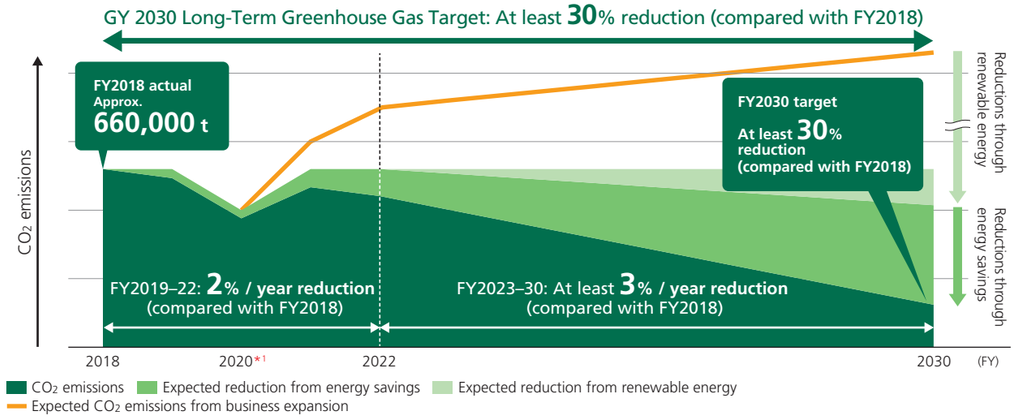
GY 2030 Long-Term Greenhouse Gas Target

Overview

We recognize climate change associated with global warming to be an important issue for society and are thus promoting the reduction of CO_2 emissions from our business activities. In May 2021 we established the "GY 2030 Long-Term Greenhouse Gas Target," our goal for reducing CO_2 emissions through fiscal 2030. To fulfill our responsibilities as a company in preparing for the transition to a decarbonized society, we are engaged in a variety of measures aimed at reducing CO_2 emissions from our business activities by at least 30% versus fiscal 2018 by fiscal 2030.

Target	**Reduce FY2030 CO_2 emissions by at least 30%**
Base year	FY2018
Period	**12 years** (FY2019 – 2030)
Rate of reduction	FY2019 – 2022: **6%** (2% / year)　FY2023 – 2030: At least **24%** (at least 3% / year)

Road map for reducing CO_2 emissions



*1 Emissions fell in fiscal 2020 due to the impact of the COVID-19 pandemic.

TOPIC

Conclusion of sustainability-linked loan agreement

On July 19, 2021, the Company concluded a sustainability-linked loan*2 (SLL) agreement with MUFG Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited, the Bank of Kyoto, Ltd., and Shiga Bank, Ltd.

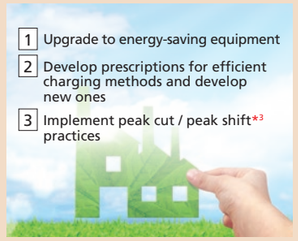
In line with the "GY 2030 Long-Term Greenhouse Gas Target", we set the sustainability performance target relating to the relevant indicator as a "reduction of CO_2 emissions by 15% from the fiscal 2018 level by fiscal 2025 as a milestone toward a reduction by at least 30% from the fiscal 2018 level by fiscal 2030." By donating the interest benefits gained by meeting this target to the Kyoto Citizens Environment Fund, in addition to the enhancement of our corporate value through ESG-related initiatives, we aim to contribute to the sound and sustained development of the regional community.

*2 SLLs are loans in which the financial institution evaluates the extent to which the borrowing company achieves its targets toward the solution of environmental and social issues and, depending on the extent of achievement, the borrowing company acquires benefits, such as lower interest rates.

Three measures for achieving the target

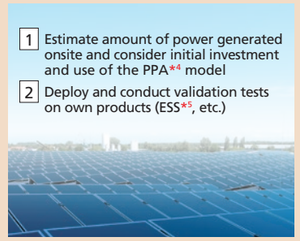
Measure 1 Promote energy-saving measures

1 Upgrade to energy-saving equipment
2 Develop prescriptions for efficient charging methods and develop new ones
3 Implement peak cut / peak shift*3 practices



Measure 2 Captive consumption of renewable energy (solar power generation, etc.)

1 Estimate amount of power generated onsite and consider initial investment and use of the PPA*4 model
2 Deploy and conduct validation tests on own products (ESS*5, etc.)



Measure 3 Procure renewable energy

1 Purchase electric power that uses renewable energy
2 Utilize emissions trading

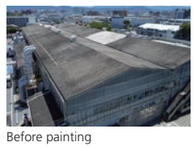
*3 Peak cut: Reducing electric power usage during peak hours at factories, etc.; Peak shift: Shifting the hours of electric power usage at factories, etc. from peak hours of electric power demand
*4 Acronym for Power Purchase Agreement, an agreement between the power generator and the consumer for the sale of electric power
*5 Energy Storage System

Examples of initiatives to date

Measure 1 Reduction of energy consumed by air-conditioning equipment by heat-shield paining of Kyoto Plant rooftop　Japan

We are making an effort to reduce the amount of energy consumed by air-conditioning equipment by heat-shield painting of our Kyoto Plant's rooftop, which restrains the rise of indoor temperatures.

In fiscal 2019 energy consumption was reduced by about 170 MWh in the building that underwent heat-shield painting; this was the equivalent of saving about 10% of the building's electricity consumption.


Before painting


The roof of the plant after heat-shield painting

Measure 3 100% shift to electricity derived from renewable energy sources at Kyoto Head Office Plant　Japan

On November 1, 2021, GS Yuasa concluded an agreement with Kansai Electric Power Co., Inc. to switch all the electricity used at the Kyoto Plant, which amounts to about 100 GWh / year, to electricity derived 100% from substantially renewable energy using non-fossil certificates.*6

As a result of this shift, the ratio of electricity derived from renewable energy sources used at business sites in Japan is expected to reach 30% (compared to result in fiscal 2020), and CO_2 emissions are estimated to drop by the equivalent of 50,000 t.*7

*6 Certificates separating the non-fossil fuel value of electricity generated from non-fossil energy sources (methods of generating electricity without using such fossil fuels as natural gas, coal, and oil).
*7 Calculated from the fiscal 2016 CO_2 emissions coefficient, which is GS Yuasa's standard.

Measure 2 Deploying solar power generation　Overseas　Japan

■ Vietnamese site (GS Battery Vietnam Co., Ltd.)

In December 2020 GS Battery Vietnam installed and began to operate solar power generation systems incorporating our Group's industrial storage batteries. These solar power generation systems also contribute to the reduction of CO_2 emissions by supplying electricity from the storage batteries and thereby covering part of the nighttime power consumption. In addition, the generated electricity is consumed as office electricity, and a contract has been concluded to sell surplus electricity to an electric power company.


The installed solar panels


GS Yuasa's industrial storage batteries for peak-shift

■ Blue Energy Second Plant

Blue Energy Co., Ltd. has installed a solar power generation system with a rated capacity of 250 kW on the roof of its second plant, which began operations in April 2022. The generated electricity is wholly used inside our Osadano Plant including its second plant.

As a result, CO_2 emissions will be reduced by an estimated 162 t-CO_2 / year.


The installed solar panels