

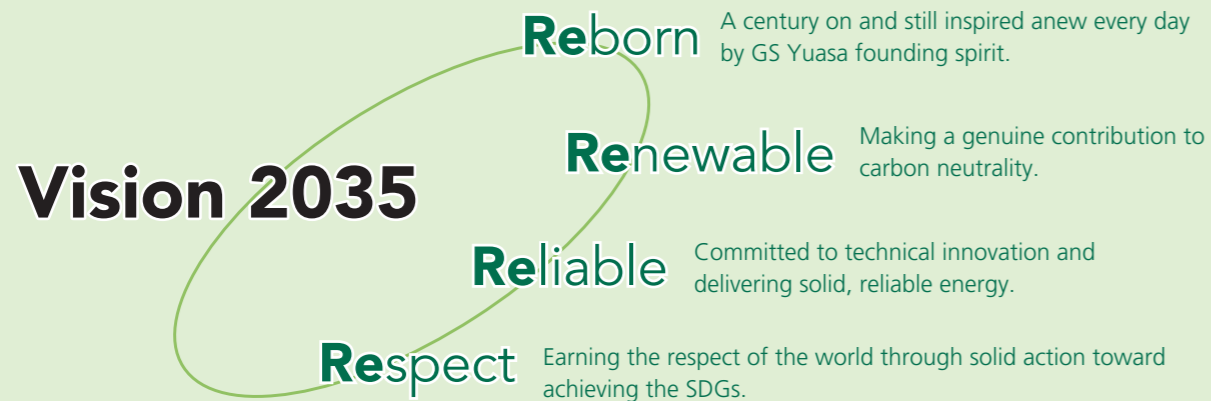
Vision 2035

GS Yuasa announced Vision 2035, our long-term vision, in April 2023. Vision 2035 expresses our ideal vision of GS Yuasa in 2035 in order to achieve "Innovation and Growth" for the next 100 years, based on the DNA of our founders and the knowledge we have accumulated over the past 100 years.

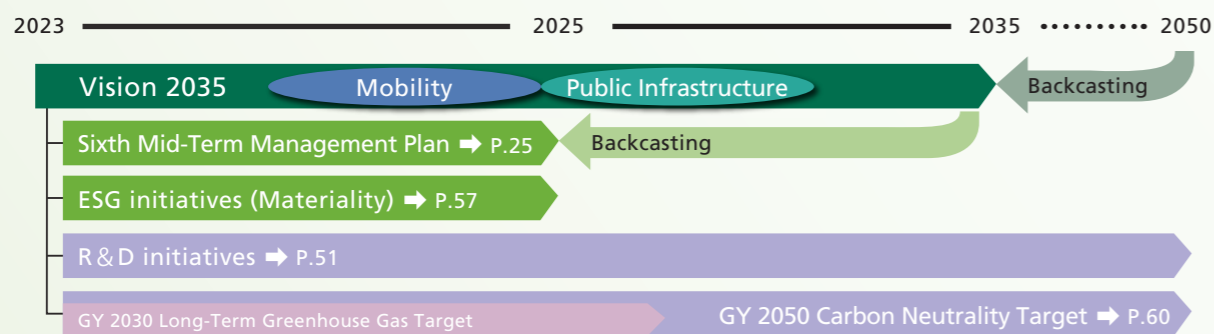
Achieving Vision 2035 requires two elements, some innovating and some eternal. Our philosophy "Innovation and Growth" inherited from the Company's founders should not be changed as well as a commitment to technical innovation, namely the sustainable development of energy storage technology that has been polished up for more than 100 years. Conversely, we seek to innovate in business areas and in the value we provide. In the past, we have offered "mono," that is "products" to customers, in the form of lead-acid batteries, lithium-ion batteries, power supply systems, etc. Going forward, in addition to products, we also want to offer solutions and services in the domains of mobility and public infrastructure, and aim to become an Energy Management Company.

Vision of GS Yuasa in 2035

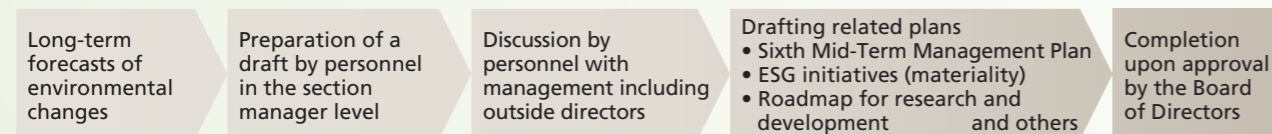
Based on the "Four Re's" formula, we strive for innovation in energy technology, endeavor to address the challenges facing society through the development of mobility and other public infrastructures, and seek to create comfortable living environments and play our part in the global effort toward sustainability.



Overall picture of Vision 2035



Vision 2035 formulation process



Business environment and value provided

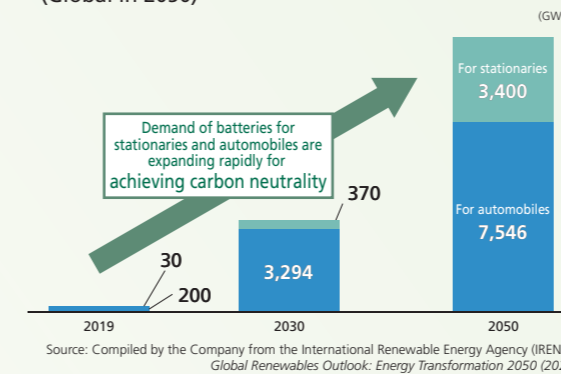
As global markets change in the lead up to 2050, we are aware that economic and social transformations due to resource and environmental constraints as well as other developments are mega trends that are deeply related to our business. Among the changes in the Company's business environment is the projected expansion of global demand for storage batteries from 230 GWh in 2019 to approximately 10,000 GWh in 2050 as efforts are made to achieve carbon neutrality. By backcasting from these types of forecasts, we have adopted a policy of focusing on mobility and public infrastructure.

Mega trend toward 2050

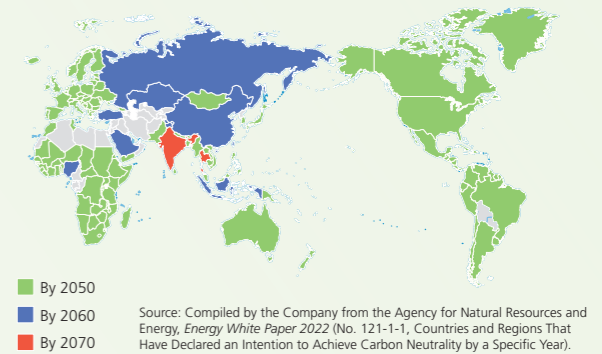


Business environment surrounding GS Yuasa

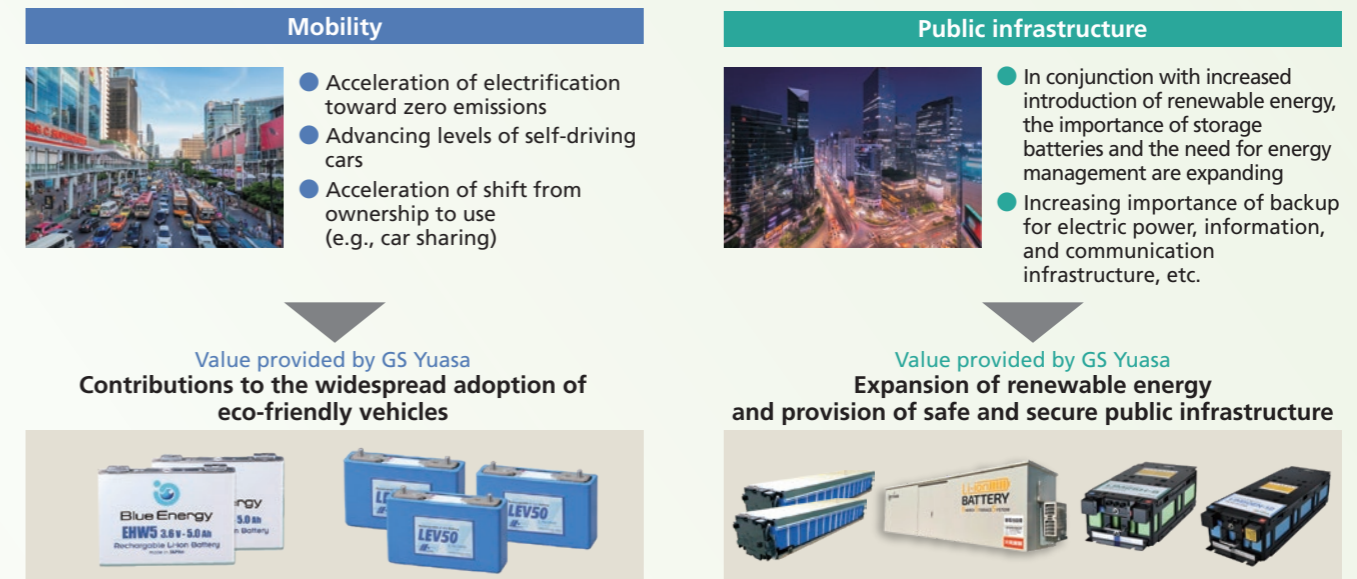
Forecast of storage batteries installation (Global in 2050)



Countries and regions that have declared an intention to achieve carbon neutrality by a specific year



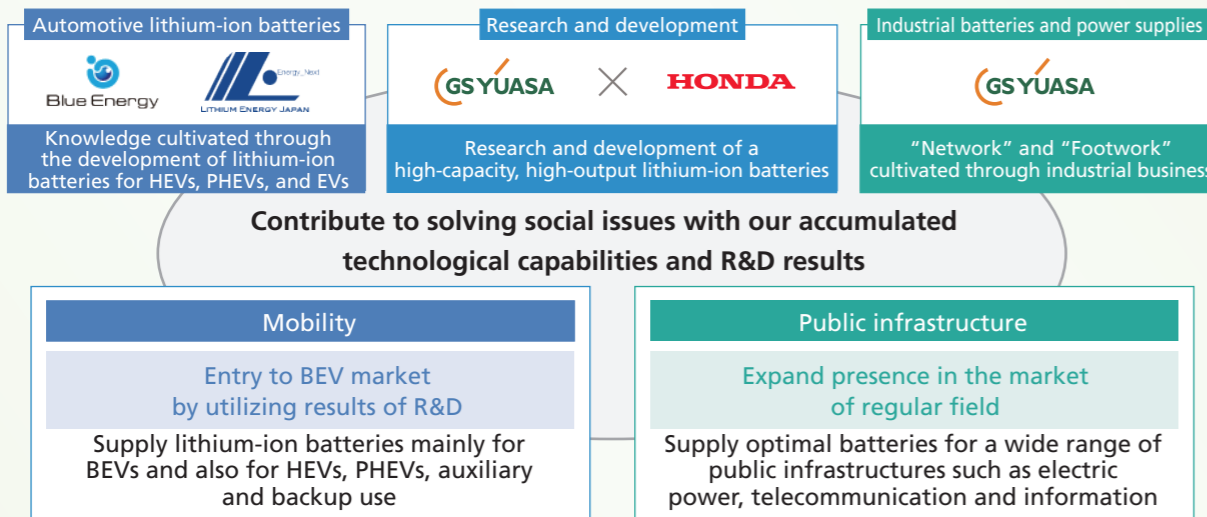
Value provided by GS Yuasa



Key points of “Innovation and Growth” for achieving Vision 2035

To achieve Vision 2035, we will advance “Innovation and Growth” with a focus on mobility and public infrastructure, contributing to solutions to social problems. We will leverage the knowledge of Blue Energy and Lithium Energy Japan concerning lithium-ion batteries for hybrid electric vehicles (HEVs), plug-in hybrid electric vehicles (PHEVs), and electric vehicles (EVs) acquired through the automotive lithium-ion battery business, the technology accumulated in the industrial battery business, and our network and footwork for delivering safety and peace of mind through maintenance and service. We will also conduct research and development of high-capacity, high-output lithium-ion batteries as part of our collaboration with Honda Motor Co., Ltd. We will use this expertise, technological capabilities, and R&D results in the mobility and public infrastructure fields.

In the mobility field, we will leverage the results of research and development to supply lithium-ion batteries, mainly for battery electric vehicles (BEVs), contributing to the advancement of mobility. In the public infrastructure field, we will use our supply capabilities, which we developed with batteries for BEVs, to expand our presence in growing regular (renewable energy) field markets and supply batteries that are optimal for a wide range of infrastructure including electric power, telecommunications, and information, supporting public infrastructure that provides safety and peace of mind.



Mobility: Strategy for lithium-ion batteries for BEVs

By using the results of research and development conducted by a new company established with Honda Motor for mass production of lithium-ion batteries for BEVs, the pillar of the mobility business, we plan to start operation of a production line in April 2027 and start full-scale mass production in October of that year. We will supply the batteries mainly to Japanese automakers, and by launching a series of production lines through 2030, the combined production capacity of GS Yuasa, Honda Motor, and Blue Energy will reach 20 GWh/year. We will later seek to expand production capacity within the GS Yuasa Group alone to more than 20 GWh/year by 2035.

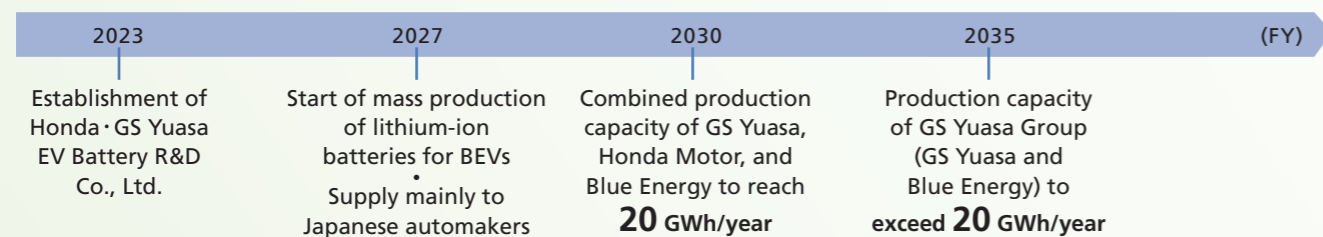
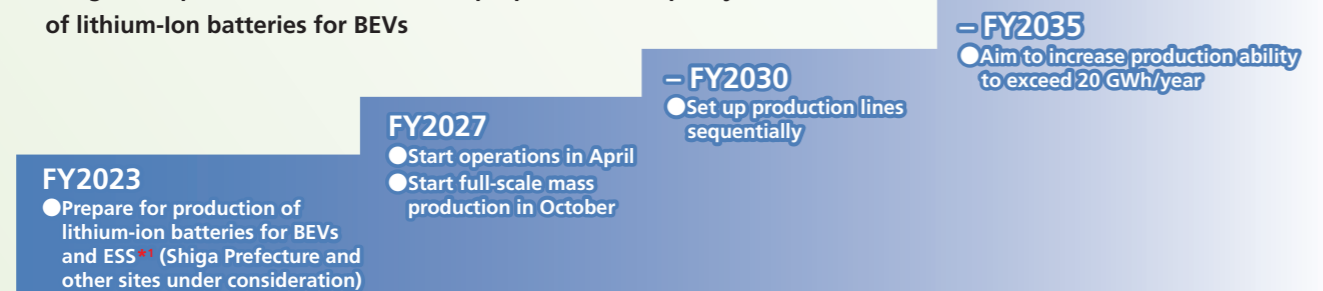


Image of expansion of GS Yuasa Group’s production capacity of lithium-ion batteries for BEVs



*1 Energy Storage System

Establishment of Honda·GS Yuasa EV Battery R&D Co., Ltd.

In July 2023, GS Yuasa and Honda Motor established Honda·GS Yuasa EV Battery R&D Co., Ltd. to collaborate on high-capacity, high-output lithium-ion batteries with a focus on use in BEVs.



A scene of the opening ceremony

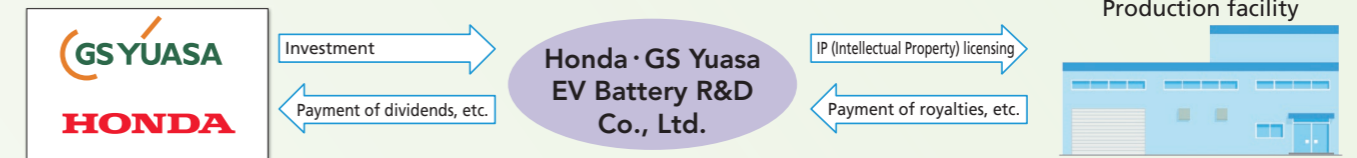
Overview of new company

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% (the joint venture company is subject to the equity method)

A broad scope of collaborations

- Research and development of a high-capacity, high-output lithium-ion batteries, 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

Image of business by the new company



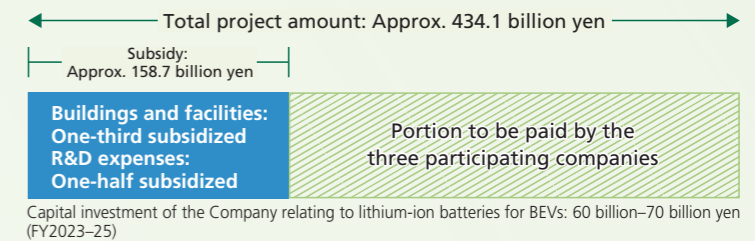
Production of lithium-ion batteries for BEVs by using subsidies (Project for Securing Supplies of Storage Batteries)

The joint research and development to be conducted by the Company and Honda Motor and the mass production investment plan including Blue Energy was approved by the Ministry of Economy, Trade and Industry as a Project for Securing Supplies of Storage Batteries. The subsidy amount is approximately 158.7 billion yen, which will cover one-third of the buildings and facilities (excluding land) and one-half of the R&D expenses. Using this subsidy will further accelerate our initiatives concerning lithium-ion batteries for BEVs.

Overview of the subsidy

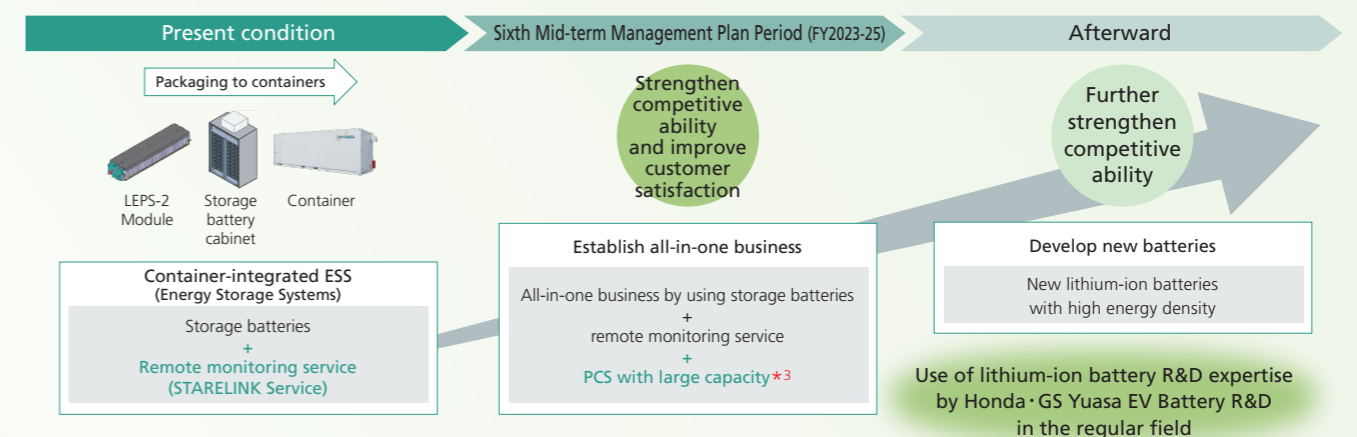
Companies name	GS Yuasa International Ltd. / Honda Motor Co., Ltd. / Blue Energy Co., Ltd.
Total amount	Approx. 434.1 billion yen
Amount of subsidy	Approx. 158.7 billion yen (maximum)
Production scale	20 GWh (in Japan)

Prospective breakdown of the subsidy



Public infrastructure: Strategy for the regular field

Under national policy, numerous subsidies relating to carbon neutrality are planned. In connection with this, it is expected that the introduction of renewable energy will expand, and the importance of ESS for controlling fluctuations and adjusting supply and demand is increasing. The competitive environment in the regular field is challenging, particularly with regard to renewable energy, and to increase profitability, in addition to the sale of products, like our container-integrated ESS, we will develop business models that can secure profits over the long term through the “Koto-zukuri (service creation) business” including STARELINK services.*2



*2 Maintenance services that use proprietary remote monitoring technology and forecasting and preventive technologies. Preventive maintenance services that use AI and DX are provided to maintain the stable operations and optimal control essential for power generating facilities that are used for extended periods.

*3 Power conditioners

Business structure reforms and business growth through 2035

Automotive batteries, currently centered on lead-acid starter batteries, is undergoing a gradual decline over the long term, but we will secure funds for investment in growth areas by optimizing regional strategies. Lithium-ion batteries for HEVs are expected to expand until the mid-2030s, after which they will see a gradual decline. Industrial batteries and power supplies play a role in the maintenance of public infrastructure, and demand is expected to remain stable. Areas that will undergo significant growth in the periods until 2035 and 2050 are high-capacity, high-output lithium-ion batteries, primarily for BEV use and the regular field. We will provide innovative storage battery technologies for mobility and public infrastructure. Starting in about 2035, we will nurture new businesses that contribute to society by utilizing the technologies that we have acquired through new initiatives.

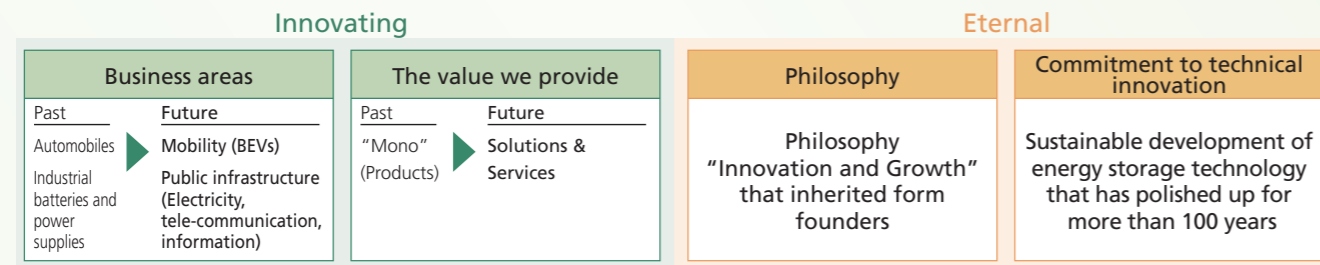


Image of Business Structure Reforms

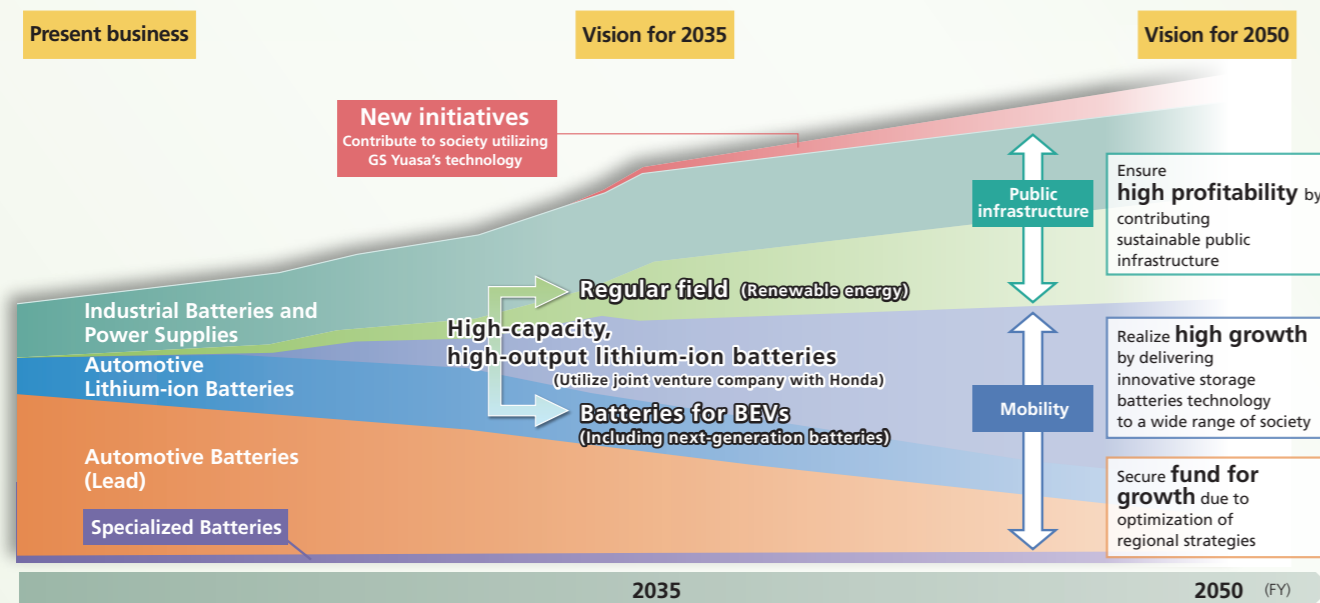
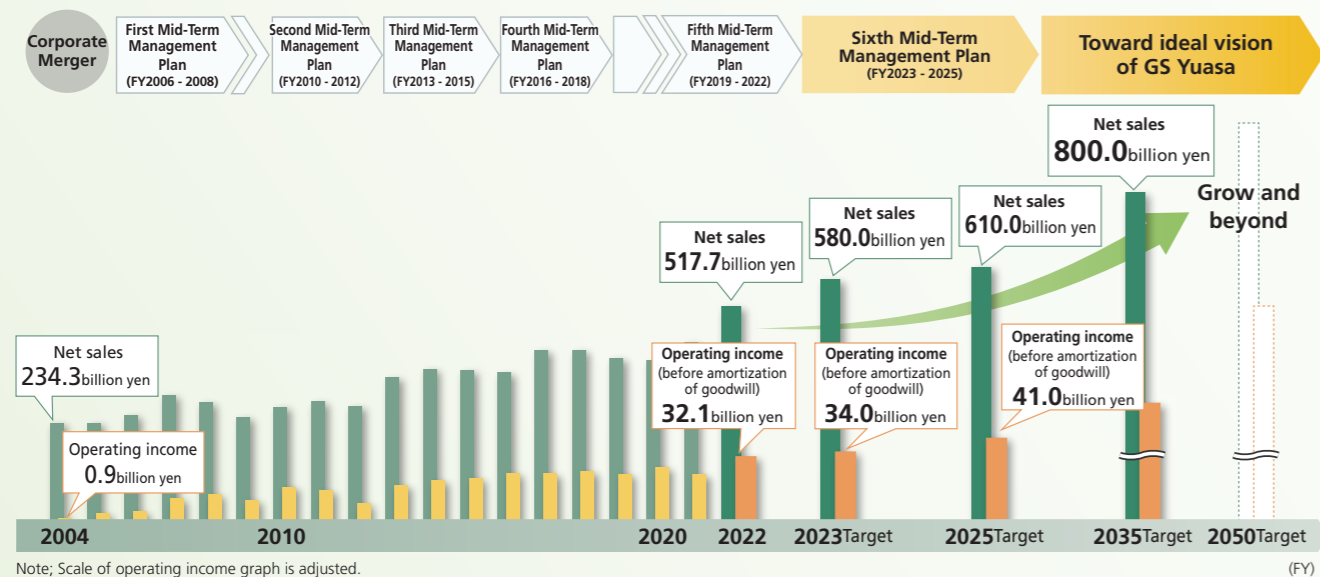


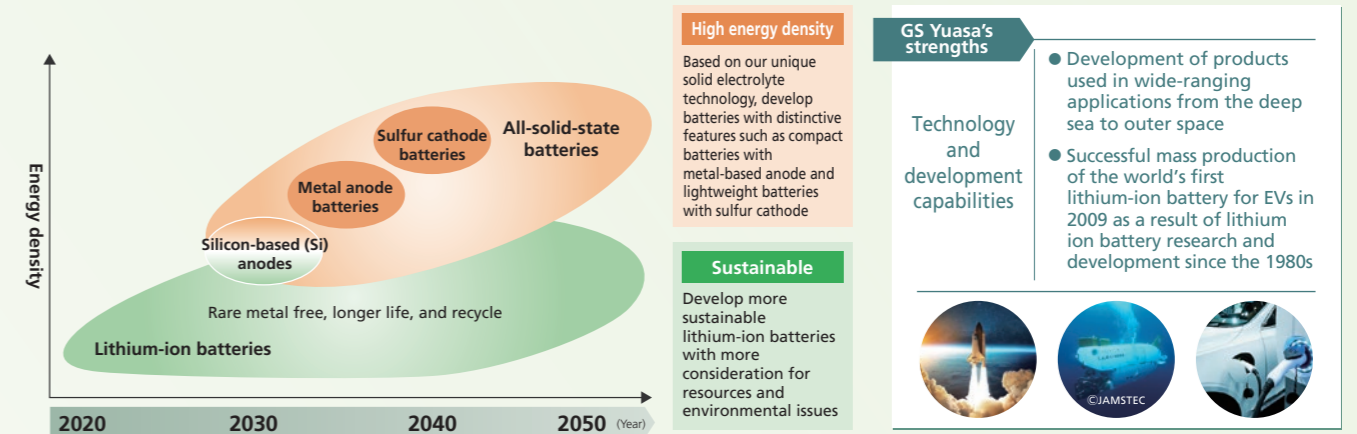
Image of Business Growth



In Focus R&D Initiatives

→ P.51 R&D Department Roundtable Discussion

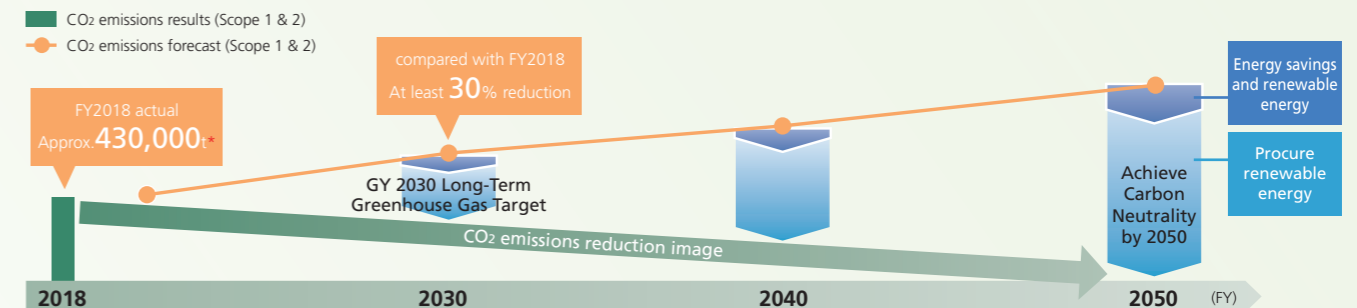
Liquid electrolyte lithium-ion batteries as they currently exist will evolve into batteries free from the use of rare metals, possessing longer lives, and capable of being recycled. As such, we will continue to develop more sustainable batteries with more consideration for resources and environmental issues. Regarding all-solid-state batteries, we are aiming to achieve higher energy density, and will be developing batteries with distinctive features, based on our unique solid electrolyte technology.



In Focus GY 2050 Carbon Neutrality Target

→ P.60

We have announced its commitment to achieving carbon neutrality by fiscal 2050 in terms of Scope 1 and Scope 2 emissions. Adding to the GY 2030 Long-Term Greenhouse Gas Target, which was announced in fiscal 2021, we will be enacting further energy savings and the use of renewable energy, as well as initiatives within the procurement of renewable energy. Through these, we will be achieving carbon neutrality. Additionally, the products we supply make a contribution to the reduction of CO₂ emissions throughout society as a whole.



* Since adoption of the Sixth Mid-Term Management Plan, GS Yuasa Group's CO₂ emissions aggregation standards were changed, and we are undergoing third-party re-verification for FY2018.
 (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.

Efforts through achieving carbon neutrality

- Promote energy-saving measures
- Promote of generating renewable energy
- Procure renewable energy

Vision 2035 (long-term vision) website

The website features materials including briefing videos and explanatory presentations, and briefly explains the key points of Vision 2035 in an easy-to-understand manner. Please access the site for more information.



▶ <https://ir.gs-yuasa.com/en/ir/management/plan.html>

Measures to increase employee understanding about Vision 2035

- In-house briefing conducted by the president
- Production and distribution of booklets

