

Realization of a Low-Carbon Society

Reduction of Greenhouse Gas Emissions

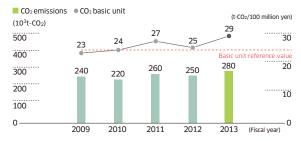
The KHI Group is committed to contributing to the prevention of global warming worldwide through products and manufacturing that use energy without waste. Under the Eighth Plan, action is directed toward targets set separately for reduction of the $\rm CO_2$ emissions generated during production and reduction of $\rm CO_2$ emissions through product-based contributions. The results for the Seventh Plan, which includes fiscal 2013, are presented below.

As a target for the first commitment period of the Kyoto Protocol, we committed to achieving a 10% reduction, compared with fiscal 2008, as a reference value in the average CO₂ emissions per unit of sales over the period from fiscal 2009 to fiscal 2013. The emissions figure per unit of sales for fiscal 2013 was 29 and the five-year average was 25, meaning that the target of 22 was not met. CO₂ credits will be used to cover the excess emissions.

In addition to Certified Emissions Reductions (CERs) under the United Nations Clean Development Mechanism (CDM)*, we will also make use of a domestic credit of 2,580t-CO2 acquired under a Hyogo Prefecture program aimed at reducing CO2 emissions through joint reduction initiatives. The credit was obtained by replacing a heavy fuel oil-fired boiler made by Kawasaki Thermal Engineering Co., Ltd., with a newer and greener natural gas-fired boiler.

* CDM: a system under which advanced countries and developing countries cooperate in projects to reduce greenhouse gases, with the investing developed nation receiving a CO₂ credit equivalent to the reduction achieved

Changes in CO2 Emissions and Basic Unit at KHI



- Notes: 1. CO_2 emissions are impacted by the electricity emission factor.
 - $2.\ CO_2$ basic unit is a measurement obtained by dividing CO_2 emissions by net sales.
 - $3.~CO_2$ emissions in logistics processes are calculated from our position as a specified consignor (a Japanese legal designation applied to consigners that ship 30 million ton-kilometers of freight or more per year), under the revised Energy Saving Law.

Reduction of Energy Consumption

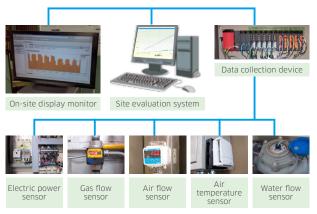
Reduction of Energy Consumption through Progress with Energy Visualization

By installing energy visualization facilities at the Kakogawa Works, we took measures to enhance energy saving.

The facilities installed at the Kakogawa Works measure not just electric power consumption but also the flow volumes of utility gas, compressed air and water, as well as the pressure of the compressed air and temperature.

In fiscal 2013, analysis of these data led to the identification of more than 50 items of waste, allowing a reduction in energy consumption.

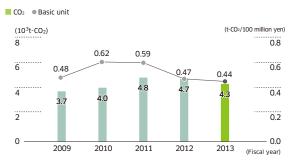
Structure of Energy Visualization Facilities



Environmentally Conscious Logistics

KHI promotes energy-saving activities and data tracking to curb CO₂ emissions from logistics processes. Evaluating the Company's freight traffic on the basis of freight ton-kilometers carried (freight weight multiplied by distance), truck transport accounts for about half, with the balance of the freight carried by train or ship, which exerts less impact on the environment. In fiscal 2013, CO₂ emissions reached 4,300 t-CO₂ and CO₂ emissions per unit of sales totaled 0.44. We will continue to look at ways of boosting the load factor for truck transport and using modal shift from truck to other modes, such as train.

CO₂ Emissions from Logistics Processes



Notes: 1. CO_2 basic unit is a measurement obtained by dividing CO_2 emissions by net sales.

- 2. CO₂ emissions in logistics processes are calculated from our position as a specified consignor (a Japanese legal designation applied to consigners that ship 30 million tonkilometers of freight or more per year), under the revised Energy Saving Law.
- $3.~CO_2$ emissions from logistics processes in fiscal 2009 and 2010 do not include emissions by Kawasaki Shipbuilding Corporation and other subsidiaries before they merged into the Company on October 1, 2010.

CO₂ Emissions Reduction through Product-Based Contributions

Through the main products it delivered in fiscal 2013, KHI made an estimated yearly contribution to CO_2 emissions reduction of 500,000 t- CO_2 . See page 20 for information on the CO_2 emissions reduction benefit of our energy- and transport-related products, industrial machinery, and other products.