

Country Report Approach towards 3R and Circular Economy Society - Japan -

Ministry of the Environment, Japan

The 5th Fundamental Plan for Establishing a Sound Material-Cycle Society



<u>The fifth Fundamental Plan</u> was approved by the Cabinet in August 2024, which is developed as a national strategy bringing all relevant ministries together to take collective actions towards transition to circular economies.



competitiveness, and support economic security

This Plan (Fifth Plan)

Transition towards circular economies is positioned as the strategic cornerstone to promote national industrial growth, regional revitalization and well-being in addition to environmental challenges including climate change and biodiversity conservation.

Fourth Plan (2018)

Integrated improvement of environmental, economic and social aspects

Third Plan (2013)

- ① Strengthen measures focusing on reducing and reusing in addition to recycling
- ② Response to the Great East Japan Earthquake

First Plan (2003)

Set numerical targets for recycling utilization rate, resource productivity, and final disposal volume

Introduction of the concept of substance flow 🐰

Second Plan (2008)

- ①Integrated efforts with a low-carbon society and a society in harmony with nature
- ②Establishment of a regional circulation zone
- ③Establishment of an international recycling- oriented society

Development of measures focusing on environmental aspects

The Resource Circulation Enhancement Act (May 29th, 2024)



The Act aims to promote decarbonization and secure the quality and quantity of recycled materials. It requires the national government to develop basic guidance for upgrading recycling businesses and certain industrial waste management companies to report and publish their recycling activities. It can lead to certify advanced recycling businesses.

1. Develop the basic guidance

The Minister of the Environment publishes basic guidance for upgrading/advancing recycling businesses

2. Promote recycling and enhance transparency

- Develop guidance/criteria of advanced recycling to encourage businesses to enhance their recycling operations and activities
- Require certain industrial waste management companies to report their recycling activities and the government to publish their information

3. Upgrade/enhance recycling businesses

The Minister of the Environment certifies advanced recycling businesses. The certified companies are exempted to permit requirements for Waste Management Act.

a. Advanced collecting and recycling scheme

Promoting business that collect and recycle waste across regions to secure the quality and quantities of recycled materials for suppliers



b. Advanced Separating facilities Promoting advanced separating and recovery facilities



Example: complete separation of glass and metals



Example: used diaper recycling

c. Highly efficient recycling facilities

Promoting highly efficient recycling facilities for reducing GHGs emissions



Example: highly efficient recycling facilities using AI

Plastic Resource Circulation Act



 This Act addresses whole lifecycle of plastics (i.e. from designing products to disposing plastic waste) and involves all stakeholders in promoting "3R+Renewable" and increasing circularity.

[Guidelines for Design for the Environment]

- Develop guidelines for Design for the Environment for manufacturers and establish a mechanism to certify products designed in accordance with the guidelines.
 - The government procures preferentially the certified products (under the Act on Promoting Green Procurement) and provides financial support to the manufactures.



<Replaceable bottles>

[Reduction of Single-use Plastics]

- Set criteria for retailers and service providers to reduce single-use plastics.
 - ➤ The competent ministers may issue recommendations and orders to suppliers who provide large amounts of single-use plastics when their actions are found significantly insufficient in light of the criteria.



[Separation, Collection, and Recycling by Municipalities]

- Municipalities can recycle plastic product waste effectively under the current recycling scheme for containers and packaging
- Municipalities develop <u>a recycling</u>
 plan in collaboration with recyclers.
 - When the plan is approved by the competent ministers, the recyclers can recycle plastics without sorting and bailing by municipalities.

[Collection and Recycling by Manufacturers and Retailers]

- Manufacturers and retailers develop a plan to collect and recycle their used products.
 - ➤ When the plan is approved by the competent ministers, the manufacturers and retailers can recycle without service permission under the Waste Management Act.



[Recycling by Waste Generators]

- Set criteria for waste generators to reduce and recycle plastic waste.
 - ➤ The competent ministers may issue recommendations and orders to waste generators who generate large amounts of plastics when their actions are found significantly insufficient in light of the criteria.
- Waste generators develop a **recycling plan**.
 - ➤ When the plan is approved by the competent ministers, the waste generators can recycle without service permission under the Waste Management Act.



ASEAN-Japan Resource Circulation Partnerships on E-Waste and Critical Minerals (ARCPEC)



Outline

- ARCPEC was launched at the 50th anniversary of ASEAN-Japan Ministerial Dialogue on Environment and Climate Change (AJMDEC) held in Vientiane, Lao PDR on 24 August 2023.
- ASEAN-Japan partnership will increase the circularity of electronics and other relevant supply chains in ASEAN countries to strengthen the supply of critical minerals and raw materials for the transition to a net-zero economy, improving human health, and promote environmentally sound recycling of e-waste and recovery of critical minerals and raw materials.

Expected cooperation

Promotion of an enabling environment

Support ASEAN countries to develop necessary laws and regulations including standards and guidelines for collection, dismantling and disposal. It also includes registration and permission system of recycling business, reduction of environmental contamination and improvement of human health.

Capacity building

Promote capacity enhancement of governments and businesses. For governments: enforcement of laws and regulations and monitoring of the entire operation from collection and recycling to final disposal. For businesses: improvement of technical and operational capacities of recycling operators.

Promotion of private partnerships

Foster collaboration between local companies and Japanese ones e.g. Technical cooperation, Joint ventures, Investments in local facilities

Promotion of the uptake of recycled material Promote the uptake of recycled critical minerals and raw materials in key supply chains.



Open burning of cables

Hand dismantling of e-waste (in Bangkok)

(in Indonesia)

Advanced technologies



Many other nonferrous metals and chemicals are produced.

