Through our business we are contributing to achievement of the Sustainable Development Goals.

Mobility

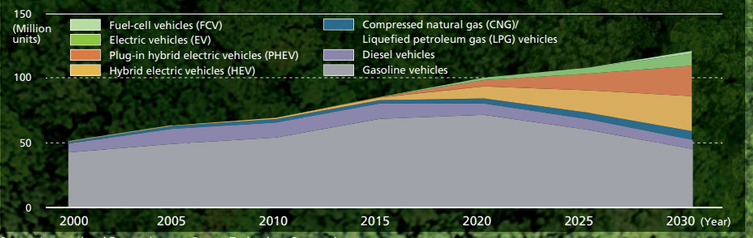
Supplying the necessary key components for the diffusion of eco-vehicles

Since emissions of carbon dioxide (CO_2) from the more than 1.3 billion vehicles on roads around the world are having an impact on global warming, regulations on CO_2 emissions and fuel consumption are becoming increasingly stringent in various regions. For this reason, the diffusion of eco-friendly vehicles, such as hybrid electric (HEVs), plug-in hybrid electric (PHEVs), and electric vehicles (EVs), is advancing. And even in the case of conventional gasoline vehicles, the standardization of start-stop functions designed to contribute to the improvement of fuel consumption is progressing.

Our Group's products are playing an important role in this shift to eco-vehicles and the electrification of automobiles.

For example, to increase the traveling distance of EVs and PHEVs, for which demand is increasing, it is necessary to vastly improve storage battery performance. We are tackling the challenge of making lithium-ion batteries better performing, cheaper, and longer-lasting.

Global Market Forecast for Automobiles



Source: International Energy Agency, *Energy Technology Perspectives 2015*

Automotive lead-acid batteries

- We have secured the second largest share of the global market for these products.
- Our product development strength has enabled quick responses to new demand, such as our lead-acid batteries for vehicles with start-stop systems.

Automotive lithium-ion batteries

- We established a mass production system ahead of competitors.
- These batteries have been widely adopted by automakers worldwide.
- Numerous market hits

Through our business we are contributing to achievement of the Sustainable Development Goals.

Renewable Energies

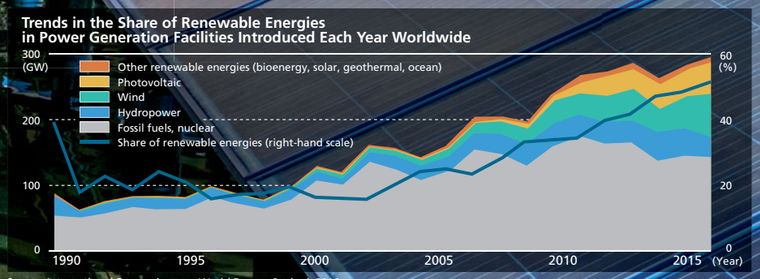
Contributing to the increased use of power source systems and storage battery technology using renewable energies

Since worldwide energy demand is increasing as a result of burgeoning populations and economic growth, it is necessary to expand the use of renewable energies to replace the limited fossil fuels, such as oil and coal. The introduction of power source systems and storage batteries to stabilize output fluctuations is essential for the effective use of energy from photovoltaic or wind power generation.

Our Group's products are attracting much attention as indispensable items for the diffusion of photovoltaic and wind power generation.

In order to utilize energy generated from solar power without waste, we are improving the conversion efficiency of power conditioners and pursuing technology. Furthermore, in Japan we are engaged in the design and building of entire photovoltaic power generation systems.

Trends in the Share of Renewable Energies in Power Generation Facilities Introduced Each Year Worldwide



Source: International Energy Agency, *World Energy Outlook 2016*

Storage battery system

- This system contributes to the effective use of energy through higher electricity conversion efficiency and little loss.

Power conditioners for photovoltaic power plants

- With a product lineup from 4.5 to 250 kilowatts, these power conditioners are used in plants of all sizes, including small-scale facilities and mega solar plants.
- By combining solar panels and storage batteries, plant operators can build storage systems for on-site power use.

Through our business we are contributing to achievement of the Sustainable Development Goals.

Infrastruc ture

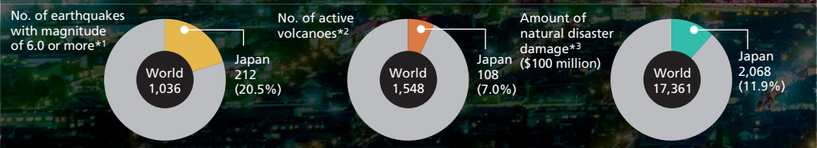
Contributing to power stabilization in social infrastructure with power backup equipment

In an age when electricity is needed for all kinds of things, the activities of society would come to a halt if the supply of electricity were cut off. Therefore, backup power sources assuming the stoppage of power supplies at times of natural disaster, such as flooding or earthquakes, are becoming increasingly important.

With their outstanding quality and reliability, our Group's products are safeguarding society's basic infrastructure. In addition, we are contributing to the continuity of business in office buildings and plants in the event of a large natural disaster.

Japan is a country prone to such natural disasters as typhoons, earthquakes, and volcanic eruptions. To fulfill our responsibility vis-à-vis some social infrastructure, we have organized a setup providing total support from product development to installation and maintenance.

Japan's Share of the World's Natural Disasters



*1: Total for 2000–9. Compiled by the Japanese Cabinet Office based on hypocenter materials of the Japan Meteorological Agency for Japan and the United States Geological Survey for the rest of the world.
*2: Active volcanoes are volcanoes, etc. that have erupted in the last 10,000 years or so. Compiled by the Japanese Cabinet Office based on volcano materials of the Japan Meteorological Agency for Japan and the Smithsonian's National Museum of Natural History in the United States for the rest of the world.
*3: Total for 1979–2008. Compiled by the Japanese Cabinet Office based on materials of the Centre for Research on the Epidemiology of Disasters (CRED).

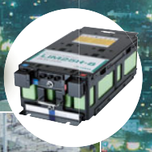
Source: Japanese Cabinet Office, *White Paper on Disaster Management 2010*, Diagram 1-1-1

DC power supply

- Ranging from general purpose to specialized power supplies, our product lineup meets all kinds of demand from customers.
- GS Yuasa's network of over 100 service centers across Japan provides unmatched customer support.

AC uninterruptible power supply

Industrial lithium-ion batteries



- Customers can choose from among high-capacity types or fast-charging and more powerful types to suit their needs.
- We have created a highly competitive product lineup by utilizing automotive lithium-ion batteries.