



# Prevention of Global Warming



- CO<sub>2</sub> Emissions by Area
- Office CO<sub>2</sub> Emissions

The reduction of greenhouse gases is becoming increasingly urgent. Murata places priority on the reduction of total emissions and per unit of net production emissions of greenhouse gases, and the Group is involved in efforts to prevent global warming.



## Reduction of CO<sub>2</sub> Emissions

### Achieving Substantial Reductions in Emissions per Unit of Net Production

In fiscal 2007, Murata set a minimum target for the Group in Japan of a 23.5% reduction in emissions of greenhouse gases per unit of net production relative to fiscal 1990, and initiated energy conservation measures to achieve this target. As a result, we achieved significant reduction (49%). We rapidly adopted highly efficient equipment that contributed significantly to our successful reduction of more than 20,000 tons of greenhouse gases annually.

Total greenhouse gas emissions have increased 15% over the previous fiscal year to approximately 550,000 tons. This is a result of expanded production and an increase in the power company emissions coefficient by approximately 4.8%.

#### About Emissions per Unit of Net Production

The emissions ratio is the value of CO<sub>2</sub> emissions against real production, which is calculated by adjusting production (monetary value) for deflation using the domestic corporate goods price index (for electronic components and devices) announced by the Bank of Japan. This figure indicates the quantity of greenhouse gases emitted in the process of producing a given product quantity (monetary value).

#### What is the power company emissions coefficient?

This coefficient is a weighted average of the growth in each power company's emissions coefficient from fiscal 2006 to fiscal 2007 by power company usage.

### Instruction in Energy Conservation at China and Singapore Plants

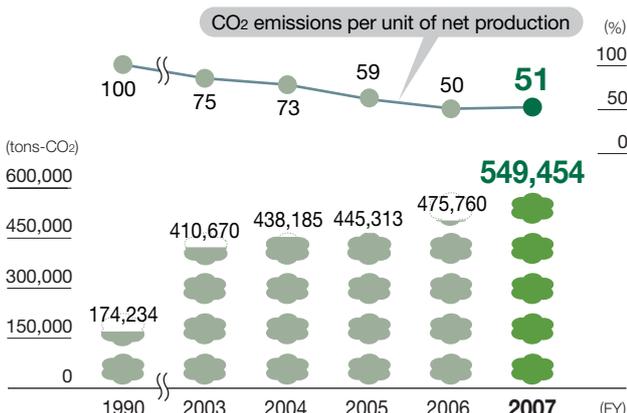
Murata is also actively involved in reducing greenhouse gases at its international locations. In fiscal 2007, advisors from the Head Office visited sites in China and Singapore to instruct staff on the adoption and operation of energy-saving devices. Operational improvements brought about a 5% reduction in compressed air used at the plants.

### Plans to Raise Emissions Ratio Targets and Reduce Total Emissions

Based on the successes of fiscal 2007, we raised our emissions ratio target to 35% for fiscal 2008 to fiscal 2010. We are also endeavoring to reduce total emissions.\*

\* Legal revisions relating to promotion of global warming prevention measures in fiscal 2006 corrected past gas company emissions coefficients retroactively.

#### CO<sub>2</sub> Emissions



Energy conservation diagnosis



Cogeneration system at the Yasu Plant

#### Employee Perspective

### Aiming to Reduce Consumption of Sustainable Energy



Toru Katsube

Environmental Management Sec., Administration Dept., Izumo Murata Manufacturing

Izumo Murata was recognized for its 28% reduction in energy consumption per unit of production from 2003 to 2006 as a result of improvements in equipment efficiency and productivity per square meter, and for its adoption of high-efficient heat source units for air-conditioning, and for these achievements was awarded the Agency for Natural Resources and Energy Director-General's Award for outstanding energy management by the Ministry of Economy, Trade and Industry in fiscal 2007.

Encouraged by this recognition, we plan to continue energy conservation activities to contribute to the prevention of global warming.

\* Komatsu Murata and Tome Murata also received a Regional Bureau of Economy, Trade and Industry award in fiscal 2007.

### Development of Energy-Saving Production Equipment

Murata is developing equipment capable of producing with the least amount of energy and in the smallest space possible. In a comparison of energy consumption per unit of net production using current equipment as a benchmark, all new equipment installed since fiscal 2004 has shown increased energy and space savings.

In fiscal 2007, we developed 10 new types of equipment, installing 375 new machines in our plants. This resulted in a reduction of approximately 9,900 tons of CO<sub>2</sub> emissions (approximately 1.9% of total CO<sub>2</sub> emissions at all domestic plants in fiscal 2007).

Beginning in fiscal 2008, we are moving ahead with the development of energy-saving equipment, focusing on five targets: 1) increased baking furnace efficiency; 2) major restructuring of key product production equipment (laminators; 75% energy savings over current equipment); 3) use of waste heat for drying equipment (50% energy savings over current equipment); 4) an enhanced system of energy savings checks during equipment design audits; and 5) energy-saving design training at domestic plants.

#### Energy Conservation Performance

