Preventing Global Warming (Manufacturing and Distribution)

Corporate Profile ➡ CSR Activities ➡ Preventing Global Warming (Manufacturing) http://www.tdk.co.jp/csr_e/csr03600.htm
Corporate Profile ➡ CSR Activities ➡ Preventing Global Warming (Distribution) http://www.tdk.co.jp/csr_e/csr03700.htm

Efforts at Manufacturing Sites

Carbon dioxide (CO_2) released through energy consumption at manufacturing sites makes up the bulk of TDK's total greenhouse gas emissions.

In fiscal 2009, TDK's total CO_2 emissions in Japan amounted to 369,988 t-CO_2, 5.5% down from the previous year (fiscal 2008), and 5.9% more than the fiscal 1991 level.

CO_2 emissions at overseas sites amounted to 582,262 t-CO_2, 10.8% up from fiscal 2008.

We actively promote various energy conservation programs to reduce CO_2 emissions.

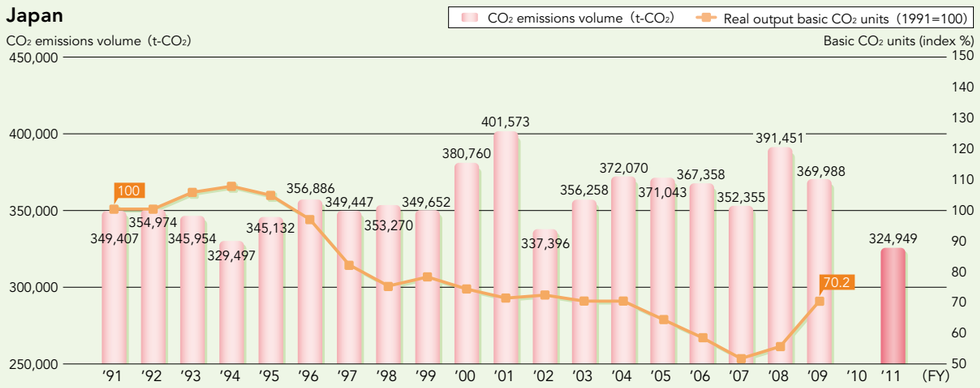
For Type I Designated Energy Management Factories in Japan that consume significant quantities of energy, we have set a stricter target than the non-binding target set down in the Energy Conservation Law*, which calls for a minimum 1% annual improvement in energy consumption per unit of products. We have set a target of at least 2.0% per year. Regarding fixed energy consumption, independent of production volume, we have also set a target of 1.0% or more year on year reduction. By achieving these specific targets, we aim to meet our medium term objective of reducing CO_2 emissions by at least 7% from the fiscal 1991 level by March 2011 (corresponding to a reduction of 324,949 t-CO_2 at domestic sites).

In an effort to bolster energy management at overseas manufacturing sites, we established a medium term target for reducing CO_2 emissions on a global basis (emissions in Japan and overseas combined) in the TDK Environmental Action 2015 launched in fiscal 2007. The goal here is to reduce CO_2 emissions by 5% or more by March 2011, as compared to the fiscal 2006 level.

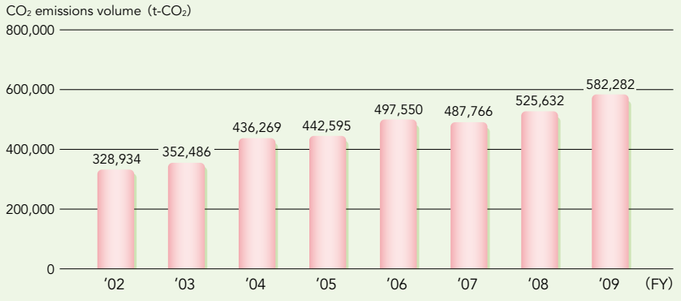
* Law promoting more efficient use of energy

TDK CO_2 Emissions Trends

Japan



Overseas



Note1: Real output: nominal output/price index released by BOJ (electric equipment)
Note2: TDK's standards for CO_2 emissions conversion are as follows:
- Figures for the energy used by each facility are calculated by multiplying the volume of purchased electricity and fuel (such as gas and oil) by a CO_2 conversion factor.
- The CO_2 conversion factor for fuel is a factor stipulated in the Law Concerning the Promotion of the Measures to Cope with Global Warming.
- The CO_2 conversion factor for electricity purchased (in Japan) is the basic unit of equivalent CO_2 emissions published by the Federation of Electric Power Companies of Japan. (For the fiscal 2009 figure, the fiscal 2008 factor is used.)
  Because the conversion factor was finalized in FY 2008, the figures for CO_2 emissions and real output basic CO_2 units for fiscal 2008 (in Japan) have been revised.
- The CO_2 conversion factor for electricity purchased (overseas) is the factor for each country stipulated in the GHG Protocol Initiative. (The fiscal 2007 to 2009 figures use the fiscal 2006 factor.)
  The figures for CO_2 emissions from fiscal 2002 to 2008 (overseas) have been revised as a result of a change in GHG protocol factor.

Initiatives to Reduce CO_2 Emissions

Global Warming Countermeasure Summit

In May 2008, TDK organized its first "Global Warming Countermeasure Summit" as a company event. On this occasion, a number of special interest groups were formed, headed by energy experts from the TDK Group in Japan, on topics such as sintering, air conditioning, and air compression systems. During FY2009, special interest group meetings were held a total of 12 times, discussing measurement data obtained according to a common standard throughout the TDK Group. Topics of discussion included energy efficiency and energy wastage. The participants realized that setting themes and targets for energy conservation, which often was difficult when done on a site-by-site basis, would be easier if a common energy efficiency index could be used as a reference. A standard was therefore established which has made benchmarking and comparisons between sites possible. Targets for improvement can now be identified more readily. The lively exchange of information among the special interest group members also brings new incentives and helps the experts to hone and improve their skills.

In the current economic and geological climate, finding ways to combat global warming and reduce energy use is becoming ever more important, also in order to ensure the continued profitability of a business enterprise. The work of the special interest groups will be further expanded in future and is expected to significantly contribute to our efforts in this regard.

A session at the first Global Warming Countermeasure Summit (May, 2009)

Participation in "Trial Implementation of an Integrated Domestic Market for Emissions Trading"

In October 2008, the Japanese government started the "Trial Implementation of an Integrated Domestic Market for Emissions Trading." TDK decided to take part in this initiative and actively contribute to it, because we see it as a way to speed up the reduction in CO_2 emissions volume from industrial activities, and because we want to help in evaluating the effectiveness and validity of an emissions trading scheme. We filed our application in December 2008 with the Ministry of Economy, Trade and Industry, and the application was accepted. Taking into account the plans for self-regulatory initiatives in the industry, we plan to participate while setting targets that are in line with the TDK Environmental Action 2015.

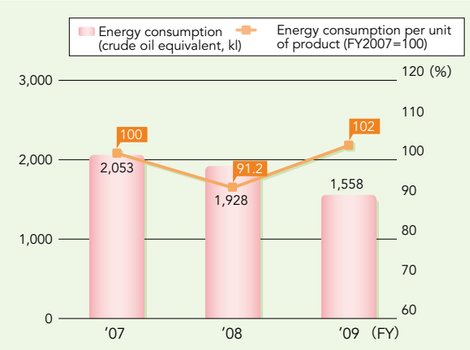
Distribution Activities

In fiscal 2007, TDK established a committee to promote energy savings and improved operation procedures in distribution. Company-wide efforts to reduce distribution costs and energy consumption are now under way. In fiscal 2009, as in 2008, the following measures were taken to achieve the nonbinding goal set down in the Energy Conservation Law to reduce energy consumption per unit of products by at least 1%:

- Implement 100% modal shift as much as possible
- Reduce the number of special transport runs with bad loading ratio
- Use local ports efficiently to reduce the domestic transport distances
- Improve loading ratio by changing from chartered transport to consolidated transport

However, due to a reduction in sales, the energy consumption per unit deteriorated by 11.5% compared to the previous year, so that the target could not be achieved.

Trends in Energy Usage for Distribution and Consumption Per Unit of Product (TDK Corporation)



Trends in CO_2 Emissions for Distribution (Japan)