

Reducing Water Usage

Targets and Achievements

Considering the increasing importance of water resources worldwide, the Mitsubishi Electric Group is continuously measuring data on water used/reused at all of its 96 business sites in Japan and overseas. These figures are checked on a regular basis for any significant change, and depending on the findings, necessary measures are taken when needed. Any effective case examples are shared with other business sites on occasions such as Key Environmental Personnel Liaison Meetings to be implemented laterally.

Our aim under the 9th Environmental Plan (fiscal 2019–2021) was to reduce water usage per unit of sales by 1% per annum compared to fiscal 2011. Based on this, we engaged in thorough management of water usage/drainage volumes and reducing water usage by saving and reusing water.

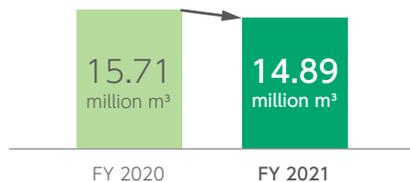
In fiscal 2021, water usage totaled 14.89 million m³ by the Mitsubishi Electric Group, of which 4.55 million m³ was reused water, corresponding to a reuse ratio of 31%. Additionally, water usage per unit of sales was 3.55 (m³/million yen), marking a reduction by 20% compared to the base year (fiscal 2011).

In Japan, water used in production processes was recycled for reuse in the same processes, and treated wastewater was used for flushing toilets and refilling cooling towers to promote the use of gray water. Rainwater was also used to reduce the use of groundwater. As a result of these initiatives, water usage totaled 13.17 million m³, of which 4.41 million m³ was reused water, corresponding to a reuse ratio of 33%. Outside of Japan, we focused on reducing the amount of water intake by reusing water and expanded the use of gray water. Owing in particular to initiatives taken at our business sites in China to conserve water and reduce water usage by increasing water reuse, water usage amounted to 1.72 million m³, of which 0.14 million m³ was reused water, corresponding to a reuse ratio of 8%.

Going forward, we will continue to examine the improvements that need to be made at the business sites that have been newly identified as high-risk sites in accordance with the revised WRI Aqueduct*¹ assessment tool, and conduct activities for their improvement. At other business sites, we will strive to reduce our environmental impact by saving water and reducing water intake while giving due consideration to the local water environment.

*¹ WRI Aqueduct: Water risk assessment tool developed by the World Resources Institute (WRI)

Total Water Usage
(Mitsubishi Electric Group)



Ratios of Reductions in Water Usage per Unit of Sales with Fiscal 2011 as Base Year
(Mitsubishi Electric Group)



→For details on total water usage, please refer to “Material Balance” on page 34.

Managing Water Risk

Water risk is increasing worldwide with ever-more serious water shortages and pollution, as well as abnormal weather caused by climate change. This affects the production of both raw materials and products, leading to a corresponding interest in corporate water risk management.

Water risk within the Mitsubishi Electric Group is evaluated as part of our corporate risk management framework. The evaluation factors in the influence on stakeholders, as well as the impact on ecosystems. We use the results of this assessment to prioritize countermeasures for each production base and take clear action.

During product development, we evaluate product impact on water sources and their lifecycles and strive to minimize the impact.

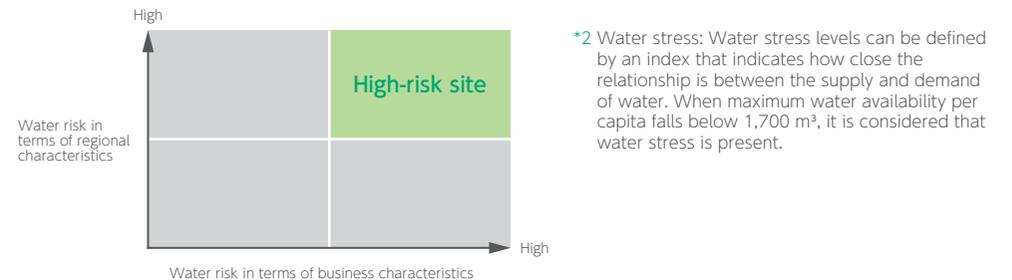
Response to High-Risk Sites

The Mitsubishi Electric Group uses WRI Water Aqueduct and other risk assessment tools to keep track of current and future water risk at business sites both in Japan and abroad (including the presence of water stress*²).

Based on this data, in fiscal 2021, overseas business sites with particularly high water risks have been identified as high-risk sites in consideration of their regional characteristics (i.e., seasonal high water/drought conditions of oceans and rivers from which water is taken) and business characteristics (i.e., water usage accompanying production activities). By distributing survey sheets to these high-risk sites, we confirmed the status of water conservation at facilities that use water and their efforts to reuse water. In fiscal 2022 and after, we will continue to make improvements based on the results of these surveys.

In addition, in Environmental Plan 2023, which started in fiscal 2022, we set a target to reduce water intake per unit of sales by 4% or more compared to fiscal 2020 by fiscal 2024 at high-risk sites.

We will continue to strengthen our efforts based on this policy with a focus on high-risk sites.



Tool Used
WRI Aqueduct 3.0

Status of Water Intake/Drainage/Reuse

Status of Water Intake

At business sites of the Mitsubishi Electric Group, water is taken to be used mainly for cooling, cleaning and adjusting the concentration of water-based paints, and as a solvent, an additive to materials and a heat medium. Water intake in fiscal 2021 was 10.35 million m³, 0.71 million m³ less than the previous fiscal year.

Status of Water Drainage

To avoid exceeding standard values set for each drainage point, the Mitsubishi Electric Group has established even more stringent voluntary standards, based on which water is treated before it is discharged. When there is a certain drainage standard in place according to properties specific to the water area, such a standard is also incorporated into our standards. The compliance of these standards is confirmed through measurements conducted on a regular basis.

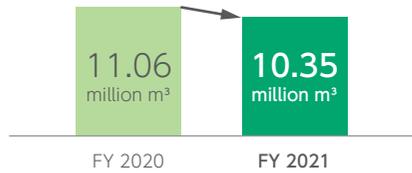
Water drainage in fiscal 2021 was 8.16 million m³, 0.48 million m³ less than the previous fiscal year.

Status of Water Reuse

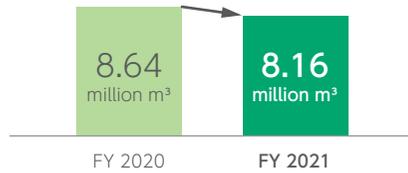
At Mitsubishi Electric Group's factories, not only fresh intake water, but water that has been used once is reused after it is treated and recycled.

Reused water totaled 4.55 million m³ in fiscal 2021, corresponding to a reuse ratio of 31%.

Water Intake
(Mitsubishi Electric Group)



Water Drainage Volume
(Mitsubishi Electric Group)



Water Reuse Ratio
(Mitsubishi Electric Group)



→For details, please refer to “Amount of Water Intake/Drainage/Reuse” on page 36.

Receiving “A-List Company” Recognition, the Highest Evaluation from CDP* for Fifth Consecutive Year

Mitsubishi Electric has been named an A-List company in the CDP Water Program for the fifth consecutive year, from fiscal 2017 to 2021. The CDP awarded us this highest evaluation in recognition of exceptional activities in terms of measures and strategies for water resources.

We will continue to press forward with our efforts to contribute to the realization of a sustainable society.

* CDP: An international NGO that examines, evaluates and discloses environmental initiatives of corporations and cities.

