

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

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

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)

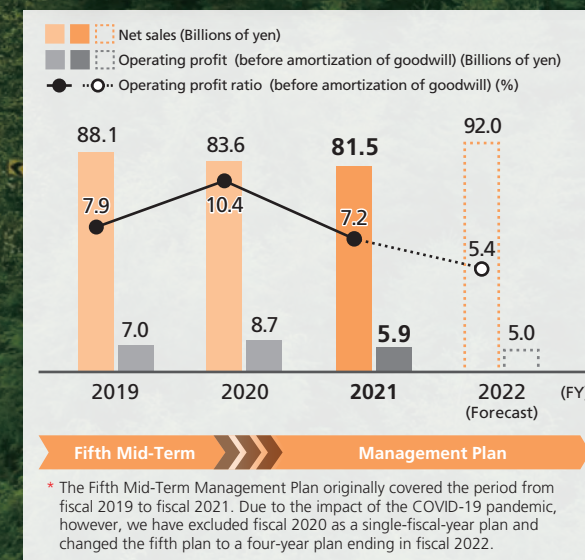
Business policy

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 CO₂ 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

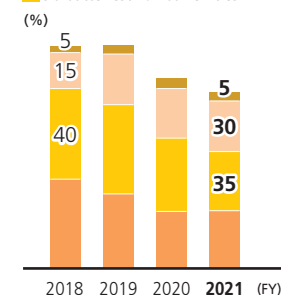
Progress in business strategies

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

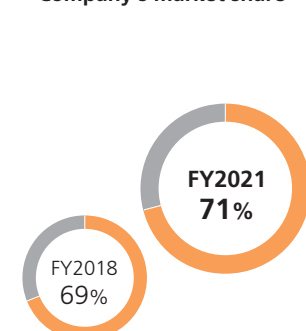
Although the shipment ratio of batteries for vehicles with start-stop systems (ISS: idling stop systems) has decreased, sales of European Norm (EN) batteries, developed ahead of other companies, are expanding, contributing to the maintenance and increase of our market share.

● Batteries for ISS vehicles and EN batteries shipped as a percentage of total shipments

EN batteries
EN batteries / for ISS vehicles
JIS batteries
JIS batteries / for ISS vehicles



● Change in the Company's market share



* Based on company research (Imported batteries are not included)

Progress in business strategies

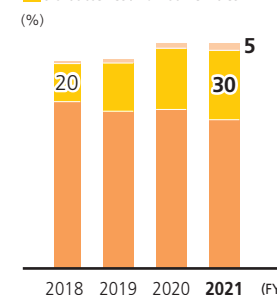
2 For replacement: Increase in demand for batteries for ISS vehicles contributing to improved profitability

Demands for replacement of batteries for ISS vehicles which have been shipped for new automobiles is increasing, contributing to improved profitability.

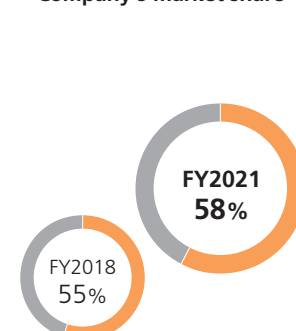
In addition, there is a gradually emerging demand for replacement of EN batteries, which have been contributing to the expansion of the market share for new vehicles, and we can expect further expansion of the market share for replacement in the future.

● Batteries for ISS vehicles and EN batteries shipped as a percentage of total shipments

EN batteries
EN batteries / for ISS vehicles
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JIS batteries / for ISS vehicles



● Change in the Company's market share



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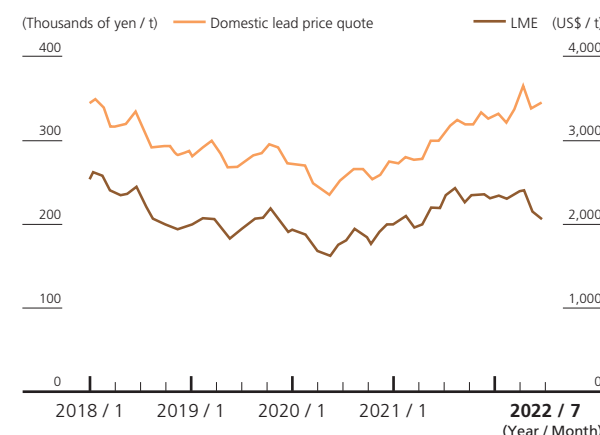
Progress in business strategies Market data

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.

● Raw material prices (lead price)



TOPIC

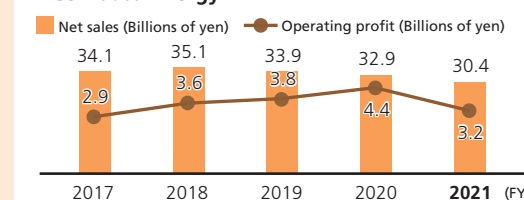
Creating synergistic effect with GS Yuasa Energy Co., Ltd.

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.



Exterior of GS Yuasa Energy

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



Automotive Batteries (Overseas)

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

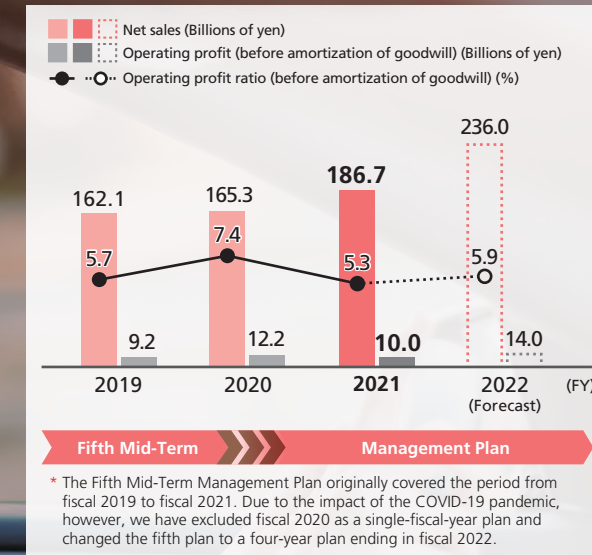
Business policy

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

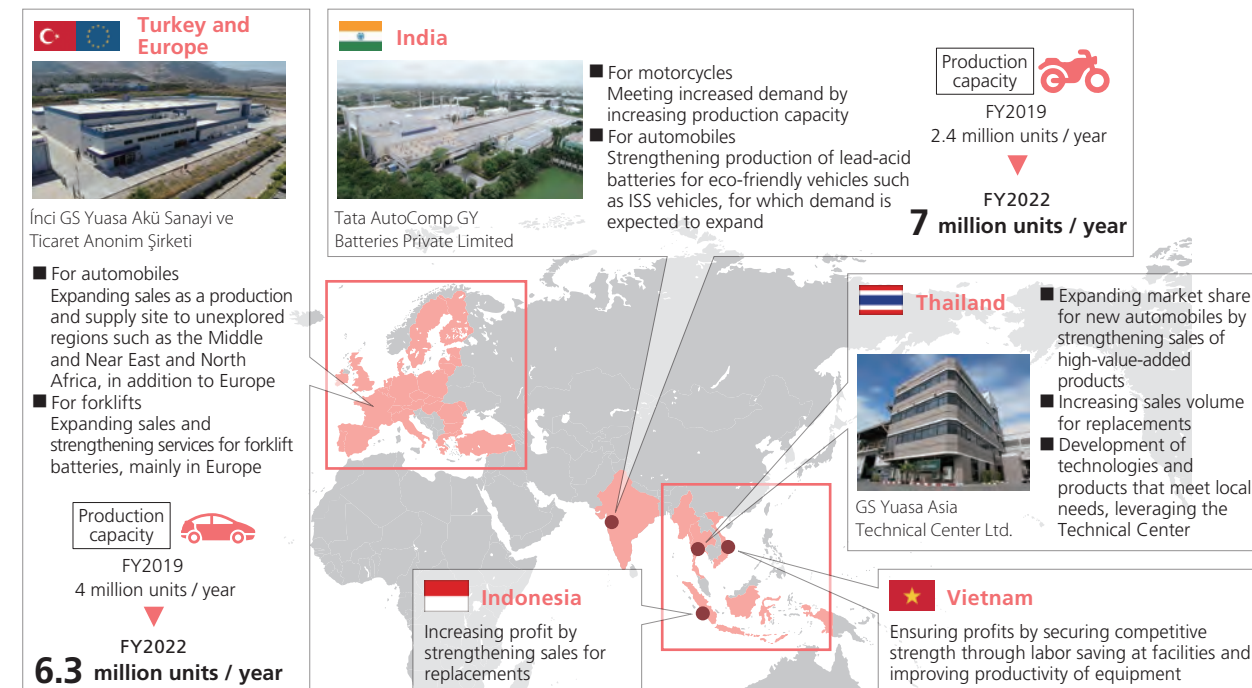
- Sales expansion

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

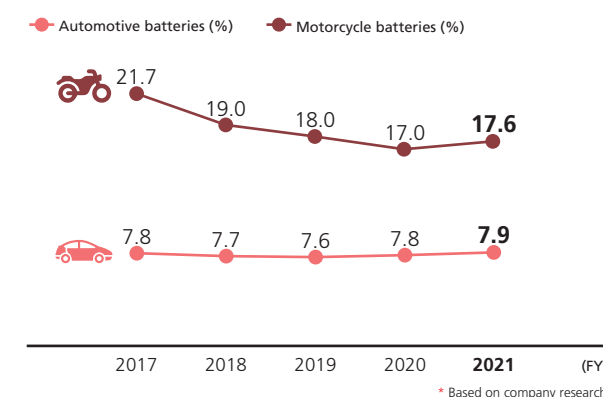


Business strategies

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.



● Net sales and operating profit of the Turkish business site

