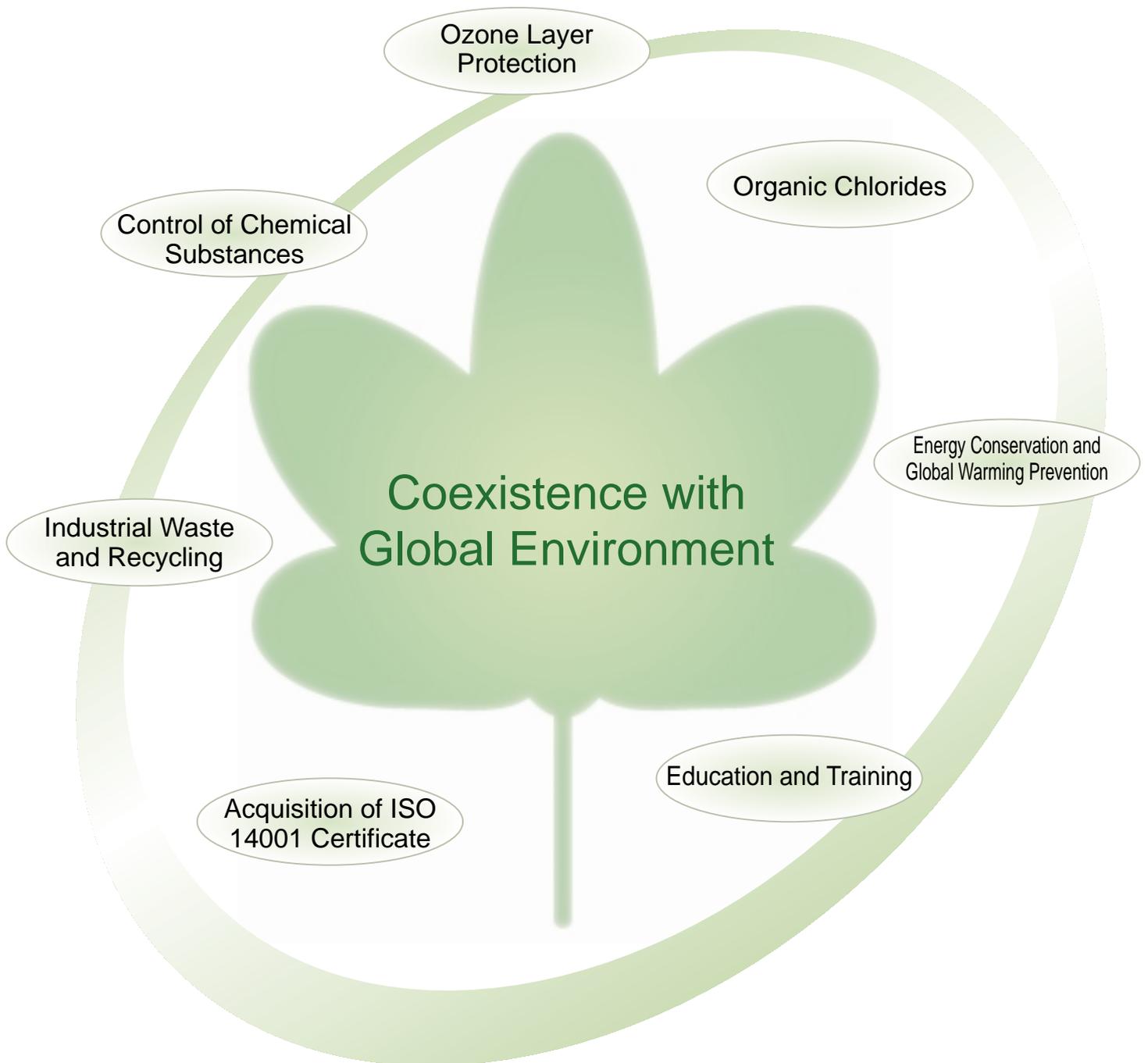


4. Environment Preservation Initiatives



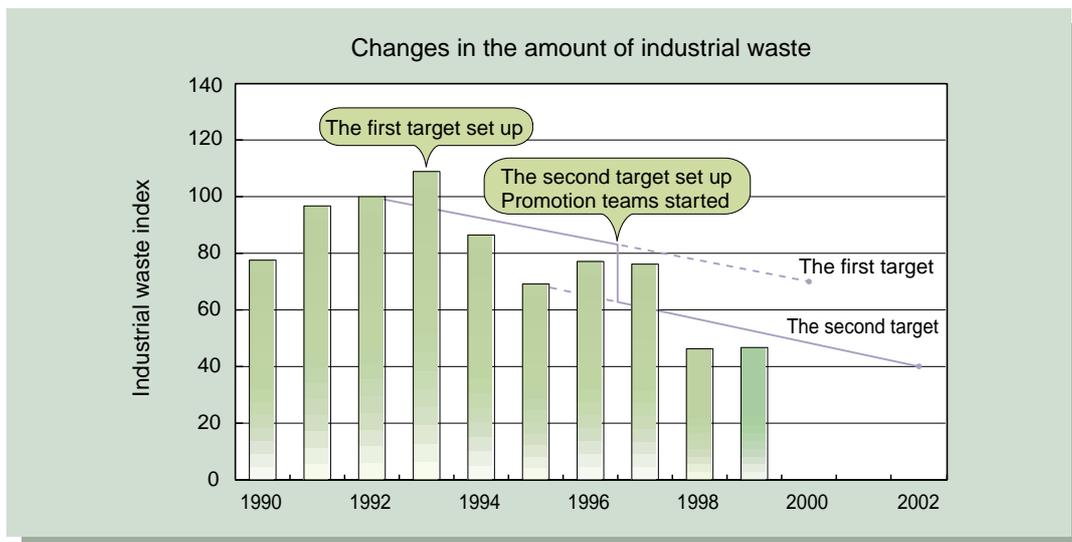
1) Industrial Waste and Recycling

◆ Industrial Waste

In 1993, a target was set up "to reduce the industrial waste as of FY 1992 by 30% by FY 2000". The target was achieved in FY 1995 through energetic activities of every Works focusing on the recycling of plastic waste, so that it was upgraded "to reduce the industrial waste as of FY 1995 by 40%, which corresponds to a 60% as of FY 1992, by FY 2002".

In addition, during the two years starting from 1997, the reduction program has been promoted by company-wide promotion teams to achieve further reduction. Hereafter, the program will be promoted through a systematic activity within the framework of the EMS (environmental management system) of each Works as well as through penetration of reduction technologies across the company to realize the 3Rs (reduce, re-use, recycle). The benchmarks for the realization are elimination of landfill waste in the first stage, upgrading gradually to zero emission of industrial waste in the last stage.

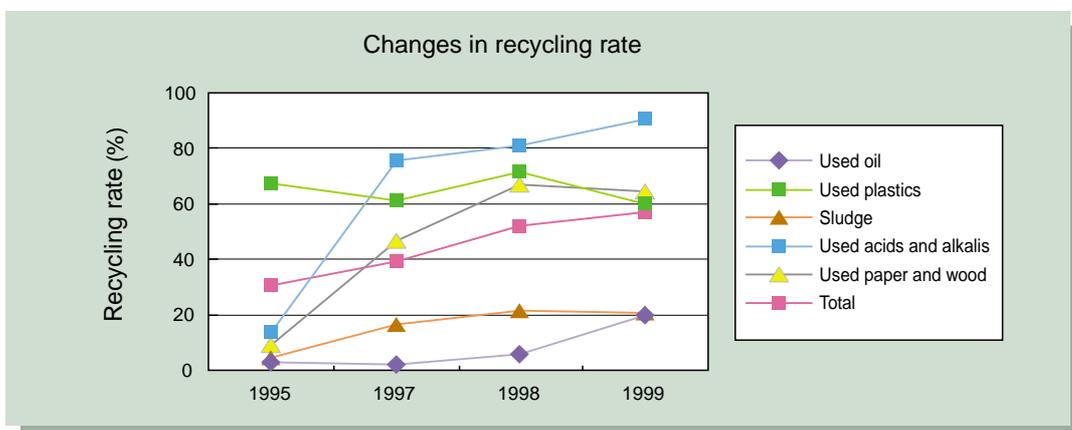
Countermeasures that are identified as major contributors to industrial waste reduction include the recycling of plastic waste, concentration and volume reduction of used oil, and the recycling of used acids and alkalis, sludge, used wood, and waste paper.



◆ Recycling

Although the recycling rate of Furukawa Electric has been improving year by year, it stagnated below 60% in FY 1999, thereby leaving ample room for further improvement. By category, used oil and sludge that account for a greater portion show a very low level of recycling. Furukawa intends, therefore, to focus on the emission reduction of these items together with the upgrading of their recycling rates hereafter.

When it comes to wire and cable, i.e., the company's mainstay products, Furukawa has long been successful in establishing a recycling system, in which Zaiko Inc., a 100% subsidiary of Furukawa Electric, has been engaged in disassembling used cables to recycle metals from cable conductors and plastics from cable insulators.



Note

The rate of recycling takes into account valuables and in-house reuse (limited to the goods processed outside the company).

2) Energy Conservation and Global Warming Prevention

◆ Progress, Structure, and Target of Energy Conservation

Furukawa Electric has been making every effort to save energy, since the company basically belongs, with its energy cost accounting for a large portion of the total cost, to energy intensive industries.

In 1974, the year of an oil crisis, promotion teams were organized across the company, achieving an energy conservation of 20% within five years. The achievements were evaluated, on a manufacturing-section basis, using an energy conservation index which was derived by comparing the result of a standard formula with actual results.

The second term of energy conservation started in 1980 with new promotion teams of entirely replaced members, thus achieving an energy conservation of 17% during the seven years until 1987.

In 1997, Furukawa's proprietary management system using energy conservation index was modified into the energy intensity per unit product system based on the Energy Conservation Law, whereby the target was set to be a 1% reduction over the previous year in terms of energy intensity per unit product.

◆ Achievements of Energy Conservation for FY 1999

Last year, energy conservation attained to more than 2% in terms of energy intensity per unit product thanks to the progress in energy conservation measures together with a high operation volume. Concerning energy conservation investment, a high-performance industrial furnace was introduced in FY 1999 succeeding FY 1998 under the subsidy from the New Energy and Industrial Technology Development Organization(NEDO). Moreover, waste-heat boilers were introduced to the existing diesel generators, and inverters were extensively installed on pumps and blowers.

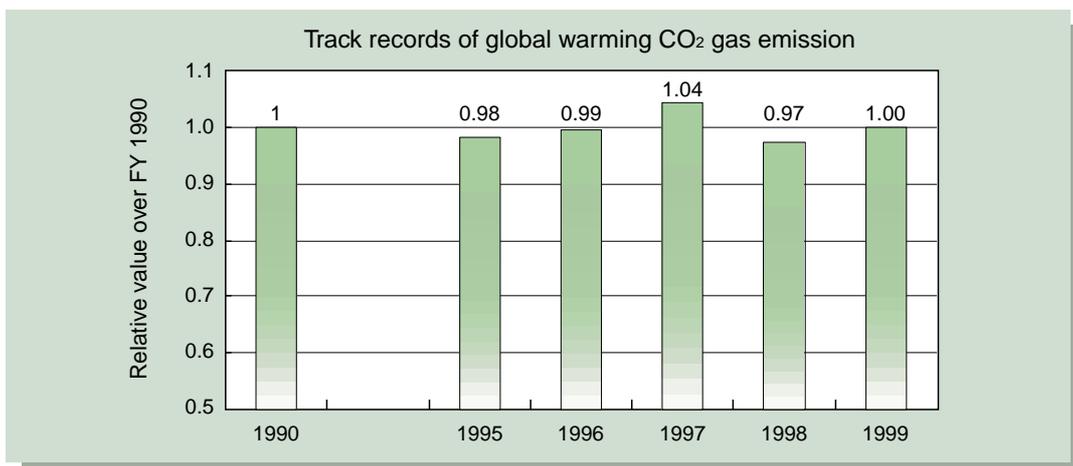
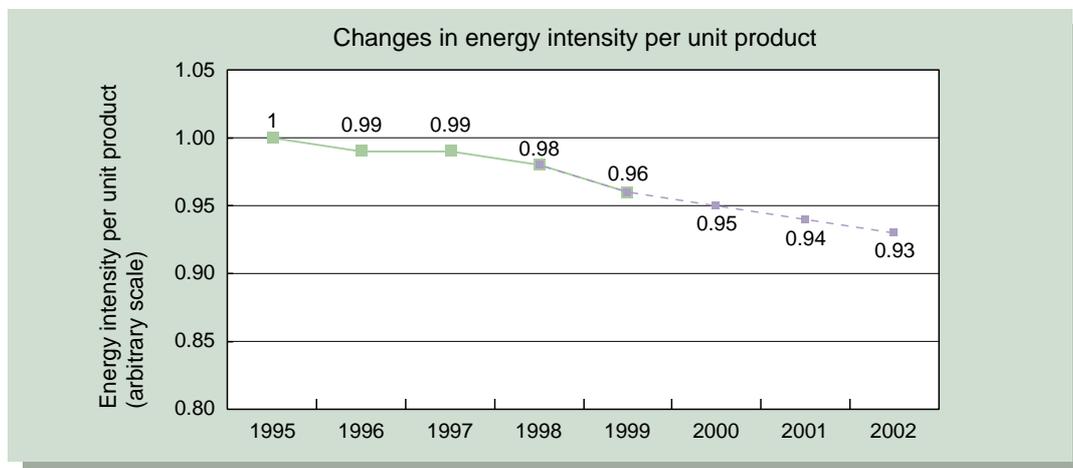
Regarding global warming gas reduction, on the other hand, the CO₂ impact increased by 3% over the previous year, rendering the emission volume comparable to that of FY 1990.

Thus, although the energy conservation program has made good progress, the reduction of emission per se has not been accomplished due to the increase of energy intensive products and operation volume.

◆ Energy-Conservation Activities in Future

Furukawa intends to formulate a control criterion that conforms to the Energy Conservation Law, thereby making efforts to achieve a reduction of 5% or more in energy intensity per unit product in five years.

Regarding the reduction of global warming gas impact, introduction of co-generation energy systems is being studied, since it is estimated that reduction efforts in terms of energy intensity per unit product only are insufficient to achieve the reduction target.

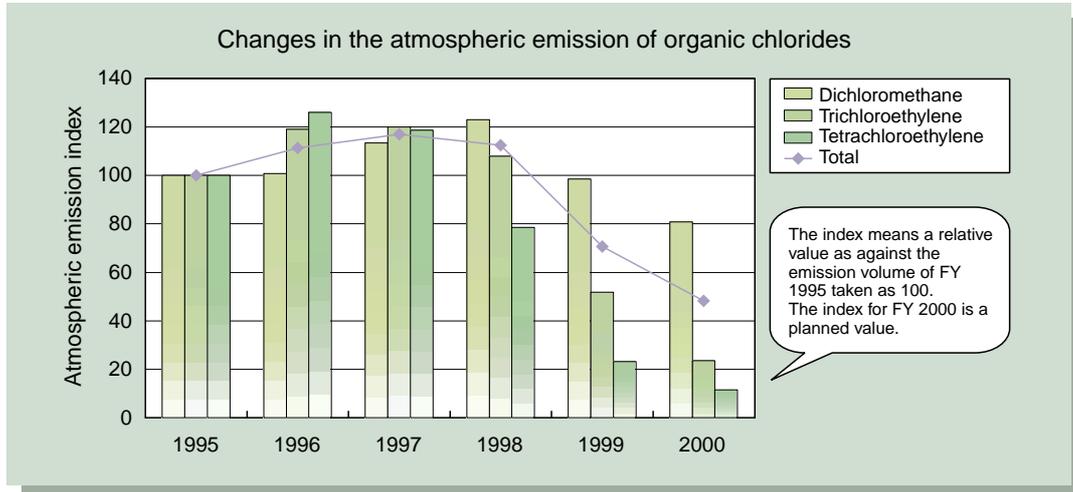


3) Organic Chlorides

A voluntary plan for reduction activity has been set up to reduce the atmospheric emission of three organic chlorides-dichloromethane, trichloroethylene, and tetrachloroethylene-by 50% by FY 1999 over FY 1995, taking into account the impact of the use on the labor and social environments as well as the growing importance of the impact. As a result, however, the activity ended unsuccessfully achieving a 30% reduction.

For FY 2000, the target was revised anew as shown below to make further reduction.

- 1) To reduce the atmospheric emission by 50% by FY 2000 over FY 1995
- 2) To eliminate the three substances by FY 2002



4) Ozone Layer Protection

Furukawa Electric has been engaged in the reduction of ozone layer depletion substances based on the strenuous efforts of project teams that started in 1989. As a result, specified CFCs and trichloroethane used in manufacturing processes were completely eliminated by the end of FY 1995.

5) Control of Chemical Substances

In April 2000, the PRTR (pollutant release and transfer register) law came into force thus tightening the control of chemical substances. Prior to this enforcement, Furukawa Electric was already promoting reduction programs against chemical substances, focusing on organic chlorides, through an active participation to the PRTR research program sponsored by the Federation of Economic Organizations, thereby announcing to the public the emission and transfer volumes of chemical substances at every Works.

As of FY 1998, the chemical substances that Furukawa is using amount to 23 in species, 2490 tons/year in handling volume, and 641 tons/year in the emission and transfer volume, including major substances as shown in the table below.

Furukawa intends to actively promote the reduction program of not only the emission and transfer volume, but also the handling volume of these substances without limiting to organic chlorides.

Chemical substance	Emission & transfer volume(tons/year)	Handling volume (tons/year)
Toluene	374	609
Dichloromethane	101	122
Trichloroethylene	80	80
Xylenes	22	603
Chlorine	12	167
Others	52	909
Total	641	2490

6) Acquisition of ISO 14001 Certificate

Recognizing early the importance of an environmental management system, Furukawa Electric has been constructing such a system of its proprietary design, so that when an international standard for environmental management system was established, the company began to tackle the certificate acquisition for ISO 14001.

In 1998, the Chiba and Mie Works acquired the certificate. These Works are the composite production basis comprised of a variety of plants for such products as electric wire and cable needless to say, optical components, automobile components, aluminum products, and copper products. Thus, based on this acquisition experience, Furukawa plans to extend the acquisition program across the company, in which three Works are due for acquisition in FY 2000, followed by the rest of all the 11 Works including laboratories by FY 2002.

Acquisition year	Works / Laboratories	Certification Agency	Certificate No.
1998	Chiba Works	DNV	EMCS-1208
1998	Mie Works	JACO	EC98J1097
2000	Hiratsuka, Kambara, Osaka		
2001	Shinagawa, Nikko, Fukui		
2002	Shiga, Oyama, Yokohama		

7) Education and Training

Commitment of individual employees is essential for environment preservation activities to be successful, in addition to organized corporate activities. To this end, Furukawa is carrying out employee education by preparing a lot of educational materials including those on the Intranet so as to enhance the awareness of individual employees.

Subject of education	Lecturer	Frequency
New employee	In-house lecturer	At entrance to the company
General employee	In-house lecturer	Whenever necessary
Managerial class	In-house lecturer	Whenever necessary
In-house inspector	In-house lecturer/Outside lecturer	Whenever necessary
Personnel in charge of safety and health	In-house lecturer	Twice a year