

Environmentally Conscious Production

Reducing Environmental Impact in Production Activities

Kawasaki aims to reduce its environmental impact in production activities by taking various measures to prevent global warming, reduce energy consumption and emission of waste, and decrease the use of chemical substances.

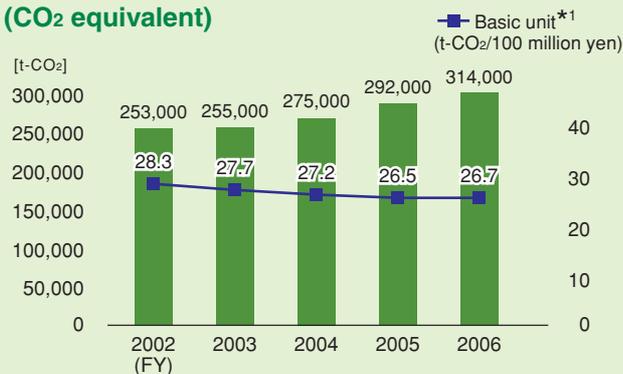
Activities to Prevent Global Warming

Kawasaki is involved in reduction of greenhouse gas emissions from production activities in various ways.

For instance, we have in place the 2010 Environmental Vision that aims to reduce the total greenhouse gas emissions from the entire Group to 6% of the FY1990 level by FY2010, and are aggressively moving towards the goal. In FY2006, the total emission increased up 22,000 t-CO₂ (7.5%) from the previous year because of the increase in business operations. Although the basic unit almost leveled off, we will nonetheless actively reinforce and promote measures to reduce environmental impact so as to match the increasing amount of business operations.

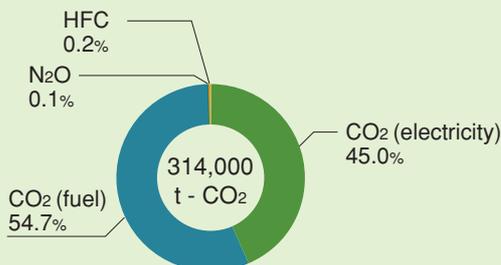
We also review comprehensive actions to prevent global warming including measures to reduce CO₂ emission through products and contributions to environmental conservation for society as well.

Amounts of Greenhouse Gas Emissions (CO₂ equivalent)



- Electricity conversion factors used herein were specified by power utility companies. (Electricity conversion factor for FY2005 were used to compute those of FY2006.)

Breakdown of Greenhouse Gas Emissions (FY2006)



Energy Saving Activities

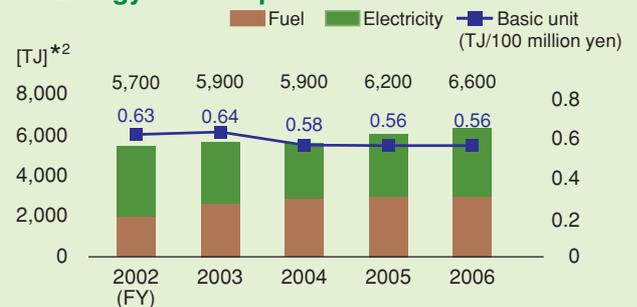
We carry out effective energy saving activities based on the analysis of their respective business activities. To be specific, the practical benefit and cost-effectiveness of each energy saving action is evaluated to decide what to correct and do now. Energy saving activities, categorized as follows, are put together in the Energy-saving Activity Checklist for company-wide implementation.

Level of Energy Saving Activities

- LEVEL1** Activities to save electrical power, curtail power use, etc.
- LEVEL2** Activities to employ energy-saving operations.
- LEVEL3** Activities to renovate production facilities.
- LEVEL4** Activities to modify large-scale production facilities and production methods.

The total energy consumption shows an upswing similar to the growth of greenhouse gas emissions because of the increased amount of business operations. We do our utmost to offset the increment of water consumption that matches the business operation expansion by ensuring leak prevention, wastewater recycling, and the optimizing of cooling tower operation.

Total Energy Consumption



Water Consumption



*1 Basic unit: Divided the greenhouse gas emissions, total energy consumption and water consumption by net sales, respectively
 *2 TJ terajoules (10¹²J)

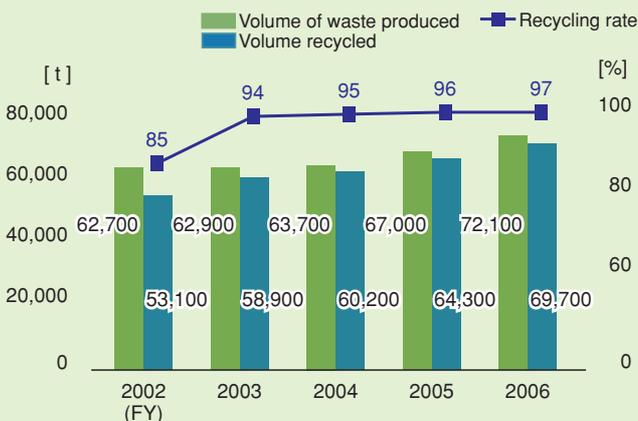
Waste Reduction Activities

We actively carry out 3Rs (reduce, reuse and recycle) promotion from the viewpoint of both reduction in waste and recycling of resources through various actions, including thorough sorting and recovery of waste.

As a result, we achieved zero emissions (a 100% rate for reusing and recycling waste generated from work) for all the works of Kawasaki Heavy Industries and maintained status. But the total amount of waste emissions increased 5,000 t (7.5%) from the previous year due to the expansion of business operations.

There is a paradigm shift in the "quality of recycling" going on at Kawasaki, which is moving away from thermal recycling, which burns waste and recovers thermal energy, to material recycling, which reuses waste as a recycled resource.

Volume of Produced and Recycled Waste



Efforts for Reducing Chemical Substances

We are reducing consumption of hazardous chemical substances, which is one of the objectives in our 2010 Environmental Vision.

The efforts in each business operation to reduce hazardous chemical substances is focused on the following three targets, and since the specific actions vary depending on the type and quantity of chemical substances handled at the sites, each target has its respective focal points and reduction goals.

- 1) Reduce emissions of major VOCs (toluene, xylene, ethyl benzene) by 30% relative to the reference year.
- 2) Reduce emissions of dichloromethane by 50% relative to the reference year.
- 3) Reduce the amounts of hazardous heavy metals (lead, hexavalent chromium, cadmium) handled
 - 30% reduction relative to the reference year for hexavalent chromium and cadmium
 - Reduction activity about lead promoted towards the FY2010 target

A considerable increase in consumption of three major VOCs resulted from the expansion in the amount of business operations in FY2006. For dichloromethane, a good reduction result was achieved, but there is still a wide gap before we reach the FY2010 target.

We plan to review those reduction programs for each of the works by considering other increasing factors, including an increase in the amount of business operations, and come up with comprehensive measures so that we can achieve the FY2010 goal.

Progress of Chemical Substance Reduction Plan

Substance		Reference year	FY2006	Change from reference year (%)	FY2010 target
Major VOCs	Toluene (t/year)	240	350	+46	170
	Xylene (t/year)	610	830	+36	430
	Ethylbenzene (t/year)	160	310	+94	110
	Dichloromethane (t/year)	110	71	-35	57
Heavy metals	Lead (t/year)	7.0	5.6	-20	—
	Hexavalent chromium (t/year)	18	20	+11	12
	Cadmium (t/year)	0.16	0.13	-19	0.11

- Values of major VOCs and dichloromethane are the amount emitted, while those of heavy metals the amount handled.