

Chapter 2

Society-wide Efforts towards the Creation of an Environmentally Advanced Nation

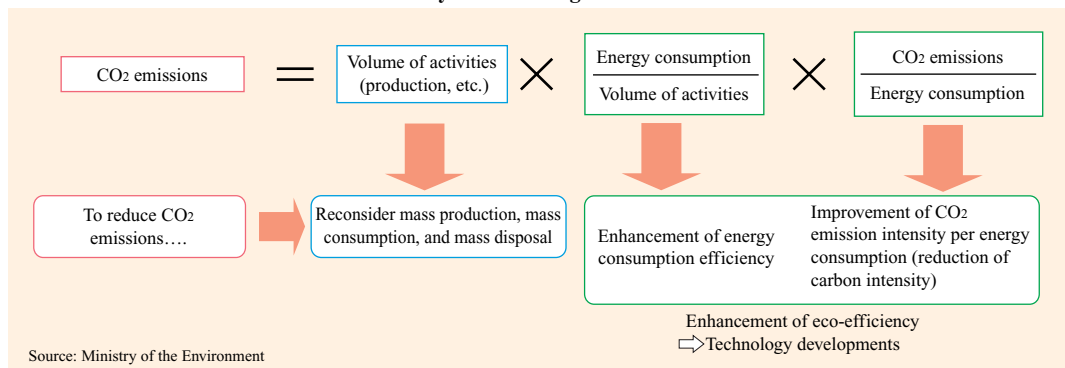
<Summary of Chapter 2>

To realize a low carbon society, it is necessary to work towards the creation of an “environmentally advanced nation” (creation of a sustainable society), in which all actors in all aspects of life care for the environment. This chapter focuses on the cultivation of “people” who carry out voluntary environmental conservation activities and the development of “systems” which help organizations and the entire society to facilitate environmental conservation, and takes a look at various initiatives being launched throughout the country.

Section 1 An Environmentally Advanced Nation Shapes a New Era

To ensure continued reduction of CO₂ emissions resulting from energy use, the main cause of global warming, it is necessary to promote measures that efficiently and effectively combine the following three elements: “energy consumption efficiency,” “CO₂ emission intensity per energy consumption (carbon intensity),” and “volume of activities.” To improve “energy consumption efficiency” and reduce “carbon intensity,” technology developments are indispensable. At the same time, from the standpoint of “volume of activities,” it is essential that we reconsider our lifestyles and socio-economic activities that are dependent on mass production, mass consumption, and mass disposal, and practice more environmentally conscious daily life and business activities.

Three Ways of Reducing CO₂ Emissions



The path we have chosen to pursue toward a low carbon society lies in our efforts to realize a society that is healthy in both economy and environment. In the efforts we seek to reduce GHG emissions while actualizing sound development of an economy with a low environmental load and a high quality of life. It is necessary to develop and diffuse energy-saving equipment, enhance energy use efficiency, and accelerate technology development; and it is equally important to enhance environmental awareness, which leads to each individual’s voluntary environmental conservation activities.

By taking part in such efforts, it would be possible for us to develop and share greater interest in environmental issues and work together in environmental conservation initiatives. This will eventually lead us to a sustainable society.

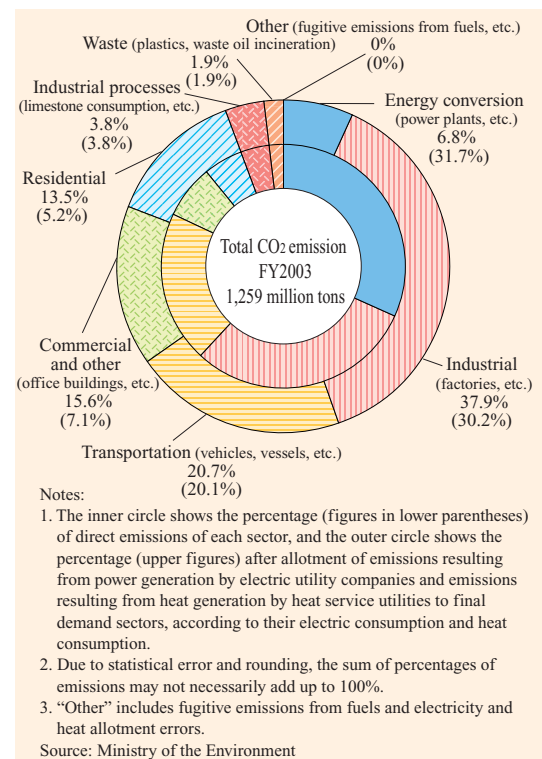
Building a sustainable society requires nurturing people who voluntarily act for environmental conservation in all scenes of life. And it is equally important to create “systems” for transforming our socio-economic systems to an environment-friendly one. Such initiatives have already begun by some actors aiming at the realization of a sustainable society.

Section 2 Initiatives at Home

As many of today's environmental problems are attributable to our daily living and business activities, it is of great importance that efforts be made to reduce environmental load at home where we carry out our daily activities. Residential energy consumption is increasing yearly along with the growing number of households and diffusion of home electrical appliances. CO₂ emissions from energy consumption by the residential sector account for approximately 14% of all Japanese CO₂ emissions from energy consumption. The amount has increased by approximately 30% from the base year (FY1990) of the Kyoto Protocol, marking a substantial growth rate compared with other sectors.

To cultivate "people" who can help build a sustainable society, the home plays an integral role. Home is the place where small efforts can gradually produce big effects. It is where a slight shift in one's point of view can reduce environmental load while achieving "high quality of life" or "enjoyable life." Furthermore, as home discipline such as "turning off lights," "not brushing teeth with water running," and "using things with care" help to instill the idea of *mottainai*, it can be said that the home is the starting point of nurturing "people" needed for the sustainable future.

CO₂ Emissions by Sector



Examples of Simple Efforts at Home

Shopping and Wastes

- Bring your own shopping bag
- Select eco products
- Make use of lease and rental services
- Make use of recycle shops
- Decline any unnecessary wrapping
- Sort wastes



Water

- Turn off the water when brushing teeth
- Reduce shower time by a minute a day
- Use leftover bath water for other purposes
- Do full loads of laundry
- Use appropriate measures of detergents
- Use a bucket rather than running water when washing a car



Transportation and Vehicles

- Walk or use bicycles for short distances
- Use trains for travel
- Avoid jackrabbit starts and quick acceleration
- Eliminate unnecessary loads on cars
- Avoid unnecessary idling
- Avoid revving
- Make use of car sharing



Energy

- Turn off main power when not in use
- Unplug appliances to reduce standby power
- Set air conditioners to 28 °C
- Plan programs before watching TV
- Don't use "keep warm" feature of electric rice cookers/warmers and electric pots
- Use compact fluorescent light bulbs
- Select energy-saving home electrical appliances



Food, Clothing and Housing

- First, adjust temperature by changing clothing
- No neckties and jackets in the summer
- Eat vegetables and food in season
- Reduce kitchen waste
- Learn eco cooking
- Use sunshades in the summer



Others

- Use things with care
- Plant trees in the garden
- Make a biotope in the garden
- Enjoy nature on holidays
- Study about environmental problems
- Teach children about the environment



Source: Ministry of the Environment

Through consistent efforts to reduce environmental load in each home and by making it a habit, it becomes possible to practice what is learned at school and work in daily life, and to apply the wisdom of life gained at home in activities at school and work. It is hoped that such changes in conduct at home will spread to other actors in society through each family member.

Section 3 Initiatives at Schools

To build a sustainable society, it is extremely important to carry out the environmental education of children who bear the destiny of our future. Schools play a significant role in fostering environment-minded people, who can take a lead in making a better society with responsible behavior and a correct understanding of the relationship between humankind and the environment.

Simply having knowledge about the current situation and causes of environmental problems is not sufficient. You must also be able to translate knowledge into concrete actions. This ability is believed to be cultivated by repeating the process of experiencing, feeling, and understanding through experiential learning. Environmental education should therefore be based on experiential and practical activities in nature and everyday life.

Fukae Primary School in Nijo-cho, Fukuoka Prefecture, conducts classes aimed at raising “awareness of the way of life” through “awareness of rich local nature,” thereby fostering an attitude of cherishing the environment. In FY 2004, fifth graders learned to “think about the waterside environment for people and living things in Fukae.” The children went to the local sea and river and learned that many living things inhabit these areas and how domestic wastewater is polluting these environments. This experience brought forth the desire to “clean the sandy beach which functions as a filter of water pouring into the sea,” and the students held exchange activities with the local people, proposing solutions. They also became eager to take the initiative to do whatever they could. They prepared posters and leaflets to promote the conservation of river water quality and installation of household wastewater treatment facilities, and cleaned up the beach. In all stages of learning, from field survey, exchange activities, to actual improvement of the environment, what they learned from “experience” was driving concrete actions.



Survey of living things in the river
Photo: courtesy of Fukae Elementary School, Nijo-cho, Fukuoka Prefecture

Section 4 Corporate Initiatives

Today, amid increasing environmental load caused by regular business activities, companies are major force driving economic activities. Thus, it is vital that companies incorporate environmental considerations in all aspects of their business activities. Moreover, as companies can possibly contribute to solving environmental problems through development of new technology for environmental conservation, it is also hoped that companies take initiatives to make full use of their abilities.

Corporate efforts in environmental conservation are not confined to just observing the laws and regulations. There are many examples of companies adopting environmental conservation measures as their social responsibility or focusing on environmental conservation as one of their most important business strategies. Such voluntary efforts are producing various positive results.

For example, according to a survey by the Ministry of the Environment, approximately 57.1% of all companies have voluntarily initiated efforts to reduce their CO₂ emissions. Efforts in the fields of environmental business and the development of environment-friendly products have remarkably improved the resource and energy saving performance

of home electrical appliances in the last few years. Japan's technology realizing both fuel efficiency and acceleration performance as represented by hybrid vehicles is highly regarded in the world. The use of vehicles equipped with such environment-friendly technology is spreading.

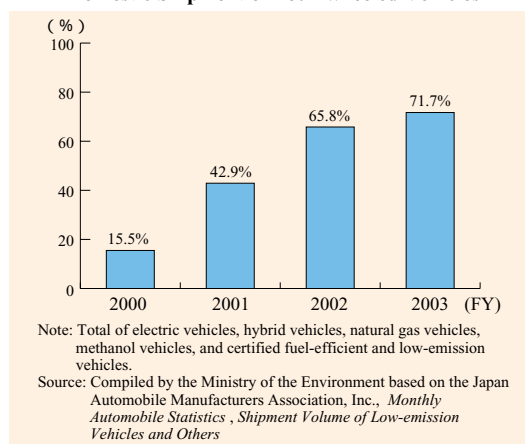
According to a FY2004 estimate by the Ministry of the Environment, consumer behavior guided by consideration for environmental conservation is expected to induce greater demands and markets for environmentally conscious products and business operations (environment-induced business). Their size is predicted to grow to approximately 103 trillion yen by 2025, employing approximately 2.22 million persons. As these markets expand with the support of consumers, companies will be attracted to make greater investment in environment-related businesses, further developing the businesses and thus contributing to the conservation of the environment.

Estimates of the Current and Future Market Sizes and Employment Potential of Environment-induced Businesses

Year	Market size (trillion yen)		Workforce (10,000 persons)	
	2000	2025	2000	2025
Environment-induced businesses	41	103	106	222

Source: Ministry of the Environment

Ratio of Low-emission Vehicles in the Total Domestic Shipment of Four-wheeled Vehicles



Section 5 Initiatives by Citizens' Groups

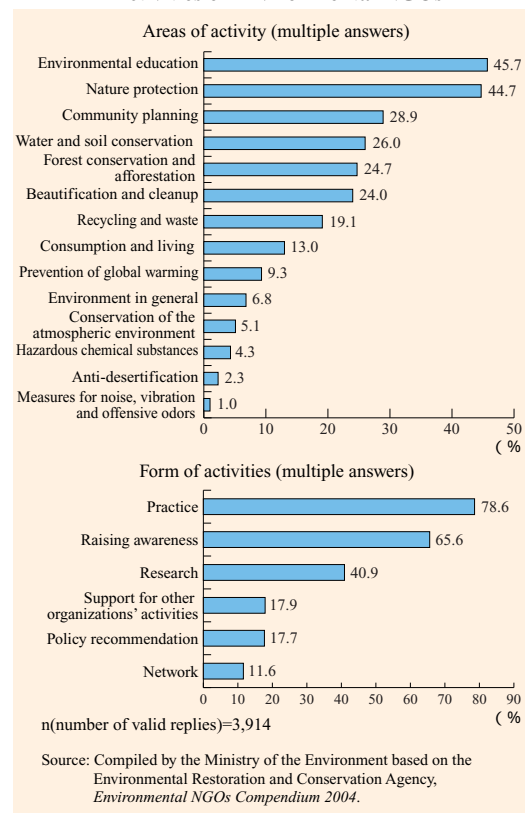
Today, throughout the country, citizens are getting together for various activities related to environmental conservation. The role played by such gatherings, or citizens' groups, is becoming increasingly greater.

According to *Environmental NGOs Compendium (2004)* published by the Environmental Restoration and Conservation Agency of Japan (ERCA), an independent administrative institution, environmental NGOs are most active in the field of "environmental education" (45.7%), followed by "nature protection" (44.7%), "community planning" (28.9%), and "water and soil conservation" (26.0%).

Citizens' groups involved in environmental education and learning cover a wide range of activities, including development of teaching materials, dispatch of lecturers, and implementation and coordination of programs. Such activities and programs are developed and offered to suit different targets, such as citizens, schools, children, and businesses.

Among citizens' groups undertaking environmental conservation activities, some take advantage of their expertise to make various proposals and recommendations. For example, Kiko Network (NPO), whose main objective is to promote climate change prevention, has been making policy recommendations, participating in international negotiations and lobbying, and disseminating information. As policy recommendations, it has proposed effective domestic policies and concrete methods to the government for achieving the 6% reduction commitment of the Kyoto Protocol. Kiko Network also carries out studies and develops proposals aimed at the early introduction of a carbon tax.

Activities of Environmental NGOs



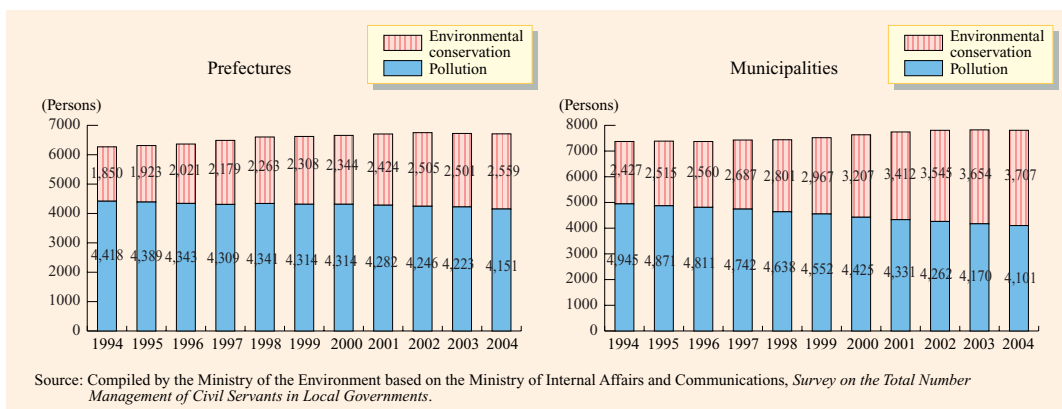
Section 6 Local Initiatives

Local governments are expected to play the role of developing “systems” and “people” that encourage individuals and local actors (companies and citizens’ groups) to reduce environmental load in their daily living and business activities.

Fundamental environment ordinances and basic environment plans that clarify the basic concepts and policies of local governments are currently under preparation throughout the country. In Hirosaki, Aomori Prefecture, the “Hirosaki Basic Environment Plan (Hirosaki Agenda 21)” was formulated with the participation of citizens in March 2001. In order to promote the plan, the city concluded an agreement with “Hirosaki Environment Partnership 21” (HEP21), an independent citizens’ organization, and jointly held courses and lectures, as well as citizens’ forums organized by HEP21. The city pays the working expenses of HEP21.

While the total number of local government staff has been decreasing in recent years, the number of officers listed under the environmental conservation and pollution sections has been on the increase. In the 11 years between 1994 and 2004, the figure increased by 7% in prefectures and 6% in municipalities. The number of staff is growing in larger local governments. In the case of many small local governments, however, they have no officers specializing in environmental conservation. Thus, the question is how to promote environmental administration in small local governments.

Number of Officers in the Environmental Conservation and Pollution Sections in Prefectures and Municipalities



Number of Officers in the Environmental Conservation and Pollution Sections by Population Size

