

Waste-free and Resource Recycling Technologies Research Initiative

The initiative aims to develop the necessary technologies and systems to achieve by 2010 quantitative targets for waste reduction (50% reduction from 1996 levels, 24% recycling rate for domestic waste, 48% recycling rate for industrial waste), and reduce the risk posed to the environment by harmful waste, as laid out in the Fundamental Law for Establishing a Sound Material-Cycle Society.

In the mid to long-term, the initiative aims to develop the necessary technology to realize the Sound Material-Cycle Society envisaged by the above law, and also to build appropriate recycling systems through coordination with overseas organizations.

Program for system development to support the construction of a Sound Material-Cycle Society

Develop technologies for systems evaluation such as Life Cycle Assessment (LCA) energy and material flow analysis, establish methods of prediction, and develop methods to encourage the technology. Also establish systems for maintaining contact with citizens, which is fundamental to realizing a Sound Material-Cycle Society.

(Aim)
Develop technologies that promote the transformation to a Sound Material-Cycle Society and methods for evaluating systems (such as LCA) based on the two principles; the hierarchy of material cycles and minimizing the environmental burden.

Program for recycling technologies and systems

Research and develop technologies and systems connected with the recycling of end-of-life vehicles construction waste, organic waste, and textile waste. Also systems related to the promotion of regional recycling through the verification of social models and other methods.

(Aim)
Develop and improve recycling technologies and systems related to individual recyclable resources. Also develop and improve "venous distribution systems", which are the foundation of the recycling system.

Program for Sound Material-Cycle design and production

Develop design, construction, and production technologies that make it possible to "Reduce" and facilitate efforts to "Recycle" and "Reuse".

(Aim)
Develop design, construction, and production technologies for industrial products, food resources, and construction materials that incorporate and promote the 3Rs.

Program for appropriate disposal technologies and systems

Develop technologies to reduce waste volume and advanced recycling, decomposition and treatment of hazardous waste, revitalize and environmentally restore polluted disposal sites and monitor inappropriate waste disposal.

(Aim)
Develop technologies and systems that relieve the pressure on disposal sites and eliminate inappropriate waste disposal, disposal of unwanted goods, and illegal disposal, and reduce the environmental burden caused by inappropriate treatment.

