costs for raw materials in sales prices and other measures, resulting in higher sales for the segment as a whole. Despite this, a decrease in profit is expected due to a deterioration of the product composition.

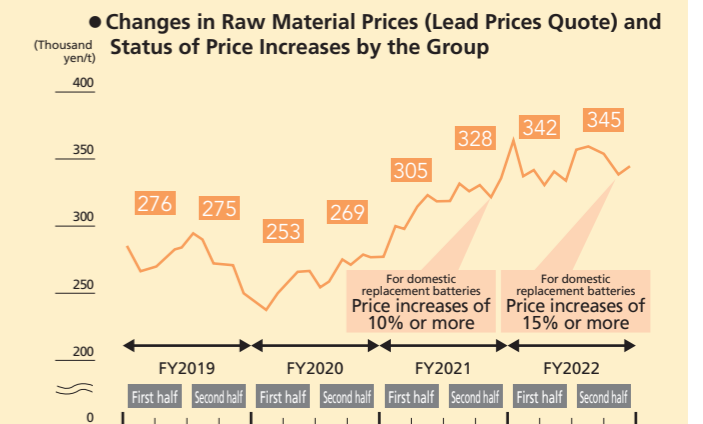
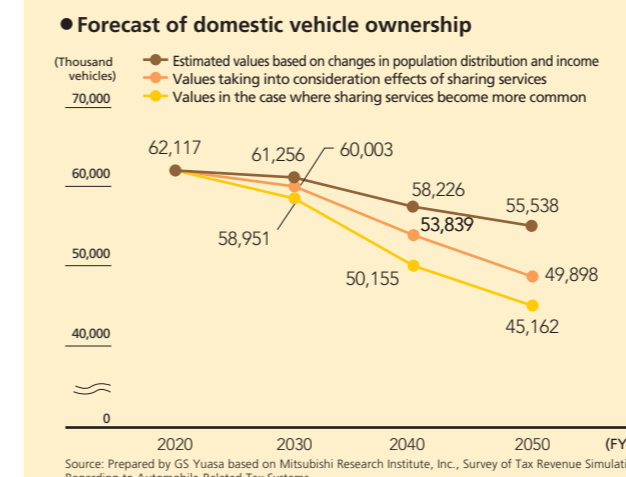
For new automobiles

- Increase in sales volume due to easing of impact from semiconductor shortage
- Progress in shifting higher costs to sales prices

For replacement

- Down due to increased demand for batteries for new automobiles
- Progress in shifting higher costs to sales prices

Relevant data



Automotive Batteries (Overseas)

Sixth Mid-Term Management Plan

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

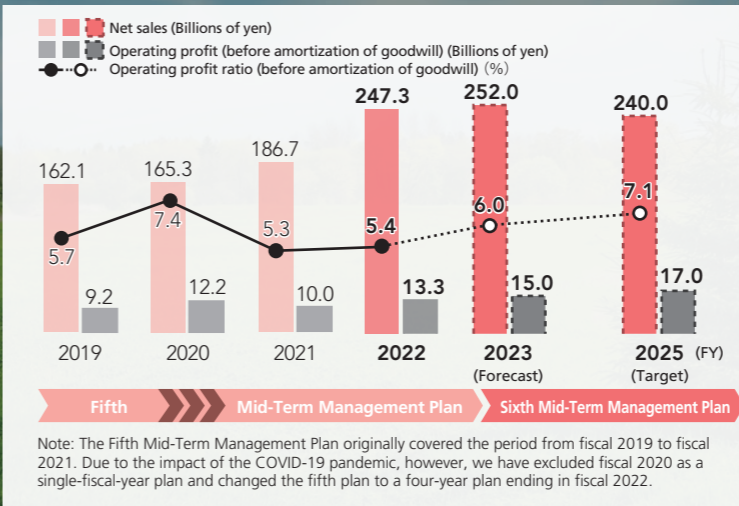
Europe

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

Other (Australia)

- Strengthen production base and expand market share of replacement batteries

Net Sales, operating income, operating profit ratio



SWOT

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

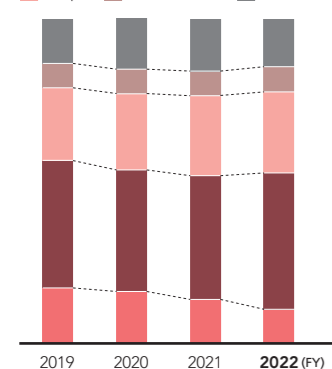
Review of the Fifth Mid-Term Management Plan

In Southeast Asia, where the Group has high market shares, we increased our development, production, and sales capacity according to the different needs of each region. In Europe, our site in Turkey became a consolidated subsidiary in fiscal 2022, reinforcing our structures for sales in Europe, the Middle East, and North Africa. In China, we conducted a fundamental review of business in response to the intensification of competition with other companies.

Achievements and issues	
Achievements	<ul style="list-style-type: none"> Expanded production capacity and reinforced sales structures in Southeast Asia Converted Turkish site into a consolidated subsidiary, reinforcing structures for sales to Europe, the Middle East, and North Africa
Issues	<ul style="list-style-type: none"> Intensifying competition in China

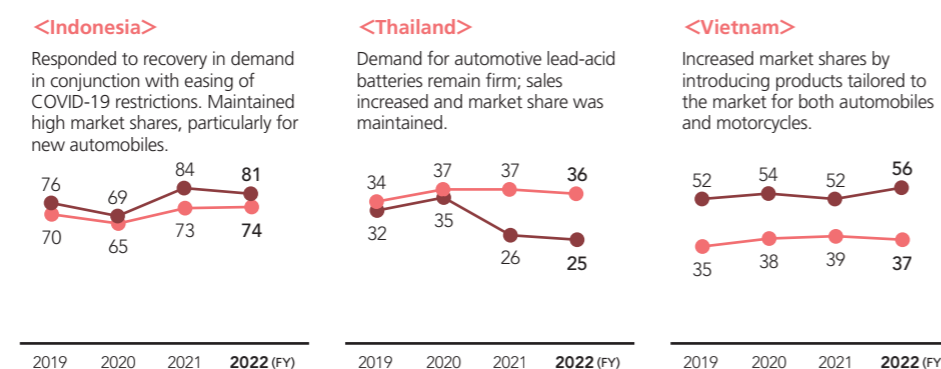
Sales composition by region (including industrial products)

China, Asia (excluding Japan and China), Europe, North America, Other



Market shares by region

Automotive batteries (%), Motorcycle batteries (%)



Note: The method of calculating market share for motorcycles in Thailand was changed in fiscal 2021.

TOPIC

Reinforced sales to Europe, the Middle East, and North Africa from our site in Turkey

İnci GS Yuasa Akü Sanayi ve Ticaret Anonim Şirketi, our site in Turkey, started joint-venture business in 2015, began operations at a new plant in January 2019, and has expanded manufacture and sales of high-performance lead-acid batteries for eco-friendly vehicles. It became a consolidated subsidiary in May 2022 and will reinforce structures for sales to Europe as well as the Middle East and North Africa.



Exterior of the Turkish business site

Outlook for the Sixth Mid-Term Management Plan Period

We anticipate an expansion of sales in Southeast Asia, Europe, and Australia during the term of the Sixth Mid-Term Management Plan, and we will strategically allocate resources.

Southeast Asia

- Demand is expected to continue growing

China

- Promote fundamental review of business

Europe

- Slight increase due to continued demand for replacement batteries

Outlook for fiscal 2023

In fiscal 2023, we expect increases in volume, mainly in Thailand and Indonesia. In Europe, a decrease in volume is expected due to inflation in Turkey, advancing electrification, and other factors, and we are reviewing our product sales price strategy. We project higher sales and profit for the segment as a whole.

Southeast Asia

- Higher volumes, mainly in Thailand and Indonesia

China

- Promote fundamental review of business

Europe

- Decrease in volume due to effects from inflation and other factors

TOPIC

Contract concluded for partial transfer of equity interests in consolidated subsidiary in China

The environment surrounding the automotive lead-acid battery business in China is undergoing major changes including tightening of environmental regulations in recent years and the imposition and subsequent lifting of zero-COVID policies.

As our growth strategy in China, we have decided to transfer 70% of our equity holdings in Tianjin GS Battery Co., Ltd. and Yuasa Battery (Shunde) Co., Ltd., which are consolidated subsidiaries, to Leoch Battery Company Limited, a Chinese company, and we concluded an equity transfer agreement and joint venture agreement. We determined that the most profitable option will be to transfer management rights to Leoch Battery, which operates under the umbrella of Leoch International Technology Limited, a company that has achieved success in this business in China, while continuing to provide technical support. The combined market share of the GS Yuasa Group and Leoch International Group will be the third largest and close to the second largest (according to research by GS Yuasa), and we synergies are expected in terms of both sales and logistics.

Name	Tianjin GS Battery Co., Ltd.	Yuasa Battery (Shunde) Co., Ltd.
Main business	Manufacture and sale of lead-acid batteries for automobiles	Manufacture and sale of lead-acid batteries for automobiles and sale of lead-acid batteries for motorcycles
Shareholders and shareholding ratio	GS Yuasa 92.5% → 22.5% Yuasa Battery (Guangdong) Co., Ltd. 7.5% → 7.5%	GS Yuasa 100% → 30%
Transfer price (approx.)	0.95 billion yen (RMB 49 Mil)	3.08 billion yen (RMB 158 Mil)