

## The Need to Establish a Sound Material-Cycle Society

In today's society, human activities are accompanied by the circulation of materials. This circulation has significant impacts in many areas. Until the 1980's, Japan focused on rapid economic growth, but in the early 1990's, both society and corporations became concerned about the impact of their activities on the global environment and began efforts to reduce that impact, with the goal of creating a Sound Material-Cycle Society in which resources are used efficiently, waste is prevented, and used materials are recycled.

Now, Japan endeavors to establish a Sound Material-Cycle Society in which the consumption of natural resources is reduced and the burden on the environment is minimized, toward the sustainable development. This can be achieved by promoting the 3Rs (Reduce, Reuse, Recycle), as well as by ensuring the appropriate disposal of waste materials, making use of natural systems of material circulation, and so on. Technologies related to the 3Rs lower the cost of reducing the burden on the environment, increase production efficiency, and encourage the appropriate consumption of energy. Therefore, using the 3Rs to develop new environmental technologies will not only help establish a Sound Material-Cycle Society in Japan, but also increase the competitiveness of Japanese industries as a whole and individual company in the global economy.

## The Importance of Science and Technology in Establishing a Sound Material-Cycle Society

In order to establish a Sound Material-Cycle Society, it is important to systematically interlink individual technologies. Therefore, resource circulation systems must be accommodated with regional industrial structures and lifestyles so as to establish a sound resource circulation loop according to scale. Because many products are produced in foreign countries, domestic efforts alone are insufficient. Japan and other countries must coordinate their efforts. Problems such as inappropriate processing and illegal disposal of waste occur frequently and are growing worse. Thus "a negative legacy" of contaminated soils and illegal waste dumps has been accumulated and accidents

resulting from the failure to implement safety procedures also continue to occur. Appropriate processing technology must be developed to ensure greater safety and security, waste disposal sites must be regenerated and their use extended, and illegal-dumping sites must be environmentally restored and their safety ensured. These issues all require immediate action.

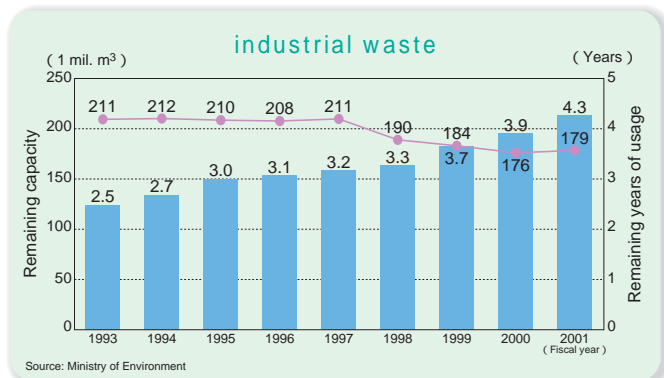
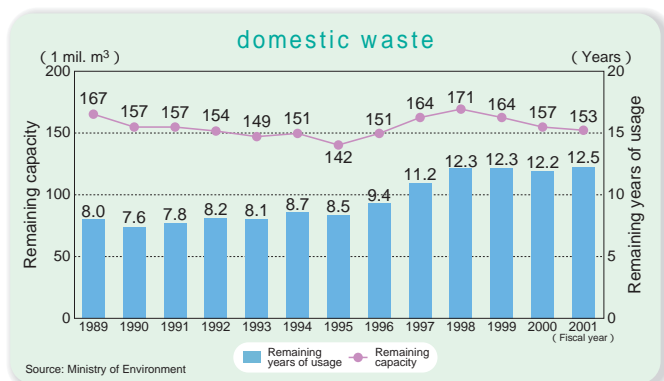
## Policy Responses for Establishing a Sound Material-Cycle Society

Under these circumstances, the cabinet passed in March 2003 a resolution called the Fundamental Plan for Establishing a Sound Material-Cycle Society. The plan aims to achieve by 2010 such goals as an improvement of resource productivity by 40%, a reduction in the amount of waste generated per person per day by 20% and a doubling of the size of the related business market and the number of people employed in businesses that contribute to establishing a Sound Material-Cycle Society. Although the final goals of the plan have been clearly specified, a diverse range of practices is needed to achieve those goals. These practices have yet to be brought together in a coherent scenario. To realize the plan's goals, the government must develop a comprehensive scenario with a clear statement of principles and vision.

## Launch of the Council for Science and Technology Policy and Establishment of the Initiative

The Council for Science and Technology Policy was launched in January 2001. Under the Basic Plan for Science and Technology (passed by a cabinet resolution in March 2001), the Council has developed strategies to promote science and technology in core areas. With regard to core issues related to the environment, the Council recommended that the promotion efforts be in the form of an initiative based on a scenario that specifies government-wide policy goals and the paths to achieve them. In this scenario, the individual research projects being carried out by each ministry are to be steadily accumulated and reconstructed. As a result of these proposals, the Waste-free and Resource Recycling Technologies Research Initiative has been implemented since fiscal 2002.

Remaining capacity and years of usage for final disposal sites



Japanese System of Laws Related to the Promotion of a Sound Material-Cycle Society

