



13 Resource circulation-related industries

<Main future efforts>

- Promoting advancement of technology, improvement of facilities, and cost reduction.
 - (1) Reduce, Renewable
 - Promoting technology development/demonstration for higher functionality of biomass materials and expansion/low cost of applications for further expansion of recycling based on the “Roadmap for the Introduction of Bioplastics”. Achieving development and advancement of recycling technology, improvement of facilities, and creation of demand.
 - Introducing approx. 2 million tons of bioplastics by 2030.
 - (2) Reuse, Recycle
 - Developing and advancing high-performance materials and recycling technology with high recycling properties, optimizing recovery routes, and expanding installed capacity, as well as realizing the expansion of the recycling market.
 - Promoting efforts toward practical use and social implementation by developing technologies for combustion control, etc. to facilitate the recovery of CO₂ from waste treatment facilities and by scaling up and reducing costs through demonstration projects.

Benefits to people’s lives in 2050

- People can receive a stable supply of electricity and heat from waste treatment facilities by taking advantage of their resilience, and use them as disaster prevention centers providing shelter.
 - Recovering energy efficiently from household waste. Utilizing waste treatment facilities as regional energy centers.
 - By ensuring the resilience of the facilities, they can be used as disaster prevention centers providing power and shelter during a disaster.

(3) Recovery

- Promoting technology development to ensure high-efficiency energy recovery from low-quality waste.
- Promoting the improvement and cost reduction of heat storage and transportation technologies for supplying heat from incineration facilities to distant utilization facilities
- Promoting a technology demonstration project with a view to increasing the scale of methanization facilities due to major changes in waste quality in the future.
- Promoting treatment of waste from a wide area and consolidation of waste treatment facilities.

