Prevention of Global Warming

Casio tackles prevention of global warming from a number of different angles, including CO_2 emission reductions.

Reduction of CO_2 Emissions

Casio set out to reduce CO_2 emissions per unit of production by 10% in fiscal 2005 and by 25% by fiscal 2010 from the levels of fiscal 1990. However, the company's CO_2 emissions per unit of production in fiscal 2004 amounted to 0.48 ton – CO_2/¥1 million, a 14% increase over the FY 1990 levels.

Starting with fiscal 2005, the company will use CO_2 emission figures per basic unit of actual production, which corrects the basic unit of production with Bank of Japan's Domestic Enterprise Price Index (electronic equipment) so as to more accurately reflect the realities of changes in business modes in line with the policies of the four electrical and electronic industry associations. Using the corrected emission figures per basic unit of actual production, Casio targets to reduce CO_2 emissions by 10% in fiscal 2005 and 20% in fiscal 2010. → P32

Efforts to Reduce CO_2 Emissions

With respect to efforts to reduce CO_2 emissions, Casio has switched to a fuel that generates less CO_2 and adopted co-generation. In addition, individual sites are taking measures individually to reduce CO_2 emissions.

The Kyoto Protocol mandates Japan to cut its CO_2 emissions by 6% between 2008 and 2012 from the levels of fiscal 1990. To comply with this mandate, Casio will study ways to reduce total emissions by taking part in emissions trading, etc.

Example of Efforts

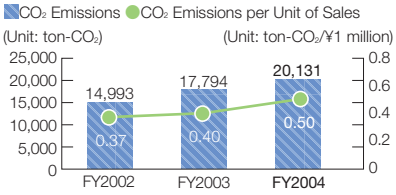
Efforts of Casio Micronics Co., Ltd.

Casio Micronics Co., Ltd. remodeled its factory and installed a free cooling system (which uses cool outside air for air conditioning), and reduced power consumption, which in turn lowered CO2 emissions. At the company's head office (in Ome), Special Bunker A fuel oil was replaced with city gas as the fuel for air conditioning of its clean rooms. As the exhaust gas became cleaner, CO_2 emissions were slashed by 2% from the levels of fiscal 2003.

CO_2 Emissions at Overseas Sites

In fiscal 2004, the new inclusion of P.T. Asahi Electronics Indonesia, which consumes large quantities of energy, in the study caused both the total CO_2 emissions and the CO_2 emissions per basic unit of sales to rise. The unit was computed by using as the denominator the sales figures after they were converted to yen.

Changes in the CO_2 Emissions and CO_2 Emissions per Unit of Sales at Overseas Sites



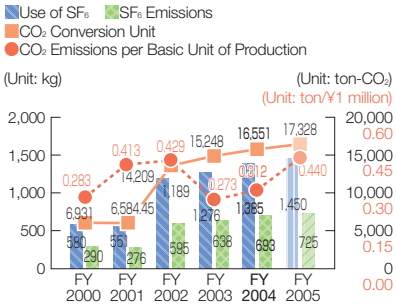
* The data were collected from 16 sites, not including Casio (Shanghai) Co., Ltd.

Reduction of Other Greenhouse Gases

SF_6 Reductions

Casio uses SF_6 in its manufacturing process. Until last year, Casio stated its SF_6 use efficiency to be 0.75. This year, the company hired a specialized contractor to perform a component analysis. The results found that the use efficiency was 0.5 or lower with some variance. Furthermore, the use efficiency rates fluctuate under different conditions. Consequently, past data are restated here, using the use efficiency of 0.5, a guidance value suggested by the Japan Electronics and Information Technology Industries Association.

Changes in SF_6 Usage, Emissions, and CO_2 Equivalent Emissions

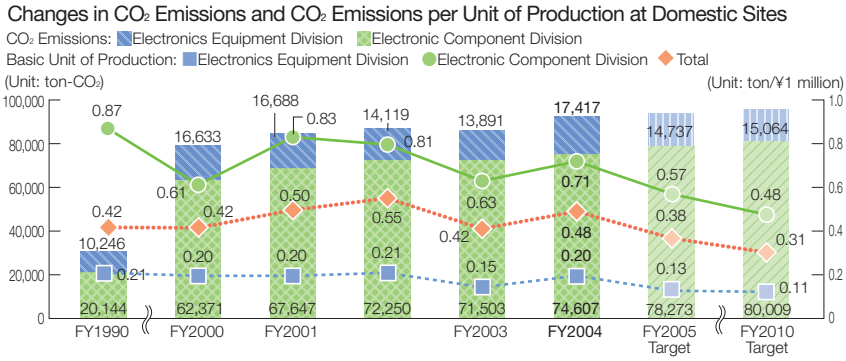


Total Discontinuation of NF_3 Cleaning Gas

In the past, Kochi Casio used NF_3 as a cleaning gas in its TFT LCD manufacturing process. NF_3 was replaced with COF_2 by March 2005.

NF_3 is not among the six gases specified in the Kyoto Protocol. However, its warming coefficient is 10,800 times on a CO_2-converted basis. In comparison, the coefficient of COF_2 is 1, the same as CO_2. Therefore, the effects on warming can be reduced to 1/2500 in spite of a four-fold increase in the volume of gas used.

Changes in CO_2 Emissions and CO_2 Emissions per Unit of Production at Domestic Sites



Changes in CO_2 Emissions per Unit of Production Corrected for Price Index