

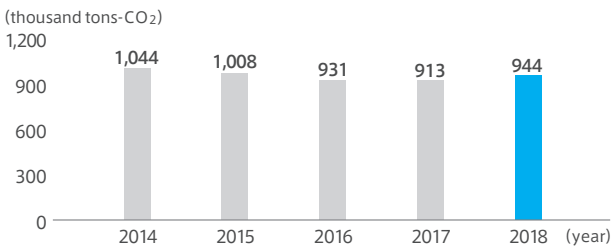
Combating Global Warming

To reduce electric power consumption for the production of silicon wafer, the SUMCO Group makes every effort to streamline production and promote rationalization. When it comes time to update production and utility facilities, we replace them with energy-saving and high-efficiency alternatives.

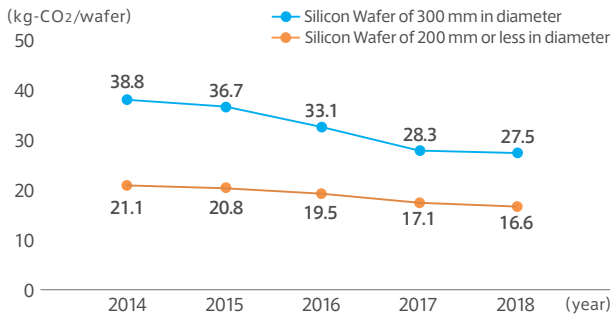
In offices, lighting is turned off during lunchtime and other breaks, and air conditioners are set at a reasonable temperature to save energy and reduce CO₂ emissions.

The SUMCO Group (Japan) also participates in the "Commitment to a Low Carbon Society" of the electric and electronic industry as a part of efforts to address the issues of climate change, and strives to combat global warming.

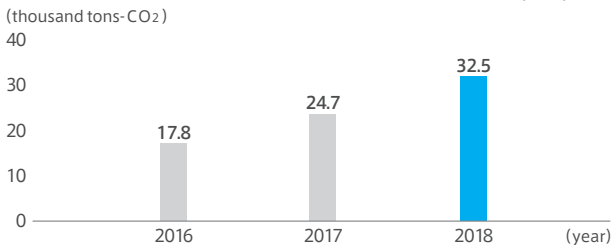
CO₂ Emissions (SUMCO Group)



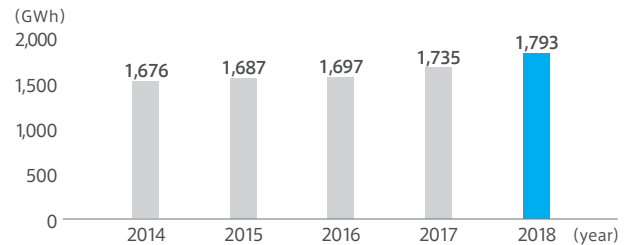
CO₂ Emissions per Silicon Wafer (sales)



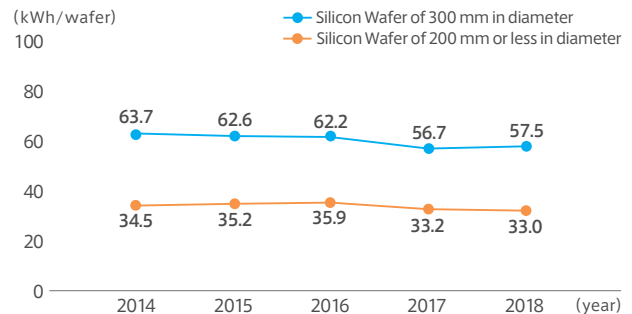
Cumulative Reduction of CO₂ Emissions (the SUMCO Group [Japan])



Electric Power Consumption (SUMCO Group)



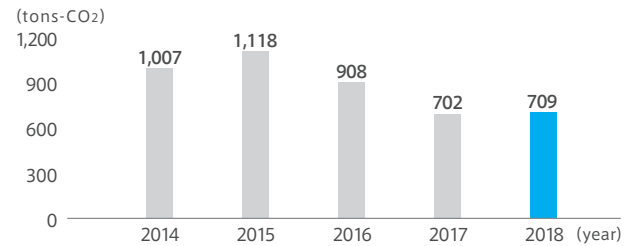
Electric Power Consumption per Silicon Wafer (sales)



CO₂ Reduction through Modal Shift to Ship Transport in the Field of Logistics

SUMCO used to rely solely on airfreight for the transportation of silicon wafers to overseas markets. However, to reduce both CO₂ emissions and transportation costs, we have been promoting a modal shift to ship transport for some of our products since 2009, taking into account factors affected by longer transportation lead time and changes in the transportation environment. We conduct tests before switching to ship transport to confirm that the quality of products is not affected, as well as consulting with customers.

CO₂ Reduction through Modal Shift to Ship Transport



Reduction of Waste

To reduce the large volume of sludge generated at our plants, the SUMCO Group (Japan) are making efforts to optimize the quantity of chemicals injected for wastewater treatment. As for waste oil, waste acid, waste alkali, waste plastics and other waste, we are promoting both their recycling and their conversion into valuable resources.

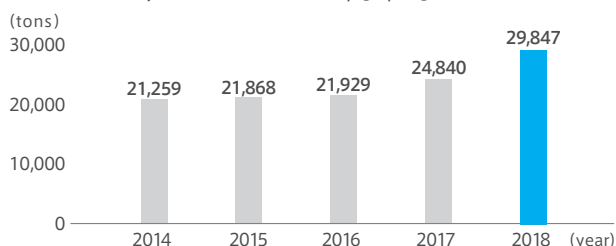
Waste Reduction through the Adoption of Reusable Containers

We are replacing the containers used to ship 300-mm diameter silicon wafers with reusable alternatives as one of the initiatives to reduce post-delivery waste.

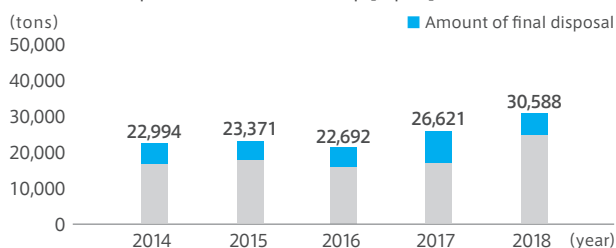
The percentage of reusable containers used for shipment in 2018 was 62.6%.

Before introducing reusable containers, we conduct tests to ensure that the quality of the products is not affected.

Amount of Recycle (the SUMCO Group [Japan])



Amount of Disposal (the SUMCO Group [Japan])

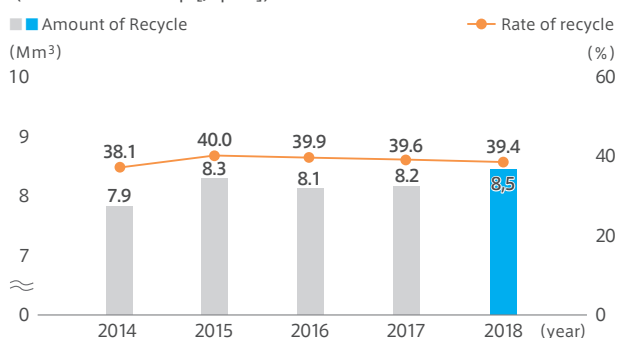


Effective Use of Water Resources

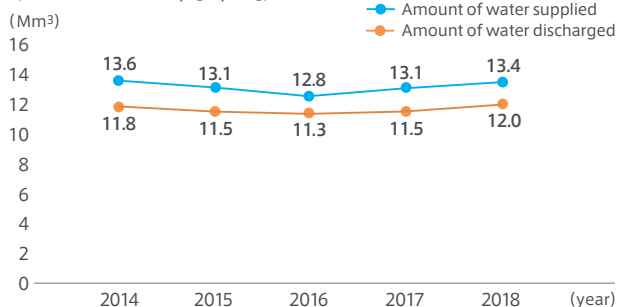
To ensure the effective use of water resources, we utilize the reject water generated in the water purification process as cooling water for utility facilities and dilution water for wastewater treatment chemicals. We also pursue initiatives to conserve as much water as possible for recycling, such as collecting the rinse water used to clean silicon wafers.

Our water recycling rate hovers at around 40% and was 39.4% in 2018.

Amount of Water Recycled and Recycling Rate (the SUMCO Group [Japan])



Amount of Water Supplied and Discharged (the SUMCO Group [Japan])



Amount of Water Consumption by Water Source (the SUMCO Group [Japan])

