

Create

Green Product

Creating products that contribute to the reduction of CO₂ emissions
Providing products and services that are friendly to people and the environment

We are working on GX (Green Transformation) both with supplying EV parts in our core business and with new businesses. In the energy industry, the rapid spread of Generative AI is expected to lead to a rapid increase in the amount of electricity consumed by data centres, and the instability of power systems due to tight supply and demand is becoming a societal issue. The use of hybrid supercapacitors (HSCs), which can charge and discharge instantaneously, can assist in stabilising the power supply. We are also developing AI-powered Autonomous Mobile Robots (AMRs), which not only improve productivity, but also accelerate the transition from gas and gasoline powered trucks to electrically powered ones. These are issues common to all manufacturing industries, and we are developing these products to deliver them to manufacturing sites around the world.

Contributing to Green
Goods and Services

Energy conversion and
benefits

Mobility



Petroleum → Electricity

Energy



Optimization and efficiency
of energy management

Industry



Efficiency and optimization
of operations

Use

Green Operations

Energy efficiency and minimization of consumption
Production using renewable energy for all processes

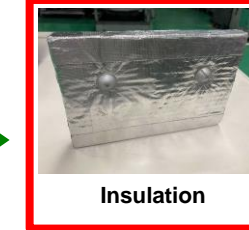
With regards to CO₂ emissions, electricity accounts for 85% of the energy used in Musashi's production activities with most of the remaining 15% being from gas. To achieve "Green Operation 100", the first step is to thoroughly improve both production efficiency and energy conservation. As well as our daily production improvement activities, we incorporate various ideas and opinions from the MM Quality Circle activities. For example, we have started initiatives in Japan to reduce the amount of gas needed to maintain the temperature of each furnace by installing insulation on the walls of heat treatment furnaces. We are gradually rolling these methods out to other plants. Utilising the strength of our global production system, we can accelerate the impact of such initiatives by sharing our know-how and horizontally deploying improvements.

As we move towards "Milestone 2030", we are gradually introducing in-house power generation and moving to electricity derived from renewable energy sources that do not emit CO₂, whilst taking advantage of the specific characteristics of each country and region.

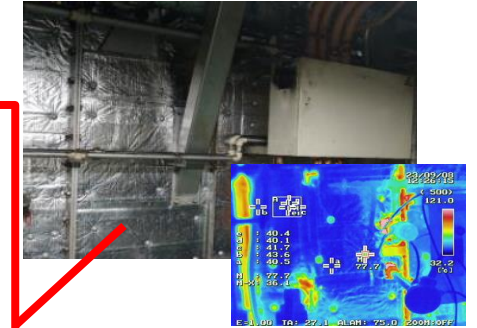
In 2023, 2 domestic and 2 overseas plants were utilizing green electricity, and the ratio of electricity derived from renewable energy has increased to 7.5%.

Energy-saving activities

Heat treatment furnace insulation



Insulation

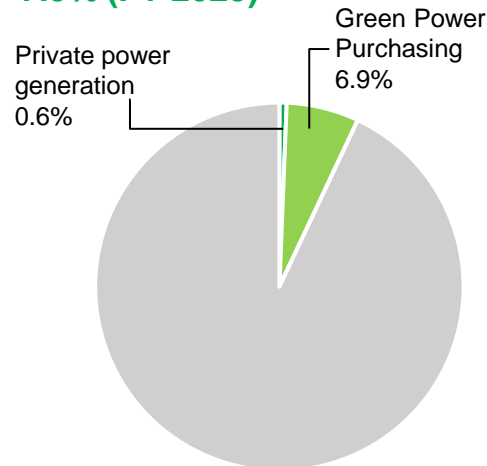


Temperature drop of furnace wall

Utilization of green power

Ratio of electricity from renewable sources

7.5% (FY 2023)



Musashi Seimitsu Co., Ltd. Head Office Plant
(Aichi Prefecture)
Solar panels



Musashi Energy Solutions
(Yamanashi)
Power purchase from hydropower



Musashi Auto Parts India
Power purchase from solar panels (PPA) + wind



Musashi do Brazil
Power purchase from hydropower