

## Effective Utilization of Resources in Manufacturing Operations

### Waste

In tandem with reducing the amount of waste produced during manufacturing operations, Komatsu conducts zero emissions\*1 activities to use waste materials as resources.

The company continued to achieve zero emissions in FY2010 through strict waste separation and utilization of waste materials as valuables\*2, boasting a recycling rate of 99.0%.

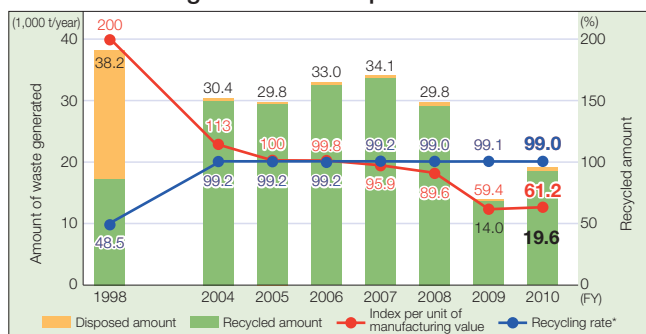
The medium-term target for waste emissions was also attained in FY2010, the last fiscal year falling within this period, with total waste emissions per unit of manufacturing value having decreased by 38.8% compared to FY2005. This dramatic reduction was due to the fact that Komatsu Castex Ltd. made advances in effectively utilizing its waste molding sand.

At the same time, new medium-term targets were established for recycling rates and total waste emissions per unit of manufacturing value at business units in Japan, and new medium-term targets for recycling rates at overseas business units.

This fiscal year Komatsu will encourage mainly its Group companies to practice thorough waste separation, with the aim of achieving the company's new medium-term target.

\*1 : Komatsu defines "zero emissions" as a waste material recycling rate of 99% or more.  
\*2 : "Valuables" in this report refers to materials that can be sold to external companies.

### Amount of Waste Generated by the Komatsu Group Manufacturing Facilities in Japan



\* Recycling rate is calculated by dividing the amount recycled (including valuables) by the amount generated (including valuables).

### Water Resources

Since FY2006, Komatsu has set a new medium-term target of achieving by FY2010 a 10% or greater reduction in the amount of water used per unit of manufacturing value, compared to the FY2005 level.

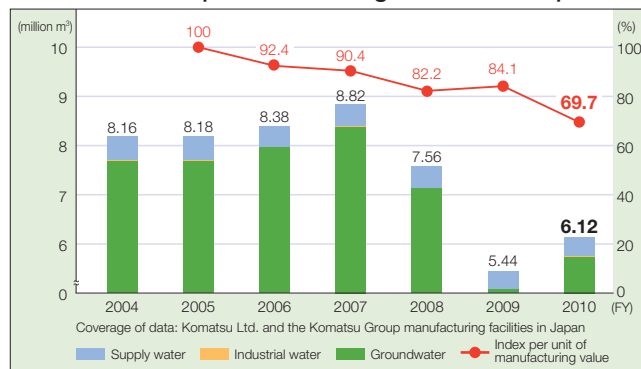
The company has attained this medium-term target by reducing the amount of water used per unit of manufacturing value by 30.3%, compared to FY2005, through the reuse of water during processing and the elimination of wasteful day-to-day practices.

In particular, the Awazu Plant cut back on its groundwater consumption through measures such as assessing the wells from which groundwater is taken and repairing water leakage. As a consequence, they were able to trim water usage by 16% per unit of manufacturing value compared to the previous fiscal year.

The plant also established a new medium-term target providing for a 25% or more reduction in the amount of water used per unit of manufacturing value by FY2015, compared to the FY2005 level.

In the years to come, Komatsu will make further efforts to reduce the amount of water resources used and to achieve its new medium-term target.

### Amount of Water Resources Used by the Komatsu Group Manufacturing Facilities in Japan

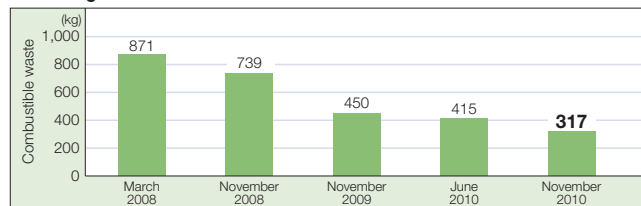


### Resource Conservation by Non-manufacturing Divisions

#### Waste

The Komatsu Head Office is promoting zero emissions and has remodeled its waste containers to make waste separation easier through the use of visual aids. Other steady efforts to recycle resources include the use of recycling boxes and kitchen waste disposal machines. The amount of waste is also being measured at regular intervals. The results showed that a 63.6% reduction has been achieved in the amount of combustible waste, compared to March in 2008 when measurements started. Komatsu also participated in the ECOCAP Movement and collected enough bottle caps to fund vaccines for 348 children in the developing world.

### Changes in the Amount of Combustible Waste from the Head Office

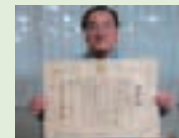


## Topics

### The Environment Minister's Commendation awarded to the Oyama Plant

- (1) Introducing high efficiency equipment based on the top management's realization of the importance of saving energy
- (2) Issuing a declaration for each employee to reduce CO<sub>2</sub> emissions by 1 kg per day
- (3) Having energy conservation patrols make the rounds of the plant to eliminate waste
- (4) Setting up a special department in charge of introduction of energy saving equipment.

Thanks to these activities, in which all corporate levels participated, CO<sub>2</sub> emissions per unit of manufacturing value in 2009 were reduced by 41% (compared to 2000), and in FY2010 the Oyama Plant was awarded the Environment Minister's Commendation for its activities to mitigate global warming.



Oyama Plant Manager