



Noda Works of Hitachi Kasei Polymer Co., Ltd. introduced thermal rotating exhaust processing equipment and reduced VOC emissions by 95.7% compared with 2000 levels.



The Shimodate Works laid pipelines for natural gas and converted from heavy oil fuels to natural gas for through flow boilers.

Preventing global warming

← P5 CSR Policy ⑤

● Reducing CO₂ emissions

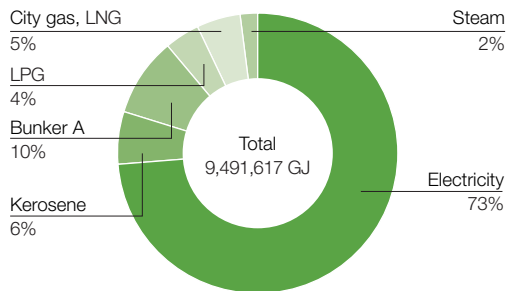
2006 Result: **Emissions: 91% of 1990 levels**
(Target: 93%)
CO₂ emissions per unit of production: 80% of 1990 levels (Target: 80%)

2007 Target: Emissions: 93% or less of 1990 levels
CO₂ emissions per unit of production: 79% or less of 1990 levels

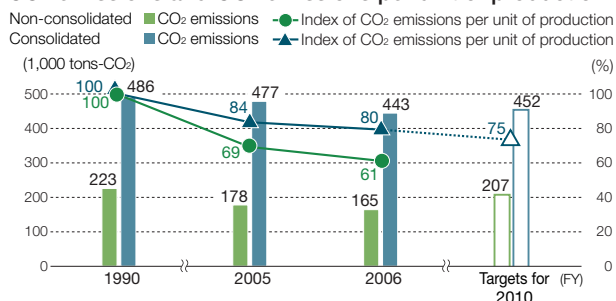
CO₂ emissions per unit of production are calculated on a consolidated basis.

In light of targets set by the Kyoto Protocol, the Hitachi Chemical Group is working to reduce CO₂ emissions to 93% of 1990 levels and CO₂ emissions per unit of production to 79% of 1990 levels.

Breakdown of total energy consumed (FY2006)



CO₂ emissions and CO₂ emissions per unit of production



Potential CO₂ emissions for oils, gases and fuel have been calculated based on standards outlined by Article 3 of the Law Concerning the Promotion of Measures to Cope with Global Warming. Electricity figures for 2005 and 2006 are based on potential emissions from electric power suppliers as listed by the Ministry of Economy, Trade and Industry, and Environment Agency Notice No. 3 (2007), and electricity for 1990 was calculated by applying the average value for all electricity sources (0.421 tons-CO₂/MWh) under Keidanren Voluntary Action Standards.

CO₂ emissions in 1990 on a consolidated basis were estimated from the proportion of CO₂ emissions in 1990 and 2000 on a non-consolidated basis.

unit of production to 75% through energy conservation measures at factories and other efforts. Specifically, we are promoting fuel conversion to natural gas, which has a smaller CO₂ emission potential per energy unit, raising production efficiency and expanding the use of energy-saving products.

In 2006, CO₂ emissions from energy sources amounted to 165,000 tons on a non-consolidated basis and 443,000 tons on a consolidated basis in Japan, or 74% and 91% of 1990 levels, respectively. CO₂ emissions per unit of production were 61% and 80% of 1990 levels, respectively, thereby achieving our targets for both emissions and emissions per unit of production for 2006. Hereafter, we will further strive to reduce emissions, while improving per unit emissions. With the cooperation of our customers, we will conserve energy at each manufacturing site and across the entire product life cycle.

● Reducing other greenhouse gases

The Hitachi Chemical Group has set goals for reducing emissions of greenhouse gases other than CO₂ to 10% or less of 2002 levels by 2010. Designated chemical substances have not been used in the production process since 2003. In testing facilities we utilize high-efficiency collection equipment for sulfur hexafluoride (SF₆) that resulted in total emissions of 0.05 tons, within the target level.

Laying our own pipelines to convert to natural gas fuel

While converting from heavy oil fuels to natural gas can lead to 20% or more reduction in CO₂ emissions per energy unit, the conversion requires the construction of gas lines and other infrastructure. For this reason, Shimodate Works worked with gas companies to lay a natural gas pipeline from Moka, Tochigi Prefecture, to the factory, and completed the conversion by installing 12 through flow boilers (see page top, right image) and deodorizing equipment in 2006. Plans are underway at Shimodate Works to convert most of the combustion facilities by 2010, and other nearby works are also planning to take advantage of this infrastructure.