

Environment

Developing and popularizing environmentally considered products

Materiality

- Market expansion for our products contained in environmentally conscious products (for use in low-emission vehicles, etc.)
- Development of products enhancing environmental performance

Popularizing environmentally considered products

Indicator	Target (FY2021)
Percentage of environmentally considered products in total sales of all products	35% or more

The GS Yuasa Group defines environmentally considered products as those products that help mitigate global warming, and we are actively working to develop and popularize such products.

In fiscal 2019 we started incorporating into the Group's Mid-Term Management Plan sales targets for environmentally considered products, making it part of our business strategy to work on climate change through the products we provide to customers.

The sales ratio of environmentally considered products in fiscal 2019 was 34%. We have achieved our annual target (28% or more) by increasing sales of vehicles with start-stop systems (ISS: idling stop systems) with that achieve low fuel consumption and products for power generation systems that utilize renewable energy. Going forward, we will continue to promote activities to provide customers with products that meet market needs related to global warming.

Examples of environmentally considered products

Item	Description
Batteries for ISS vehicles	Batteries for ISS vehicles for improving gas mileage by allowing the engine to stop instead of idling to reduce fuel consumption
Storage battery system	A system to effectively utilize renewable energy (power conditioners, lithium-ion battery, etc.)
Automotive lithium-ion batteries	Hybrid vehicle (HEV) batteries and electric vehicle (EV) batteries that contribute significantly to reducing greenhouse gases

Promoting environmental protection

Materiality

- Promotion of effective use of water resources
- Contribution to realization of low-carbon society
- Prevention of environmental pollution (thorough environmental risk management)
- Improvement in ratio of use of recycled materials in products provided to markets

Reduction of CO₂ emissions

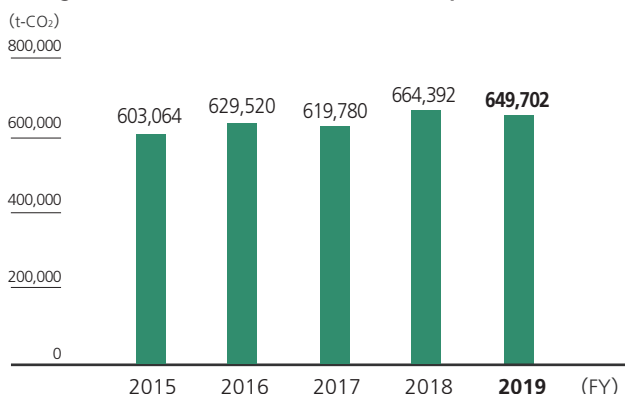
Indicator	Target (FY2021)
CO ₂ emissions	6% reduction compared to fiscal 2018

The Group is working to reduce CO₂ emissions in production activities worldwide. From fiscal 2019, we have incorporated global reduction targets into our Mid-Term Management Plan.

With the reduction rate of CO₂ emissions being 2% in fiscal 2019, we have achieved our target for the year (2% or more). We believe energy saving activities in production processes such as storage battery charging processes and the parts manufacturing processes contributed to the achievement of the targets.

In the future as well, we are committed to continued efforts to reduce greenhouse gas emissions through activities that enhance operational efficiency.

Changes in the CO₂ emissions for the Group*



* We have been expanding the scope of application since fiscal 2018.

Environment

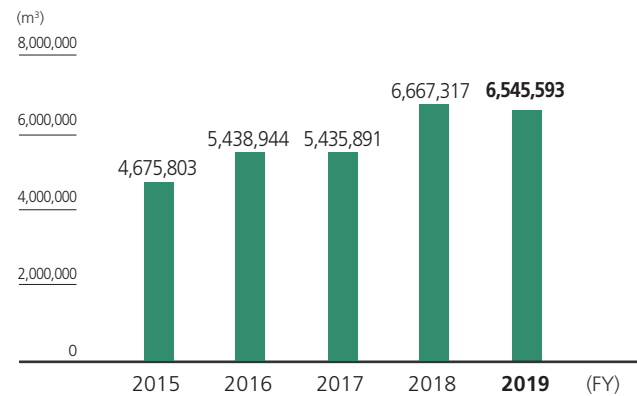
Reduction of water consumption

Indicator	Target (FY2021)
Water consumption	8% reduction compared to fiscal 2018

The Group is working to reduce water consumption in production activities worldwide. From fiscal 2019, we have incorporated global reduction targets into our Mid-Term Management Plan.

With the water consumption reduction rate in fiscal 2019 being 2%, the annual target (3% or above) could not be achieved. This was due to some problems including issues with the water circulation facilities at our domestic business sites, but we are committed to continue conducting activities to promote recycling of water.

Changes in the water consumption for the Group*



* We have been expanding the scope of application since fiscal 2018.

Appropriate environmental information disclosure

The Group conducts information disclosure in response to the CDP. The CDP requires companies to disclose information of environmental strategies based on the needs of institutional investors and customers.

For the volume of greenhouse gas emissions, we disclose information for which the authenticity of data has been secured through third-party verification.* We are also promoting disclosure of information on performance and countermeasures with regards to water risks.

In the future as well, we are committed to working on disclosure of appropriate environmental information in response to the needs of various stakeholders.

* We have received third-party verification from SGS Japan Inc.

Increasing ratio of recycled lead used in products

Indicator	Target (FY2021)
Ratio of recycled lead used as lead raw materials in lead-acid batteries	35% or more

The GS Yuasa Group is working to increase the usage ratio of recycled lead—the primary material used in lead-acid batteries, one of our core products.

In fiscal 2019 we started taking action to work toward a recycling-oriented society as part of our business strategy by incorporating targets for the usage ratio of recycled lead into the Mid-Term Management Plan.

The GS Yuasa Group has been taking action to recycle our post-use products by building and operating a recycling system based on extended producer responsibility (EPR). Going forward, we also plan to strengthen our efforts to promote the use of recycled materials in our products.

With the ratio of recycled lead used being 42% for fiscal 2019, we have achieved the annual target (31% or more). We believe that this can be attributed to the speedy improvement in the usage rate of recycled lead at overseas Group companies that led to a significantly higher use of recycled lead for lead-acid batteries than initially estimated. We are committed to continued efforts to maintain and improve this level.

Initiatives for the Task Force on Climate-related Financial Disclosures (TCFD)*1

In the recommendations published by the TCFD in June 2017, in order to stabilize financial markets through a smooth transition to a low-carbon society, companies are being called on to disclose information on medium- to long-term climate-related risks and opportunities and their financial impact.

In December 2019, the GS Yuasa Group expressed its support for the TCFD recommendations and affirmed its participation in the TCFD Consortium.

The GS Yuasa Group recognizes that climate-related issues that may have a significant long-term impact on corporate management are important management issues, and believes that it is necessary to promote strategies for responding to such issues. For this, the Group initiated the work of examining risks and opportunities based on climate change scenarios in fiscal 2019 that took into account the information disclosure scheme proposed by the TCFD. We are promoting analysis of risks and opportunities in respective scenarios taking as basis the 2°C scenario, which assumes that a low-carbon society has

been realized through the achievement of the goal*2 related to the increasing global average temperature, and the 4°C scenario, which assumes that this goal has not been achieved and global warming has progressed.

The following table lists the risks and opportunities being currently examined as potential candidates. In particular, trends in the automotive market affecting the automotive battery business, which is our main product, are considered important in terms of both risks and opportunities. In addition, the spread of renewable energy on a global scale is being seen as a major opportunity to expand sales of storage battery systems.

In the future, we are committed to promoting identification of risks and opportunities using the TCFD and to the development of business strategies, as well as to making concerted efforts for appropriate disclosure of information related to climate change.



*1 An organization established by the Financial Stability Board at the request of G20 for examining climate-related information disclosure and ways in which financial institutions can respond
 *2 The goal of keeping the global average temperature increase well below 2°C compared to the pre-Industrial Revolution levels

Risks and opportunities being examined as potential candidates

Classification	Area	Value Chain Stage	Content
Opportunities	Products and Services	Sales	With the spread of renewable energy, it is expected that there will be an increase in the demand for large-scale storage batteries for power storage facilities necessary for power supply stabilization. Sales are expected to increase through the development of power storage systems and product development that meet market needs.
	Products and Services	Sales	The below 2°C and the 2°C scenarios suggest that the market for gasoline cars will expand in the medium term and HEVs and EVs will become popular in the long term. By launching products that meet the market needs at the right time, we expect to see an increase in market share.
Transition Risks	Regulations	Procurement	The 2°C scenario suggests that carbon taxes will be increased to meet each country's CO ₂ emission reduction targets and costs of procurement of energy from fossil fuels will increase. Additional initiatives for energy conservation and use of renewable energy will become important.
	Markets	Sales	Considering the implications of below 2°C and 2°C scenarios, as well as regulatory planning conditions including for gasoline vehicles in Europe, it is expected that the gasoline vehicle market will shrink significantly in the long term. It is necessary to transform business models to respond to market changes.
Physical Risks	Short-term Risks	Direct Operations, Procurement	There are concerns about suspension of operations at our company plants and disruption of the supply chain due to flood damage caused by abnormal weather. A survey to analyze and evaluate losses caused by flood damage at our company plants has been conducted from fiscal 2019.
	Long-term Risks	Direct Operations	Some overseas affiliated companies have concerns about the future risk of drought in a 4°C scenario. It is necessary to adopt measures including reduction in the amount of water used and promoting water reuse to ensure sufficient water for business activities.