

## Preventing global warming

### P16 CSR Policy 5

#### ●Reducing CO<sub>2</sub> emissions

<b>2008 Result: Emissions*: 83% of 1990 levels (Target: 93%)</b> <b>CO<sub>2</sub> emissions per unit of production: 80% of 1990 levels (Target: 77%)</b>	<b>2009 Target: Emissions: 93% or less of 1990 levels</b> <b>CO<sub>2</sub> emissions per unit of production: 77% or less of 1990 levels</b>
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\* CO<sub>2</sub> emissions are calculated on a consolidated basis in Japan because overseas data for fiscal 1990 is estimated.

Based on the Kyoto Protocol targets, the Hitachi Chemical Group set its own goal of reducing CO<sub>2</sub> emissions to 93% of 1990 levels (reduction by 7%) and CO<sub>2</sub> emissions per unit of production to 75% by fiscal 2010.

Toward achieving these targets, individual business sites and Group companies define their specific reduction targets in line with the Environmental Conservation Action Plan along with specific items to be implemented every year. In addition, we are improving the efficiency of reduction measures by sharing the content of actions at business sites and other locations across the Group through such channels as the Energy Conservation Committee.

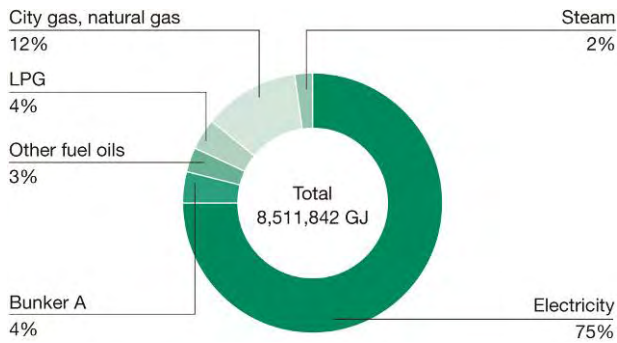
In fiscal 2008, in particular, we have maintained our focus on fuel conversion from heavy oil to natural gas, which offers potential CO<sub>2</sub> emission reductions of about 20% per energy unit. As a result, the Shimodate Works, Yamazaki Works and Shin-Kobe Electric Machinery Co., Ltd. achieved significant reductions in CO<sub>2</sub> emissions. We will continue converting to natural gas for fuel at individual business sites of Hitachi Chemical and Group companies.

Individual business sites of the Company are systematically assessing energy-saving methods using specialists and actively promoting energy-saving measures, including improvements in the energy efficiency of air conditioning equipment and exhaust heat recovery, while working to boost production efficiency and expand the use of energy-saving products.

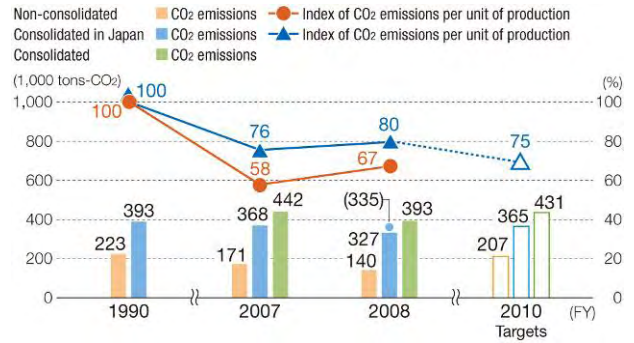
Overseas, we dispatch specialists in production technology from Hitachi Chemical to assist in assessing energy-saving methods as production increases.

As a result of these efforts, we achieved our targets for fiscal 2008 with CO<sub>2</sub> emissions from energy sources amounting to 140,000 tons on a non-consolidated basis and 327,000 tons on a consolidated basis in Japan, or 63% and 83% of 1990 levels respectively. On the other hand, CO<sub>2</sub> emissions per unit of production were 67% of 1990 levels on a non-consolidated basis and 80% on a consolidated basis in Japan, falling short of our target for fiscal 2008. This was due to the lower capacity utilization rate (energy efficiency), which was significantly influenced by the drop in sales from the economic downturn that commenced the latter half of the fiscal year. Looking ahead, we will strive to reduce emissions while improving per unit emissions through energy-saving efforts and shifting to energy-efficient production methods.

**Breakdown of total energy consumed (consolidated)  
(FY2008)**



**CO<sub>2</sub> emissions and CO<sub>2</sub> emissions per unit of production**



- Target for 2010 on a consolidated basis is 93% of the estimated emissions of fiscal 1990, including overseas Group companies.
- CO<sub>2</sub> emissions from oils, gas and fuel were calculated using the values defined in Article 3 of the Order for Enforcement of the Act on Promotion of Global Warming Countermeasures. Since fiscal 2008, we have been calculating emissions from electricity including at overseas Group companies, using as coefficient the average value of all power supplies for 1990 in Japan (0.417 tons-CO<sub>2</sub>/MWh). We recalculated CO<sub>2</sub> emissions of fiscal 2007 accordingly. For fiscal 2008, CO<sub>2</sub> emissions calculated using the "CO<sub>2</sub> emission factor by electric power supplier" described in Notification No. 8 of the Ministry of Economy, Trade and Industry and the Ministry of the Environment are also shown in the above graph in blue dots.

**• Reducing other greenhouse gasses**

The Hitachi Chemical Group has set goals for reducing the emissions of greenhouse gasses other than CO<sub>2</sub> to 10% or less of 2002 levels.

Designated chemical substances have not been used in our production process since fiscal 2003. In testing facilities, we utilize high-efficiency collection equipment for sulfur hexafluoride (SF<sub>6</sub>), reducing the total emissions to 0.05 tons, or 5.5% of 2002 levels. We intend to maintain this level going forward.