

Strategy by Business Segment – Specialized Batteries and Others

Message from the President of GS Yuasa Technology

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

For batteries for defense applications, we receive orders for development and mass production of many thermal batteries in line with the increase in Japan's defense spending and proceed with a production increase plan. As for space applications, thermal batteries and lithium-ion batteries are adopted for domestic H3 rockets, and the amount of orders received for commercialization is expected to increase. In addition, we participated in the US's Artemis (lunar exploration) program, developed batteries to be used in a living environment like the International Space Station, and have already delivered some products. As for aircraft applications, the replacement of lithium-ion batteries delivered on an OEM basis has been in steady progress and is a main source of profit.

During the term of the Sixth Mid-Term Management Plan, demand for lithium-ion batteries for submarines is expected to remain firm. Orders for various types of batteries for defense applications are increasing year by year, and among them, thermal batteries are projected to increase several times over the current volume. We are proceeding with automation of some processes to accommodate increased production. The demand for replacement lithium-ion batteries for aircraft will expand as the replacement demand for the initially installed batteries expands and volumes will increase. We expect FY2025 results to be similar to those of the previous fiscal year, and we expect the Seventh Mid-Term Management Plan to exceed the results of the Sixth Mid-Term Management Plan.



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

Yoshiaki Namikawa

Business Policy in the Sixth Mid-Term Management Plan

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

Strategies and Important Tasks in the Sixth Mid-Term Management Plan

Specialized batteries business

Initiatives	Progress
<ul style="list-style-type: none"> Improve profitability due to efforts to strengthen the foundation of the defense industry 	<ul style="list-style-type: none"> Profit margins have improved in recent years due to negotiations for higher selling prices in response to changes in the Ministry of Defense's contract system and rising costs
<ul style="list-style-type: none"> Development of next-generation lithium-ion batteries for submarines 	<ul style="list-style-type: none"> Steady progress in the development of next-generation batteries under the guidance of the Ministry of Defense
<ul style="list-style-type: none"> Response to expanded demand of lithium-ion batteries for aircraft 	<ul style="list-style-type: none"> Engaged in initiatives for defense and electrification applications in addition to civil aircraft
<ul style="list-style-type: none"> Expand sales of lithium-ion batteries for satellites 	<ul style="list-style-type: none"> Proceeding with the development of cells for small satellites in collaboration with a U.S. subsidiary and conducted proposal activities for customers in the U.S. and Japan

GS Yuasa's "Value Creation"
- Steady Evolution Generates Value

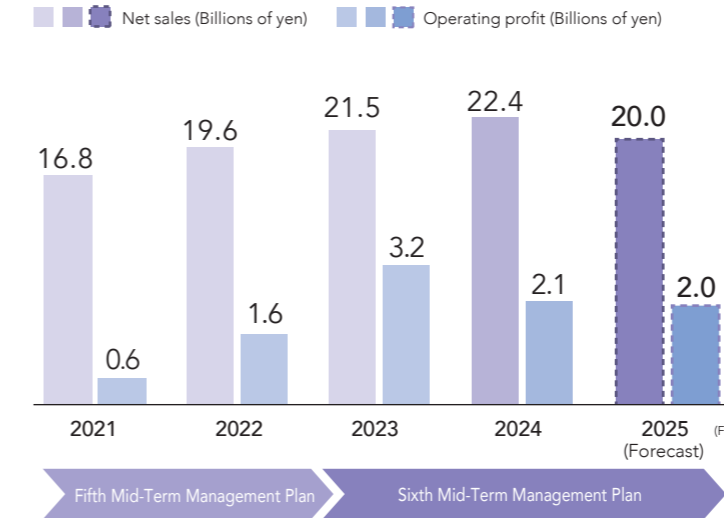
"Company-Wide Strategy"
for Value Creation

"Business and Technical Strategies"
for Value Creation

"Foundations" of Value Creation

Corporate Data

Performance trends



Position

- For Defense (For Submarines)**
 The only manufacturer of specialized batteries for submarines in Japan
- For Space**
 World's top ranking in battery capacity installed in satellites launched into orbit
- For Aircraft**
 Developed and supplied the world's first lithium-ion batteries for commercial aircraft

SWOT

Strengths <ul style="list-style-type: none"> The only specialized battery manufacturer in Japan High technological capability and reliability that allow us to win adoption into new public infrastructure 	Weaknesses <ul style="list-style-type: none"> Multi-variety, low-volume production, unsuitable for full automation Aging equipment
Opportunities <ul style="list-style-type: none"> Establishment and enforcement of the Act on Enhancing Defense Production and Technology Bases Expansion of new market such as for space use 	Threats <ul style="list-style-type: none"> Higher costs due to increased development difficulty Occurrence of incidents arising from batteries Increased social responsibility Concern over stable procurement of lithium-ion battery components due to geopolitical risks

Main examples of where our batteries are installed

© JAXA/NASA International Space Station (ISS)	© JAXA H3 launch vehicle	© JAXA Quasi-Zenith Satellite System Michibiki No. 6 (QZS-6) Source: Cabinet Office of Japan's Quasi-Zenith Satellite System website	© JAXA X-Ray Imaging and Spectroscopy Mission (XRISM)
© JAXA Global Observing SATellite for Greenhouse gases and Water cycle (GOSAT-GW)	© JAXA Boeing 787	© JAMSTEC Shinkai 6500	© JAMSTEC Soryu-class submarine (Photo courtesy of Japan Maritime Self-Defense Force)