

Strengthening Murata's response to climate change

Background of setting the material issues

Climate change has caused a variety of environmental issues around the world in recent years. Murata aims for a continuous cycle of social value and economic value by promoting climate change countermeasures from the perspective of both its own environmental initiatives and its business activities, in accordance with the Murata Philosophy. Murata has set this key issue in order to contribute to the decarbonization of society.

Our goal

We aim to reduce the amount of greenhouse gases (GHG) emitted during manufacturing, by operating in accordance with RE100*1 and SBT.

Fiscal 2024 targets	<ul style="list-style-type: none"> GHG emissions (vs. fiscal 2019) Scope 1 + Scope 2: 1.28 million t-CO₂e (20% reduction) Renewable energy implementation rate: 25%
Fiscal 2030 targets	<ul style="list-style-type: none"> GHG emissions (vs. fiscal 2019) Scope 1 + Scope 2: 0.87 million t-CO₂e (46% reduction) Scope 3: 3.25 million t-CO₂e (27.5% reduction) Renewable energy implementation rate: 50%
Fiscal 2050 targets	<ul style="list-style-type: none"> Renewable energy implementation rate: 100%

Promoting climate change measures

Murata is working to reduce total GHG emissions by promoting energy conservation and the use of renewable energy, with the Climate Change Committee taking a central role. In addition, the Climate Initiatives Subcommittee, a subordinate organization of the Climate Change Committee, works with the Committee to discuss responses to major climate change initiatives such as RE100 and TCFD*2. In fiscal 2021, Murata acquired SBT certification for our fiscal 2030 GHG emission reduction targets.

Murata has been highly rated even from outside the company such as being selected for the A list in the CDP climate change questionnaire*3 in 2021.

*1 RE100: an international initiative run by the international NGO called "The Climate Group" in which globally influential companies aim for 100% renewable energy.

*2 TCFD: Task Force on Climate-related Financial Disclosures

*3 A questionnaire conducted by CDP, an international environmental NGO, that surveys and evaluates the climate change measures and strategies, etc. of each company.

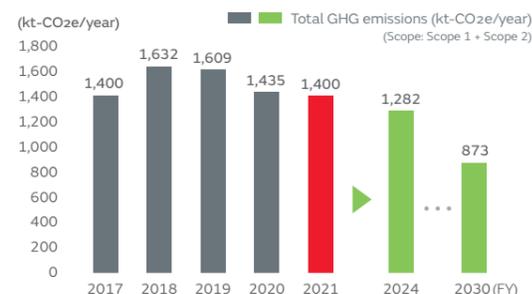
Trends in GHG emissions and reduction efforts

Murata has been involved in implementing energy conservation initiatives and continues to implement anywhere from 450 to 600 energy conservation measures annually (equivalent to 40 to 50 kt-CO₂ reduction). However, recent business expansion has outpaced these efforts, and our GHG emissions have increased in recent years.

In response, Murata has implemented measures to conserve energy and expand renewable energy

sourcing. GHG emissions peaked in fiscal 2018 and decreased to 1.4 million t-CO₂e in fiscal 2021. To achieve our targets for fiscal 2024 and fiscal 2030, we will further accelerate our initiatives going forward.

In order to accumulate future CO₂ reductions, we designed an internal carbon pricing system that encourages decision-making on investment implementation with CO₂ reduction effects by incorporating CO₂ reductions into investment decision indicators, and have been operating the system since fiscal 2021. Moreover, from fiscal 2022 we started a sustainability investment promotion system that reduces the increased costs associated with investments aimed at solving social issues, as well as the burden associated with holding assets, in management accounting.



* CO₂ calculation method
 Location-based: Calculated using the average CO₂ emission coefficient for the power network in that region
 Market-based: Calculated using the CO₂ emission coefficient for each power purchase agreement
 Murata's calculation method changed to the market-based method since fiscal 2019 because market-based calculation is more accurate and has become the mainstream method used in recent years

Obtaining SBT certification for GHG emission reduction targets

Murata has established GHG emission reduction targets by fiscal 2030 based on the 1.5°C scenario for Scope 1 and 2 and the WB2°C scenario for Scope 3. As these targets are based on scientific evidence, we obtained SBT certification by the international initiative "SBTi" in fiscal 2021. This was the first time Murata was able to set a reduction target that included Scope 3.

In Scope 1 and Scope 2, the goal is to reduce emissions through enhanced focus on the energy conservation and renewable energy efforts we have so far promoted. In Scope 3, we will strengthen cooperation among related divisions and promote the reduction of CO₂ throughout the entire supply chain by primarily tackling "CO₂ emissions (Category 1) due to purchased goods and services," which account for a high percentage of emissions, while simultaneously refining our approach to calculating emission volumes.



Introduction of renewable energy

Murata endeavors to expand renewable energy sourcing. As a global company, we have actively promoted the introduction of solar power generation on the roofs and parking lots of our sites, both in Japan and other countries, and we have incorporated the utilization of renewable energy certificates. During fiscal 2021, electricity originating from generation via solar power generation equipment, renewable energy certificate procurement, and other forms of renewable energy reached approximately 600 million kWh (the ratio of renewable energy to the total consumption is about 21%), which is equivalent to a reduction of approximately 330 kt-CO₂. We are continuing to promote the introduction of renewable energy in Japan and overseas to help reduce the environmental load.

As an example of the efforts in fiscal 2021, Kanazu Murata Manufacturing. (Fukui Prefecture) became the first plant in the Murata Group to run on 100%

renewable energy. This was made possible through the introduction of a system which combines large-scale solar panels and Murata storage batteries, along with a menu of renewable energy power from hydroelectric power generation.

This way, Murata will contribute to the realization of a sustainable society by accelerating responses to climate change, combining our products and systems.



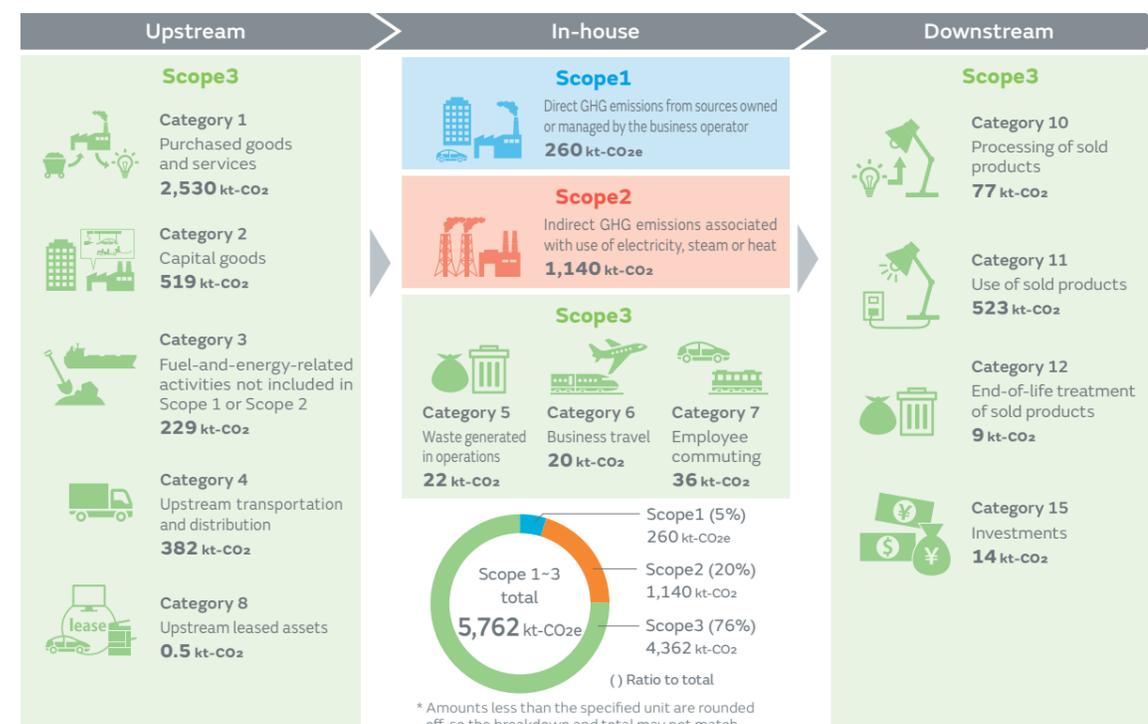
Solar power generation system at Kanazu Murata Manufacturing

TOPICS Procurement of renewable energy-derived electricity

In March 2022, Murata concluded an agreement with The Chugoku Electric Power Co., Inc. for the supply of green energy via solar power generation (offsite agreement) and other services with the introduction of new renewable energy facilities. Thanks to this agreement, all Murata production sites in the Chugoku region will be operating on 50% renewable energy by fiscal 2030. In this way, we will continue to promote the use of renewable energy and to strengthen our efforts to combat climate change. In March 2022, Murata concluded an agreement with The Chugoku Electric Power Co., Inc. for the supply

of green energy via solar power generation (offsite agreement) and other services with the introduction of new renewable energy facilities. Thanks to this agreement, all Murata production sites in the Chugoku region will be operating on 50% renewable energy by fiscal 2030. In this way, we will continue to promote the use of renewable energy and to strengthen our efforts to combat climate change.

For more information on the initiative, please see here.
<https://corporate.murata.com/en-global/newsroom/news/company/csrtopic/2022/0331>



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