

Conservation of Water Resources



Progress in FY2022

- Put in operation and improve of operation at a discharged water recycling plant at Mitsubishi Motors (Thailand) Co., Ltd. (MMTh)
- Completed an effluent treatment facility and associated sludge dewatering equipment to treat emissions from the Mizushima Plant's paint plant, sheet metal plant, and in other production processes.

<Related pages>

P15 MITSUBISHI MOTORS' Materiality

P20 Materiality

P33 Environmental Management

P118 Environmental Data Related to Products and Business Activities

WEB Atmosphere/Wastewater Quality/PRTR-designated Pollutants Data (FY2022 Results)
https://www.mitsubishi-motors.com/en/sustainability/esg/factory_archive2023.html

Basic Approach

Due to the increasing population and changes in the natural environment caused by climate change, water supply and demand are becoming tighter in more regions, and social concern for the preservation of water resources are increasing.

MITSUBISHI MOTORS requires a large amount of industrial water, city water, and groundwater, etc., for the automobile production process and discharge of water into sewage lines and rivers, etc. In regions where water risk is high, it is essential to consider the impact that water withdrawal and discharge from our business activities have on the surrounding environment.

At each plant, we comply with various legal requirements, such as the one on the quality of discharged water. In addition, we work to reduce water withdrawal amounts and introduce water recycling

technologies based on the status of water resource management in individual countries and regions.

Water is required for the operations of our business partners. We are aware of the importance of water risk management throughout the entire value chain.

Reduction of Water Withdrawal Volume

We are striving to reduce water withdrawal volumes by reusing washing water used in production processes for pre-washing and by circulating cooling water and temperature control water.

At the Okazaki Plant and at PT. Mitsubishi Motors Krama Yudha Indonesia (MMKI), we have set up rainwater storage tanks in order to reuse rainwater.

At the Okazaki Plant, we have also set up equipment to filter groundwater so that it can be used to supply drinking water to employees and those who live nearby, in case any disasters occur.

▶ Data (p. 120): Withdrawn water volume



Rainwater storage tanks (Okazaki Plant)



Groundwater membrane filtration equipment (Okazaki Plant)

Water Withdrawal Source and Drainage of Each Plant

Plant	Water Withdrawal Source	Drainage
Okazaki Plant (Okazaki, Aichi Pref.)	Yahagi River	Kanda River Tributary → Kanori River
Kyoto Plant –Kyoto (Kyoto, Kyoto Pref.)	Lake Biwa	Sewage line
Kyoto Plant –Shiga (Konan, Shiga Pref.)	Lake Biwa	Sewage line
Mizushima Plant (Kurashiki, Okayama Pref.)	Takahashi River	Hakken River → Mizushima Port
Mitsubishi Motors (Thailand) Co., Ltd. (MMTh)	Nong Pla Lai Reservoir, etc.	Sewage line
Mitsubishi Motors Krama Yudha Indonesia (MMKI)	Lake Jatiluhur	Sewage line



Reuse of Discharged Water

The MITSUBISHI MOTORS Group has introduced wastewater recycling technologies, taking into consideration the situation regarding water resource management at each facility location. Currently, discharged water recycling plants are operational at PT. Mitsubishi Motors Krama Yudha Indonesia (MMKI) and Mitsubishi Motors (Thailand) Co., Ltd. (MMTh).

MMKI has been utilizing a water recycling plant since its establishment in 2017. In FY2022, its wastewater recycling rate reached 67%.

In addition, in January 2022 MMTh began operating its first discharged water recycling plant, in conjunction with the start of operations of a new paint plant. By starting and improving operations in FY2022, in January–March 2023 the wastewater recycling rate rose to 83%.

▶Data (p. 120): Withdrawn water volume



Wastewater recycling plant (MMTh)

Prevention of Water Pollution

To prevent water pollution in areas surrounding plants, we measure and manage the quality of discharged water based on legal requirements. We also conduct surveys and confirmations regarding the quality of groundwater and soil pollution. In this way, we confirm that no toxic substances are being discharged to the outside area. In order to quickly detect abnormalities in discharge water quality due to such factors as rainfall, we set up a surface oil detector* in front of outlets leading from the plant to public water and continuously monitor discharge water conditions. We carry out continuous monitoring so that water discharged from the plant does not affect the environment outside the site. In the event of an accident, we respond quickly to prevent pollution from spreading, report to the local authorities and disclose information to the community.

* Detects the presence of oil by capturing changes in reflectance as the reflectance of oil is greater than that of water.



Observation well (Okazaki Plant)



Surface oil detector (Okazaki Plant)

TOPICS

Upgrading Industrial Wastewater Treatment Facilities and Sludge Dewatering Equipment (Mizushima Plant)

At the Mizushima Plant, we are gradually upgrading waste water treatment facilities that have deteriorated over time. After upgrading urine and domestic wastewater treatment facilities in FY2021, in FY2022 we updated wastewater treatment facilities, including those for the paint plant and sheet metal factory, along with the accompanying sludge dewatering equipment. The upgraded facilities began operating in March 2023.

We have installed a high-speed coagulation and sedimentation device in our wastewater treatment facility, allowing us to reduce processing time, optimize space utilization, and stabilize the quality of treated water. Additionally, by utilizing natural gradients for water transfer and reducing the number of pumps, we have increased energy efficiency, reducing annual CO₂ emissions by an estimated 50 tons.

By updating the filter press dewatering equipment to improve the dewatering performance of our sludge dewatering equipment, we expect to reduce the amount of sludge treated as industrial waste by approximately 15%, or 70 tons per year.



Industrial wastewater treatment facilities and the green site of the former treatment plant (Mizushima Plant)