

11th Regional 3R and Circular Economy Forum in Asia and the Pacific

“Integrating Circular Economy in Major Development Sectors towards Achieving Zero Waste Societies and the SDGs”

8-10 February 2023, Siem Reap, Kingdom of Cambodia

Country Report

(Draft)

<Japan>

This country report was prepared by the Government of Japan as an input for the 11th Regional 3R and Circular Economy Forum in Asia and the Pacific. The views expressed herein do not necessarily reflect the views of the United Nations.

Country 3R Progress Report

Name of the Country: Japan

Name, Designation and Organization Respondent:

Office for Promotion of Sound Material-Cycle Society,
Environmental Regeneration and Material Cycles Bureau,
Ministry of the Environment, Japan

Other Ministries, Organizations, Agencies contributing to
Country Report:

Timeline of Submission: 15 January 2023

(Email: 3R@uncrd.or.jp)

Progress and achievements towards implementation of the Ha Noi 3R Declaration
-Sustainable 3R Goals for Asia and the Pacific (2013-2023)-

With the objective of demonstrating renewed interests and commitments of Asia-Pacific countries towards realizing a resource efficient society, the Fourth Regional 3R Forum in Asia-Pacific in 2013 adopted the good-will and legally non-binding “*Ha Noi 3R Declaration – Sustainable 3R Goals for Asia and the Pacific 2013-23.*” The objective of the Country Reporting is to share among international community with various initiatives launched and efforts made (such as new policy instruments, legislations, regulations, institutional arrangements, investments or financing, technological innovation or intervention, partnership mechanisms, such as PPPs, etc.) by the member countries of the Forum in addressing each of the underlined goals of the Ha Noi 3R Declaration. This would help the member countries to share various best practices in 3R and resource efficiency areas across the region. In addition, it would also help bi-lateral and multi-lateral development agencies, donors, development banks in assessing the sustainable needs and challenges of those countries to better plan their existing as well as future capacity building programmes and technical assistance in the areas of 3Rs and sustainable waste management.

With the cooperation of other related ministries, organization and agencies, we request you to kindly fill in the below table as much as possible with relevant data/information. If additional spaces are required, separate sheets could be attached.

Thank you very much for your kind cooperation.

**Voluntary Progress/Achievements/Initiatives in
Implementing Ha Noi 3R Declaration (2013~2023)**

| |
|-----------------------|
| Country Name Japan |
|-----------------------|

Secretariat of the Regional 3R and Circular Economy Forum in Asia and the Pacific
United Nations Centre for Regional Development (UNCRD)
Email: 3R@uncrd.or.jp

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)

| | |
|---------------|--|
| Goal 1 | Significant reduction in the quantity of municipal solid waste generated, by instituting policies, programmes, and projects at national and local levels, encouraging both producers and consumers to reduce the waste through greening production, greening lifestyle, and sustainable consumption. |
|---------------|--|

Q-1 *What specific 3R policies, programmes and projects, are implemented to reduce the quantity of municipal solid waste?*

- *Japan states that the government strengthens efforts to further push 3Rs approach and waste management in the 4th Fundamental Plan for Establishing a Sound Material-Cycle Society (Ministry of the Environment, 2018).*
- *Japanese government launched a comprehensive waste reduction strategy in 1993 to promote local community-wide waste reduction and recycling by subsidizing sorted waste collection and group collection by resident groups in municipalities, and it provided subsidies for facilities that repair end-of-life products and put recycled products on display (recycling plazas) to encourage the development of such facilities.*
- *With a view to strongly promoting waste reduction initiatives in cooperation with consumers and business operators, the Japanese government held the First Waste Reduction Promotion National Conference in September 1992 to compare notes regarding waste reduction. In 1993, the government specified the week starting on May 30 as the Waste Reduction Promotion Week and took an active part in developing a variety of awareness-raising programs through TV broadcasting and other events (the week was renamed the Waste Reduction and Recycling Promotion Week in 1997).*
- *Many awareness-raising programs for waste reduction by local government initiatives such as “Sapporo waste reduction campaign”, “Sapporo slim Sunday”, “Shopping with your own bag” and so on.*

Q-2 *What is the level of participation of households in “source” segregation of municipal waste streams?* (Please check the appropriate box)

- Very High (> 90%)
- High (>70%)
- Average (50-~70%)
- Low or not satisfactory (< 50%)
- Does not exist

Q-3 *Total annual government expenditure per capita (US\$ per capita) in municipal solid waste management in 2020-2021*

US\$ 15.6 per capita (2,129,000,000,000 JPY / 126,146,000 person) US\$=108 JPY

The cost for waste management for April 2020 to March 2021 : 2,129,000,000,000

Source: <https://www.env.go.jp/press/110813.html> (Only available in Japanese)

The population as of October 2020 : 126,146,000

Source: Statistics Bureau of Japan

| | |
|--|--|
| I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste) | |
| Goal 1 | Significant reduction in the quantity of municipal solid waste generated, by instituting policies, programmes, and projects at national and local levels, encouraging both producers and consumers to reduce the waste through greening production, greening lifestyle, and sustainable consumption. |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <ul style="list-style-type: none"> ➤ <i>Strengthening linkages between production and consumption</i> ➤ <i>Transition of service provision systems to encourage Supply Chain Planning</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <ul style="list-style-type: none"> ➤ <i>Japan established “The 4th Fundamental Plan for Establishing a Sound Material-Cycle Society” in July 2018. For details, please refer to the attachment.</i> ➤ <i>To reinforce the cooperation between public sector and private company for further promotion of Circular Economy, Ministry of the Environment and Japan Business Federation co-established the Japan Partnership for Circular Economy (J4CE) in March 2021. In the J4CE website, some corporate initiatives related to 3R and Circular Economy are introduced as “best practice”.</i> https://j4ce.env.go.jp/en ➤ <i>Other attempts are as follows,</i> <i>Reduction of plastic shopping bags by banning to provide with free plastic bags at stores from July 2020.</i> <i>Reduction and recycling of food waste</i> <i>Promote the use of self-owned bottles and etc.</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| <i>“The 4th Fundamental Plan for Establishing a Sound Material-Cycle Society” issued in July 2018.</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste) | |
|---|--|
| Goal 2 | Full-scale utilization of the organic component of municipal waste, including food waste, as a valuable resource, thereby achieving multiple benefits such as the reduction of waste flows to final disposal sites, reduction of GHG emission, improvement in resource efficiency, energy recovery, and employment creation. |
| Q-1 Does the central government have policies or support to utilize or reduce the organic waste such as composting, energy recovery and improving efficiency in food processing? | |
| <p><i>The Food Recycling Act was established in May 2001 and revised twice in 2008 and 2015. It mainly focuses on food waste generated by food related industries and businesses, and aims to (1) reduce food waste generation; and (2) promote recycling of food waste to feedings or organic fertilizers. As a result, the rate of recycling food waste generated by food related industries and businesses ((Controlled amount + recycled amount for use specified under the Food Recycling Act + amount of heat recovery × 0.95 + reduced amount) / (Controlled amount + annual amount of food waste generated)) increased from 37% in 2001, to 54% in 2007, 85% in 2015, and 84% in 2017.</i></p> | |
| Q-2 What is happening to country's organic waste? (Please check the appropriate box) | |
| <input type="checkbox"/> mostly landfilled <input checked="" type="checkbox"/> mostly incinerated <input type="checkbox"/> both landfilled and incinerated <input type="checkbox"/> mostly open dumped or open burned | |
| Challenges (policy/ institutional/ technological/ financial) faced in implementation: | |
| <ul style="list-style-type: none"> ➤ <i>The utilization of the organic waste by household is quite low.</i> ➤ <i>Further efforts to systematically reduce and recycle food wastes are needed across all other stages in the food supply chain.</i> | |
| Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant | |
| <ul style="list-style-type: none"> ➤ <i>Recycling businesses registration system</i> ➤ <i>Recycling loop system</i> ➤ <i>Other measures such as “No-Foodloss Project”, “Eat-Up Movements (3010 campaign)”, and “Salvage Party” for food waste reduction.</i> | |
| Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022) | |
| <p><i>In July 2019 the government issued new basic policy based on The Food Recycling Act.</i></p> <p><i>In the basic policy;</i></p> <ul style="list-style-type: none"> ➤ <i>Considering the convergence to SDGs, it is stated that Japan halves the amount of food loss in 2030 compared to that of 2000.</i> ➤ <i>The government calculated the specific generation of food waste per volume of sales, production, etc. for each of the various business types to identify the most appropriate reduction/prevention target, which is called as “reference generation unit”. It has been applied as the target value for the control of food waste generation by a total of 26 industry groups for a period of five years from April 2014, increased to 31 groups in 2015. As of March 2019, 90% of industry groups achieved the target value. In response to this result, the target value for these 31 industry groups was raised and new target value for</i> | |

| I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste) | |
|--|---|
| Goal 2 | Full-scale utilization of the organic component of municipal waste, including food waste, as a valuable resource, thereby achieving multiple benefits such as the reduction of waste flows to final disposal sites, reduction of GHG emission, improvement in resource efficiency, energy recovery, and employment creation. |
| | <p><i>additional 3 industry groups was set.</i></p> <p>➤ <i>In 2019 the government revised the recycling rates for each category of business and industry, which were 95% for food manufacturers, 70% for wholesalers, 55% for retailers, and 50% for restaurants. Revised target values by March 2024 are 95% for food manufacturers, 75% for wholesaler, 60% for retailer, and 50% for restaurants.</i></p> |
| <p><i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all</p> | |

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)

Goal 3 Achieve significant **increase in recycling rate** of recyclables (e.g., plastic, paper, metal, etc.), by introducing policies and measures, and by setting up financial mechanisms and institutional frameworks involving relevant stakeholders (e.g., producers, consumers, recycling industry, users of recycled materials, etc.) and development of modern recycling industry.

Q-1 What is the recycling rate of various recyclables? (Please check the appropriate cell & add more waste streams as relevant for the country)

| Type \ Rate | Very High (>90%) | High (>70%) | Average (50~60%) | Poor (<50%) | Recycling does not exist | Definition of recycling rate* |
|--------------------|----------------------------|-----------------------|------------------|-------------|--------------------------|-------------------------------|
| Paper | | ✓ 80.4% in 2017 | | | | Definition 1 |
| Plastic | | ✓ 86% in 2017 | | | | Definition 3 |
| Metal | ✓ 93.9% in 2017 | | | | | Definition 3 |
| Construction waste | ✓ 92% in 2008 | | | | | Definition 1 |
| e-waste | | ✓ 71% in 2018 | | | | Definition 3 |
| others | ✓ 97.9-98.9% in 2017 | | | | | Definition 3 |

*Note: Please specify in the cell which of the following definitions (ie., 1 or 2 or 3) is followed for recycling rate
 Definition 1: (collected recyclable waste)/(estimated generation of waste)
 Definition 2: (volume of utilized recyclable waste)/(volume of raw material)
 Definition 3: (volume of utilized recyclable waste)/(volume of collected waste for recycling)

Q-2 What specific policies are introduced at local and national level for prevention or reduction of waste streams – paper, plastic, metal, construction waste, e-waste?

- **Implementation of individual recycle acts (Containers and Packaging Recycling Act, Home Appliance Recycling Act, Small Appliance Recycling Act, Food Waste Recycling Act, Construction Waste Recycling Act)**
- **Municipal solid waste treatment facilities, such as recycle centers, are being developed to promote generation control, cyclical use and proper treatment of waste, through the Subsidy System for Promoting the Establishment of a Sound Material-Cycle Society.**
- **Reduction of plastic shopping bags and so on.**
- **“Resource Circulation Strategy for Plastics” was issued in May 2019, in which “3R+Renewable” was defined as basic principle. For more detail, please refer to “Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant”.**
- **The Plastic Resource Circulation Act came into effect in April 2022 for all stakeholders**

to promote “3R+Renewable” and increase circularity.

Q-3 What is the rate of resource recovery from various waste streams?

| Rate Type | Very High (>90%) | High (>70%) | Average (50~60%) | Poor (<50%) | Recycling does not exist |
|-----------------------|---------------------------|-------------------------|---------------------------|----------------|-----------------------------|
| Paper | | | ✓ 64.3% in 2018 | | |
| Plastic | | ✓ 86% in 2017 | | | |
| Metal | ✓ 93.4% in 2017 | | | | |
| Construction waste | ✓ 96% in 2012 | | | | |
| e-waste | ✓ 93% in 2018 | | | | |

(Please check the appropriate cell & add more waste streams as relevant for the country)

Q-4 What is the level of existence of resource recovery facilities/ infrastructures in cities?

| Level Type | Every Major City | Few Major Cities only | Does not exist | Supportive policy or programmes exists | No supportive policy or programmes |
|-----------------------|---------------------|--------------------------|-------------------|---|--|
| Paper | ✓ | | | | |
| Plastic | ✓ | | | | |
| Metal | ✓ | | | | |
| Construction waste | ✓ | | | | |
| e-waste | ✓ | | | | |

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)

Goal 3 Achieve significant **increase in recycling rate** of recyclables (e.g., plastic, paper, metal, etc.), by introducing policies and measures, and by setting up financial mechanisms and institutional frameworks involving relevant stakeholders (e.g., producers, consumers, recycling industry, users of recycled materials, etc.) and development of modern recycling industry.

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

- *Strengthening efforts on “reduce/reuse” in 3Rs, which progress has been slow compared to recycling*
- *Strengthening efforts for material recovery*

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Resource Circulation Strategy for Plastics was issued in May 2019.

It includes following targets;

- <Reduce >*
- ① 25% reduction of the accumulated volume of one way plastics by 2030*
- <Reuse / Recycle >*
- ② Reuse / recyclable designs by 2025*
- ③ 60% of packages / containers to be recycled or reused by 2030*
- ④ 100% utilization of used plastics by 2035*
- <Recycled Plastics / Biomass Plastics >*
- ⑤ Utilization of recycled plastics to be doubled by 2030*
- ⑥ 2 million tons of biomass plastics to be introduced by 2030*

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)

Targets on Material Flow of 3rd Fundamental Plan and 4th Fundamental Plan for Establishing a Sound Material-Cycle Society

(USD1=JPY110)

For the comparison targets in the (), FY 2000 and FY 2010

| Targets | FY2000 | FY2010 | FY2020 | FY2025 |
|--|--|--|--|---|
| Resource productivity | <i>JPY250,000 /Ton US\$2,773 /Ton</i> | <i>JPY 370,000 /Ton US\$ 3,364 /Ton</i> | <i>JPY 460,000 /Ton US\$4,182 /Ton</i> | <i>JPY490,000/Ton US\$ 4,455 /Ton</i> |
| Cyclic usage rate (resource base) | <i>10% (10%)</i> | <i>15.3 % (15%)</i> | <i>17%</i> | <i>18%</i> |
| Cyclic usage rate (waste base) | <i>-</i> | <i>-</i> | <i>45%</i> | <i>47%</i> |
| Final disposal quantity | <i>57 Million Tons (56 Million Tons)</i> | <i>19.2 Million Tons (19 Million Tons)</i> | <i>17 Million Tons</i> | <i>13 Million Tons</i> |

Source: Outline of the Basic Plan for Establishing the Recycling-Oriented Society, Ministry of the Environment

Is this Goal relevant for your country? Highly Partially Not at all

| | |
|---|---|
| I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste) | |
| Goal 4 | Build sustainable cities /green cities by encouraging “zero waste” through sound policies, strategies, institutional mechanisms, and multi - stakeholder partnerships (giving specific importance to private sector involvement) with a primary goal of waste minimization |
| Q-1 What specific waste management policies and programmes are introduced to encourage private sector participation in municipal waste management? | |
| <i>Eco-Town programmes have been implemented under initiatives of Ministry of the Environment and other related ministries in several targeted cities since 1997. Eco-Town programmes encourage local government to get information access, market creation and networking among relevant stakeholders, policy and strategy development, to achieve “zero waste” by combining regional industries and financial supports from the central government.</i> | |
| Q-2 What are the major waste management areas that have strong involvement of private and business sector? (Please check appropriate boxes and add other areas if not listed below) | |
| <input type="checkbox"/> waste collection <input type="checkbox"/> resource recovery <input checked="" type="checkbox"/> waste recycling <input checked="" type="checkbox"/> waste to energy, composting, etc. <input type="checkbox"/> PPP projects in waste sector | |
| Challenges (policy/ institutional/ technological/ financial) faced in implementation: | |
| <i>Although biomass technologies like methane fermentation have been widely applied after the development of Feed-in-Tariff (FIT) system, the technology mainly targets on industrial organic waste in same waste characteristics. For the implementation of this technology to target on municipal food waste from household, further political and technological improvement will be required.</i> <i>Education is a common keyword in waste and resource sectors for application of environmentally sound technologies with financially balanced material stream.</i> | |
| Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant | |
| <i>Detail of Eco-Town is introduced on the website of Ministry of the Environment.</i> https://www.env.go.jp/recycle/ecotown/ (Only available in Japanese) | |
| Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022) | |
| <i>Measures aimed at the establishment of “Regional Circular and Ecological Spheres” to improve local resource efficiency and vitalize local economies based on an integrated approach toward circulation, low carbon, and harmony with nature, utilizing renewable resources, stock resources, and circulative resources.</i> | |
| Is this Goal relevant for your country? <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| | |
|---|---|
| I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste) | |
| Goal 5 | Encourage the private sector , including small-and medium-sized enterprises (SMEs) to implement measures to increase resource efficiency and productivity , creation of decent work and to improve environmentally-friendly practices through applying environmental standards, clean technologies, and cleaner production. |
| Q-1 What are the major clean technology related policies aiming to increase energy and resource efficiency of SMEs? | |
| <p><i>Recycling industry is an open market to any stakeholder, however, recyclers need to provide an application to a local government or relevant organizations to join bidding process for recycling and recovery businesses. In the application form recyclers are required to fill out their recycling and recovery performance, and it has to meet requirement standards set by laws or guidelines specific to individual materials.</i></p> <p><i>To encourage SMEs to promote energy efficiency, Ministry of Economy, Trade and Industry provides subsidy a program for the application of energy-efficient equipment and the improvement of operation to increase productivity of SMEs.</i></p> | |
| Q-2 What are the capacity building programmes currently in place to build the technical capacity of SMEs in 3R areas? | |
| <i>SMEs can access to all programmes initiated by the central government, local administrative, and relevant organizations.</i> | |
| Challenges (policy/ institutional/ technological/ financial) faced in implementation: | |
| <i>Securing finance is a common challenge for SMEs.</i> | |
| Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant | |
| <i>Ministry of Economy, Trade and Industry provides a subsidy program for the application of energy-efficient equipment such as energy-efficient lightnings, air-conditioners, heat pumps, and boilers.</i> | |
| Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022) | |
| <i>Ministry of the Environment had decided to establish a programme to subsidize the SMEs' installation cost of machinery and equipment with energy conservation and low carbon emission in 2021.</i> | |
| Is this Goal relevant for your country? <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste) | |
|--|---|
| Goal 6 | Promote the greening of the value chain by encouraging industries and associated suppliers and vendors in socially responsible and inclusive ways. |
| <i>Q-1 What percent of companies and industries have introduced green accounting and voluntary environmental performance evaluation (Ref: ISO 14000)?</i> | |
| <input checked="" type="checkbox"/> Very High (> 90%) <input type="checkbox"/> High (>70%) <input type="checkbox"/> Average (50~70%) <input type="checkbox"/> Low or not satisfactory (< 50%) <input type="checkbox"/> None | |
| <i>Q-2 What percent of companies and industries have introduced social accounting (Ref: SA 8000) in consultation with their workers?</i> | |
| <input type="checkbox"/> Very High (> 90%) <input type="checkbox"/> High (>70%) <input type="checkbox"/> Average (50~70%) <input checked="" type="checkbox"/> Low or not satisfactory (< 50%) <input type="checkbox"/> None | |
| <i>Q 3 Does government have a programme for promoting greening of the value chain? What specific policies, programmes and incentives are introduced to promote greening of value chain?</i> | |
| <p><i>The Basic Act for Establishing a Sound Material-Cycle Society stipulates two concepts of the Polluter Pays Principle (PPP) and Extended Producer Responsibility (EPR) as fundamental principles for policy making.</i></p> <p><i>Act on Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities (Act on Promoting Green Procurement) had been established as one of individual laws under the Basic Act for Establishing a Sound Material-Cycle Society.</i></p> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| N/A | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <p><i>Home Appliance Recycling Act stipulates physical and financial responsibilities for consumers (pay for collection and recycling), retailers (collect) and manufacturers (recycle) under the concept of the EPR scheme.</i></p> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| N/A | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste) | |
|---|---|
| Goal 7 | Promote industrial symbiosis (i.e., recycling of waste from one industry as a resource for another), by providing relevant incentives and support. |
| <p>Q-1 Does your government have policies and programmes promoting industrial symbiosis in industrial parks or zones? What specific policies, programmes and incentives are introduced to promote industrial symbiosis?</p> <ul style="list-style-type: none"> ➤ <i>From 1997-2006 Ministry of Economy, Trade and Industry, and Ministry of the Environment, jointly promoted a policy programme called Eco-Town Programme. This policy was originally aimed at promoting “Zero Emissions” by promoting effective use of by-products among different industries or “industrial symbiosis”. Japanese government provided financial support to construct recycling capacity in former industrial cities such as Kawasaki and Kitakyushu. Later it had become a policy to establish recycling facilities and networking of recycling businesses to establish national recycling capacity responding to Japan’s Sound Material Cycle policy. In addition, government had provided policy financial investment and some tax exemptions for establishing new recycling capacity during that period to facilitate private investments to establish such recycling capacity.</i> ➤ <i>Also, municipal solid waste treatment facilities such as recycle centers have been developed in order to promote waste generation control, cyclical use and proper treatment of waste, through a grant for Promoting the Establishment of a Sound Material-Cycle Society which has supported municipalities with their local Plans for Establishment of a Sound Material Cycle Society.</i> <p>Q-2 How many eco-industrial parks or zones or the like, which is supported by the government, are there in the country?</p> <p><i>26 areas were supported by this Eco-Town programme from 1997-2006.</i></p> <p><i>Eco town policy had received about 94.75 billion yen in total governmental expenditures (subsidies from 1997-2004, tax reductions & policy finance from 2000-2004) to generate an increase of 5.89 million tons in recycling capacity (Ministry of Economy, Trade, and Industry’s ex post facto policy evaluation in March 2006). This corresponded to around 20% of annual increase in average in national recycling capacity.</i></p> <p>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</p> <p><i>Although original purpose to promote industrial symbiosis as well as environmental industry was not fully achieved through this Eco-Town Programme, it had led to a policy to establish recycling capacity to sustain Sound Material Cycle Policy of Japan later.</i></p> <p>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</p> <p><i>Detail of Eco-Town in Japan is introduced on the website of Ministry of the Environment. https://www.env.go.jp/recycle/ecotown/ (Only available in Japanese)</i></p> <p>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</p> <p><i>Circular Economy Roadmap published in September 2022</i></p> | |

**Voluntary Progress/Achievements/Initiatives in
Implementing Ha Noi 3R Declaration (2013~2023)**

| |
|-----------------------|
| Country Name Japan |
|-----------------------|

| | |
|--|---|
| I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste) | |
| Goal 7 | Promote industrial symbiosis (i.e., recycling of waste from one industry as a resource for another), by providing relevant incentives and support. |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| | |
|---|---|
| I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste) | |
| Goal 8 | Build local capacity of both current and future practitioners, to enable the private sector (including SMEs) to obtain the necessary knowledge and technical skills to foster green industry and create decent, productive work. |
| <i>Q-1 How many dedicated training facilities or centers are there to cater the needs of SMEs and practitioners in the areas of cleaner production, resource efficiency and environment-friendly technologies, etc.?</i> | |
| <i>All training facilities and centers are open to SMEs.</i> | |
| <i>Q-2 Please provide an indicative figure on annual government (US \$) expenditure on building technical capacity of SMEs and practitioners in the areas of cleaner production, resource efficiency and environment-friendly technologies, etc.?</i> | |
| <i>There are several programmes supporting SMEs' businesses but it is difficult to count the indicative figure in the field of cleaner production, resource efficiency and environment-friendly technologies due to its wideness.</i> | |
| Challenges (policy/ institutional/ technological/ financial) faced in implementation: N/A | |
| Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant | |
| <i>Ministry of Economy, Trade and Industry provides a subsidy program for the application of energy-efficient equipment such as energy-efficient lightnings, air-conditioners, heat pumps, and boilers.</i> | |
| Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022) | |
| <i>Ministry of the Environment had decided to establish a programme to subsidize the SMEs' installation cost of the machinery and equipment with energy conservation and low carbon emission in 2021.</i> | |
| <i>Circular Economy Roadmap published in September 2022</i> | |
| Is this Goal relevant for your country? <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste)

Goal 9 Develop proper classification and inventory of hazardous waste as a prerequisite towards sound management of such waste.

Q-1 Is there a systematic classification of hazardous waste? If so, please attach.

Yes No

Outline of Specially Controlled Waste

| Category | Main Type | Summary | |
|---|------------------------------------|--|---|
| Special management for general waste | Parts used in PCB | Parts of PCB of air conditioner, TV and Microwave | |
| | Dust | Amongst the garbage treatment facility, the things produced in incineration facility | |
| | Dust, ash, mud | Dioxin type things that are produced by burning general waste of special facility set according to Dioxin special measures law | |
| | Infectious municipal waste | There is a fear that infectious pathogen may have present or attached in/to general waste that is discharged from medical institutions. | |
| Special management for production waste | Waste oil | Volatile oil, Kerosene, diesel compounds (excluding flame-retardant tar pitch type) | |
| | Waste acid | Waste acid of pH less than 2.0 to have significant corrosive | |
| | Waste alkali | Waste alkali of pH more than 12.5 to have a significant corrosive | |
| | Infectious industrial waste | There is a fear that infectious pathogen may have present or attached in/to industrial waste that is discharged from medical institutions. | |
| | Certain hazardous industrial waste | Waste PCB | Waste oil having waste PCB and PCB |
| | | PCB contamination | PCB with stains, PCB with stained waste paper, PCB having stained wood chips or fiber scraps, metal strap or plastic material with attached or enclosed PCB, ceramic waste or debris with attached PCB |
| | | PCB treated things | PCB is included in the things that were processed in order to dispose of waste such as PCB or PCB contamination |
| | | Specified sewage sludge | Sludge that is specified in Article 13 rule 4 of Sewerage Law Enforcement Ordinance |
| | | Slag | Materials containing multiple metals with constant or higher concentration |
| | | Waste asbestos etc. | The thing that is generated from the business place where special dust generation facility is installed as per Air Pollution Control Act, may be scattered or things related to asbestos building materials removal business. |
| | | Ash | Ash of heavy metals or things that contains dioxins of certain concentration |
| | | Dust | Heavy metals, 1,4-Dioxin, Dioxin type with constant or higher concentration |
| | | Waste oil | Things that contains organic chlorine compounds |
| | | Mud, waste acid, waste alkali | Heavy metals, PCB, organic chlorine compounds, pesticides, things having Dioxin type with constant or higher concentration |

Source: [Law related to waste management and cleaning] as per the creation of Ministry of the Environment.

Q-2 What specific rules and regulations are introduced to separate, store, treat, transportation and disposal of hazardous waste?

- **Waste Management and Public Cleaning Act**
- **Act for the Control of Export, Import and Others of Specified Hazardous Wastes and other Waste (Domestic Basel Act)**
- **Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes**

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

- **To promote smooth and safe treatment of wastes, such as wastes contain asbestos, or e-waste contaminated by trace amounts of PCB, and to explore technologies as well as promote detoxification treatment of such wastes based on a Toxicity Eliminating or Decomposing Treatment Certification System.**
- **Under the amended Domestic Basel Act,**
 - (1) **In the route of mixed metal scraps in Japan, companies engaged in illegal collection are to be objectives to be regulated.**
 - (2) **Government to simplify the import procedure to import hazardous wastes easily to be speedy through the exemption printed-circuit board from the import procedure and the introduction of pre-consented mechanism.**

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

**Voluntary Progress/Achievements/Initiatives in
Implementing Ha Noi 3R Declaration (2013~2023)**

| |
|-----------------------|
| Country Name Japan |
|-----------------------|

| | |
|---|---|
| I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste) | |
| Goal 9 | Develop proper classification and inventory of hazardous waste as a prerequisite towards sound management of such waste. |
| <p><i>List of each country's regulation for hazardous waste on the website Ministry of the Environment.</i> http://www.env.go.jp/recycle/yugai/basel_info/index.html (Only available in Japanese)</p> | |
| <p><i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i></p> <p><i>Amended Domestic Basel Act</i></p> | |
| <p><i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all</p> | |

| | |
|---|--|
| II. 3R Goals in Rural Areas | |
| Goal 10 | Reduce losses in the overall food supply chain (production, post harvesting and storage, processing and packaging, distribution), leading to reduction of waste while increasing the quantity and improving the quality of products reaching consumers. |
| <i>Q-1 What specific policies, rules and regulations, including awareness programmes, are introduced to minimize food or crop waste?</i> | |
| <i>The Food Recycling Act</i> | |
| <i>Q-2 Is there any continuing education services or awareness programmes for the farmers or agricultural marketing associations on reduction of crop wastes for increased food security?</i> | |
| <i>Act on the Promotion of Environmental Conservation Activities through Environmental Education</i> | |
| <i>Q-3 What is the average wastage of crops or agricultural produce between farms to consumers, if there is a study in your country?</i> | |
| <input checked="" type="checkbox"/> Very High (> 20~ 30%) <input type="checkbox"/> High (10~20%) <input type="checkbox"/> Medium (5~10%) <input type="checkbox"/> Low (< 5%) <input type="checkbox"/> Negligible (<1%) | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <ul style="list-style-type: none"> ➤ <i>Reduction of generated food losses on farms and at the post harvesting stage.</i> ➤ <i>Further efforts to systematically reduce and recycle food wastes are necessary across all other stages in the food supply chain.</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <ul style="list-style-type: none"> ➤ <i>Changing display methods of “best-before date”</i> ➤ <i>Review of business practices: experiment of extending delivery & sales deadlines</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| <i>Please refer to Goal 2.</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

II. 3R Goals in Rural Areas

Goal 11 Promote full scale **use of agricultural biomass waste and livestock waste** through reuse and/or recycle measures as appropriate, to achieve a number of co - benefits including GHG emission reduction, energy security, sustainable livelihoods in rural areas and poverty reduction, among others.

Q-1 How much amount of – (a) agricultural biomass waste and (b) livestock waste are grossly generated per annum?

The Amount of Generation, Utilization Rate and Goal of Each Type of Biomass in 2021

| Type of biomass | Amount generated in current year | Current utilization rate | Goal of FY 2030 |
|--|--|--------------------------|-------------------------|
| Domestic animal wastes | Approximately 80 million tons | Approximately 86% | Approximately 90% |
| Sewage sludge | Approximately 79 million tons | Approximately 75% | Approximately 85% |
| Sewage Biomass Recycling ^(*1) | - | Approximately 35% | Approximately 50% |
| Black liquor ^(*2) | Approximately 12 million tons ^(*2) | Approximately 100% | Approximately 100% |
| Paper | Approximately 25 million tons | Approximately 80% | Approximately 85% |
| Food waste | Approximately 24 million tons | Approximately 58% | Approximately 63% |
| Remainder material of saw mill etc. | Approximately 5.1 million tons ^(*2) | Approximately 98% | Approximately 98% |
| Construction generated wood | Approximately 5.5 million ton | Approximately 96% | Approximately 96% |
| Non-food part of agricultural crops (Except plowing) | Approximately 12 million ton | Approximately 31% | Approximately 45% |
| Remainder material of forest | Approximately 9.7 million tons ^(*3) | Approximately 29% | Approximately above 33% |

*1: Recycling rate is the percentage of organic matter in sewage sludge used for energy and green farmland.
 *2: Black liquor is a resin in liquid form which comes out when extracting fiber from wood chip in the manufacturing process of wood pulp and is considered as a main ingredient.
 *3: Dry weight for black liquor and sawmill open forest remainder. Other biomasses indicate wet weight.
 Source: Basic Plan for Promotion of Utilization of Biomass, Ministry of Agriculture, Forestry, and Fisheries

Q-2 How are most of the agricultural biomass wastes utilized or treated? (Please check all appropriate boxes)

- as secondary raw material input (for paper, bioplastic, furniture, etc.)
- biogas/electricity generation
- composts/fertilizers
- mostly left unutilized or open dumped
- mostly open burned

Q-3 What specific policies, guidelines, and technologies are introduced for efficient utilization of agricultural biomass waste and livestock waste as a secondary material inputs towards full scale economic benefits? Relevant websites could be shared for additional information.

- **Basic Act for Promoting the Utilization of Biomass**
- **Basic Plan for Promoting the Utilization of Biomass**
- **Feed-in tariff (FIT) scheme**

| II. 3R Goals in Rural Areas | |
|---|---|
| Goal 11 | Promote full scale use of agricultural biomass waste and livestock waste through reuse and/or recycle measures as appropriate, to achieve a number of co - benefits including GHG emission reduction, energy security, sustainable livelihoods in rural areas and poverty reduction, among others. |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>To promote efficient use of agricultural biomass waste and livestock waste within local area</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Please refer to the website of Ministry of Agriculture, Forestry and Fisheries. HP: https://www.maff.go.jp/e/policies/env/biomass.html</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| <i>Goals set to be achieved by 2030 (see the above table) include formulating a biomass utilization promotion plan in all prefectures, the domestic biomass market accounts for approximately 2% of products and energy’s 57 trillion yen market.</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| III. 3R Goals for New and Emerging Wastes | |
|---|--|
| Goal 12 | Strengthen regional, national, and local efforts to address the issue of waste, in particular plastics in the marine and coastal environment. |
| <i>Q-1 What specific policies and regulations are in place to address the issue of plastic wastes in coastal and marine environment?</i> | |
| <p><i>In July 2009 the “Marine Litter Act” came into effect. Based on the provisions of this Act, a Coastal Drift Handling Measures Promotional Council has been set up for the respective administrative agencies to coordinate and carry out a comprehensive, effective and efficient promotion of coastal drift handling measures.</i></p> | |
| <i>Q-2 What extent issue of plastic waste is considered in integrated coastal zone management (ICZM)? (Please check the appropriate box)</i> | |
| <input checked="" type="checkbox"/> Very much <input type="checkbox"/> Somehow <input type="checkbox"/> Not at all | |
| <i>Q-3 Please provide a list of centre of excellences or dedicated scientific and research programmes established to address the impacts of micro-plastic particulates (<5 mm) on coastal and marine species? If yes, please provide relevant websites.</i> | |
| <p><i>Strategic Research Programme of Environment Research and Technology Development Fund “Research for advancing systematic analysis and measurement techniques of movement and environmental impacts of marine plastic wastes”. This research project had been formed under a collaborative project among Kyushu University, Tokyo University of Agriculture and Technology, and Tokyo University of Marine Science and Technology from 2018 to 2020.</i></p> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <p><i>Ministry of the Environment conducted a survey on marine litter in seven coastal areas across the country in the five-year period between FY2010 and FY2014. Looking at the five-year totals, considering individually, there were more plastics (Source: Material from the 6th Coastal Drift Handling Measures Promotional Council, wood, etc. accounted by weight in two sites, and plastics in other survey sites. On analyzing the bottles by the country of manufacture, many of them originated in Japan are seen on the Pacific side, with bottles originating from China and South Korea in the East China Sea and Sea of Japan. International collaboration for controlling coastal drift wastes is essential.</i></p> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <ul style="list-style-type: none"> ➤ <i>A symposium on marine litter was held in January 2016.</i> http://www.env.go.jp/en/water/marine_litter/2016nys_r.html ➤ <i>Regional Knowledge Centre for Marine Plastic Debris (RKC-MPD) was established in Economic Research Institute for ASEAN and East Asia (ERIA) by the financial contribution from Ministry of the Environment in October 2019.</i> https://rkcmpd-eria.org/ | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| <p><i>Ministry of the Environment updated the Basic Policy based on Marine Litter Act in 2019 in accordance with the revision of Marine Litter Act. The main principles of revised basic policy</i></p> | |

| | |
|--|--|
| III. 3R Goals for New and Emerging Wastes | |
| Goal 12 | Strengthen regional, national, and local efforts to address the issue of waste, in particular plastics in the marine and coastal environment. |
| <i>are as follows.</i> | |
| <ul style="list-style-type: none">➤ <i>Implementation of smooth treatment of coastal drift in cooperation with different stakeholders in basin</i>➤ <i>Reduction of generation amount of plastic waste by implementing 3R</i>➤ <i>Countermeasures for marine plastic flowing into the ocean</i>➤ <i>Support of private sector's activity by government</i>➤ <i>International cooperation</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

III. 3R Goals for New and Emerging Wastes

Goal 13 Ensure **environmentally-sound management of e-waste** at all stages, including collection, storage, transportation, recovery, recycling, treatment, and disposal with appropriate consideration for working conditions, including **health and safety aspects** of those involved.

Q-1 How do people usually recycle their e-waste (waste electrical and electronic equipment)?
(Please check the appropriate box in order of priority by filling in numbers like 1, 2, 3, 4,...etc., for example 1 => Highest priority)

| Check if applicable | Number in priority order | |
|---------------------|--------------------------|---|
| | | Take to recycling center / resource recovery facilities |
| | | Take to landfill |
| ✓ | 1 | Take to the retailer |
| | | Take to local charity for re-use |
| ✓ | 2 | Take to second-hand shop for re-use |
| ✓ | 1 ※ | Ship back to the manufacturer |
| | | Ship back to the manufacturer |
| | | Recycle in another country |
| | | Do not know how people dispose |

※This is applied to PCs

Among end-of-life appliances disposed from household (this does not include domestic reuse), about 62.2% goes to official recycling route for specific home appliance recycling act, about 24.7% is ended up as scrap, and about 3.6% as exported as reusable equipment.

Source: Ministry of Economy, Trade, and Industry, Ministry of the Environment

https://www.meti.go.jp/shingikai/sankoshin/sangyo_gijutsu/haikibutsu_recycle/denki_wg/pdf/038_02_00.pdf
(Only available in Japanese)

Q-2 What specific policies and regulations are in place to ensure health and safety aspects of those involved in e-waste management (handling/sorting/resource recovery/recycling)?

Normal health and safety as well as pollution control measures applied to factories are applied to recycling facilities of e-waste as well. Health and safety guidelines applied to recycling facilities and waste management facilities have been developed by Ministries as well as industrial associations.

Specific guidelines for collection, handling, recycling have been developed by Ministries for specific home appliances and small home appliances under Home Appliance Recycling Act and Small Home Appliance Recycling Act.

Q-3 How much amount of e-waste is generated and recycled per year in 2021?

| Type of e-waste | Estimated total volume generated (ton/year) | % of collected by permitted recycler | % of volume recycled in collected |
|--|---|--------------------------------------|-----------------------------------|
| Television (Cathode-ray tube) | N/A | N/A | 72% |
| Television (Liquid-crystal and plasma) | N/A | N/A | 85% |
| Refrigerators | N/A | N/A | 80% |
| Washing machines | N/A | N/A | 92% |
| Air conditioners | N/A | N/A | 92% |
| Others... | N/A | N/A | N/A |

| | |
|---|---|
| III. 3R Goals for New and Emerging Wastes | |
| Goal 13 | Ensure environmentally-sound management of e-waste at all stages, including collection, storage, transportation, recovery, recycling, treatment, and disposal with appropriate consideration for working conditions, including health and safety aspects of those involved. |
| <i>Source: Website of Ministry of the Environment</i> https://www.env.go.jp/press/press_00089.html (only available in Japanese) | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <ul style="list-style-type: none"> ➤ <i>To increase collection rate</i> ➤ <i>Transparency in how recyclers and waste treatment businesses actually treat these recyclables.</i> ➤ <i>Regulation of informal collectors in collaboration with municipalities</i> ➤ <i>To prevent illegal dumping</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <ul style="list-style-type: none"> ➤ <i>Act on Recycling of Specified Home Appliances (Home Appliance Recycling Act)</i> ➤ <i>Small Home Appliances Recycling Act</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| <i>Steady implementation and review of the progress of Home Appliance Recycling Act and Small Home Appliances Recycling Act</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| III. 3R Goals for New and Emerging Wastes | |
|---|--|
| Goal 14 | Effective enforcement of established mechanisms for preventing illegal and inappropriate export and import of waste, including transit trade, especially of hazardous waste and e-waste. |
| Q-1 What specific policies and regulations are introduced to prevent illegal import and export of e-waste? | |
| <ul style="list-style-type: none"> ➤ <i>Waste Management and Public Cleansing Act</i> ➤ <i>Under the Domestic Basel Act, an activity “The Asian Network for Prevention of Illegal Transboundary Movement of Hazardous Wastes” had been started, organized annually by Ministry of the Environment from fiscal year 2004, for proper implementation of regulations regarding the import, export, etc., of hazardous wastes, implementing initiatives that facilitate dialogue and strengthen partnerships between officers of Asian countries participating in the Basel Convention, customs officers and related international institutions. Also, financial and technological support was provided for projects implemented under the Basel Convention, such as the formulation of a framework regarding environmentally sound management of used computer equipment and other e-waste, as well as environmentally sound management of hazardous wastes in the Asia Pacific.</i> | |
| Q-2 Do you have required number of well-trained custom or other officials (for airport, sea-port, land border control, etc.) to track illegal export and import of e-waste? | |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| <p><i>Ministry of Economy, Trade, and Industry and Ministry of the Environment, and Japan’s Customs Office has a regular communication to identify items violating Basel Convention and related domestic laws.</i></p> <p>https://www.env.go.jp/en/recycle/asian_net/Annual_Workshops/2010_PDF/Session2/S2_04_Japan_Customs.pdf</p> | |
| Challenges (policy/ institutional/ technological/ financial) faced in implementation: | |
| <i>Illicit reporting of export items such as wastes contaminated contamination or with hazardous substances in mixture of metal scraps</i> | |
| Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant | |
| <ul style="list-style-type: none"> ➤ <i>Waste Management and Public Cleansing Act</i> ➤ <i>Domestic Basel Act</i> ➤ <i>The Asian Network for Prevention of Illegal Transboundary Movement of Hazardous Wastes</i> | |
| Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022) | |
| <p><i>The annual Asian Network workshops have been organized since 2004 with the objective to enhance cooperation and promote information exchange between Competent Authorities and Focal Points in the Asian region</i></p> <p>https://www.env.go.jp/en/recycle/asian_net/Annual_Workshops/Annual_Workshops.html</p> | |

**Voluntary Progress/Achievements/Initiatives in
Implementing Ha Noi 3R Declaration (2013~2023)**

| |
|-----------------------|
| Country Name Japan |
|-----------------------|

III. 3R Goals for New and Emerging Wastes

| | |
|----------------|--|
| Goal 14 | Effective enforcement of established mechanisms for preventing illegal and inappropriate export and import of waste, including transit trade, especially of hazardous waste and e-waste. |
|----------------|--|

Is this Goal relevant for your country? Highly Partially Not at all

| III. 3R Goals for New and Emerging Wastes | |
|--|--|
| Goal 15 | Progressive implementation of “ extended producer responsibility (EPR) ” by encouraging producers, importers, and retailers and other relevant stakeholders to fulfill their responsibilities for collecting, recycling, and disposal of new and emerging waste streams, in particular e-waste. |
| Q-1 What specific Extended Product Responsibility (EPR) policies are enacted or introduced? (If there is none, then skip Q-2 below) | |
| <ul style="list-style-type: none"> ➤ <i>EPR principle is stated in Fundamental Act of Sound Material Cycle Society (framework policy for Japan’s Sound Material Cycle Society and the 3Rs).</i> ➤ <i>Act on the Promotion of Sorted Collection and Recycling of Containers and Packaging</i> ➤ <i>Home Appliance Recycling Act</i> ➤ <i>End-of-Life Vehicle Recycling Law</i> ➤ <i>Small Home Appliances Recycling Act</i> ➤ <i>Act on the Promotion of Effective Utilization of Resources</i> | |
| Q-2 Please provide a list of products and product groups targeted by EPR nationally? | |
| <ul style="list-style-type: none"> ➤ <i>Containers and packagings (glass bottles, PET, paper containers and packaging, plastic containers and packaging, Aluminum cans, steel cans, paper carton / tetrapak style), cardboard</i> ➤ <i>Automobiles</i> ➤ <i>4 type of home appliances (TVs, refrigerators, air-conditioners, washing machines)</i> ➤ <i>Personal Computers under Act on the promotion of effective utilization of resources</i> ➤ <i>Compact researchable batteries under Act on the Promotion of Effective Utilization of Resources</i> ➤ <i>Small home appliances including PCs, mobile phones, and other small electronic devices</i> | |
| Challenges (policy/ institutional/ technological/ financial) faced in implementation: | |
| <ul style="list-style-type: none"> ➤ <i>To increase collection rate</i> ➤ <i>Transparency in how recyclers and waste treatment businesses actually treat these recyclables.</i> ➤ <i>Regulation of informal collectors in collaboration with municipalities</i> ➤ <i>To improve quality of material recycling</i> | |
| Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant | |
| <i>Please refer to Q-1.</i> | |
| Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022) | |
| <ul style="list-style-type: none"> ➤ <i>The 4th Fundamental Plan for Establishing a Sound Material Cycle Society issued in June 2018</i> ➤ <i>The Plastic Resource Circulation Act came into effect in April 2022, which develop guidelines for Design for the Environment for manufacturers and establish a mechanism to certify products designed in accordance with the guidelines.</i> | |

**Voluntary Progress/Achievements/Initiatives in
Implementing Ha Noi 3R Declaration (2013~2023)**

| |
|-----------------------|
| Country Name Japan |
|-----------------------|

III. 3R Goals for New and Emerging Wastes

| | |
|----------------|--|
| Goal 15 | Progressive implementation of “ extended producer responsibility (EPR) ” by encouraging producers, importers, and retailers and other relevant stakeholders to fulfill their responsibilities for collecting, recycling, and disposal of new and emerging waste streams, in particular e-waste. |
|----------------|--|

Is this Goal relevant for your country? Highly Partially Not at all

| | |
|--|--|
| III. 3R Goals for New and Emerging Wastes | |
| Goal 16 | Promote the 3R concept in health-care waste management. |
| <i>Q-1 What specific policies and regulations are in place for healthcare waste management?</i> | |
| <i>Infection waste is designated to treat under the Waste Management and Public Cleaning Act as a specially controlled waste to ensure that it is properly treated in order to conserve the living environment and improve public hygiene.</i> | |
| <i>Q-2 What is the total annual government expenditure towards healthcare waste management (US\$ per year)?</i> | |
| <i>The financial and physical responsibilities for healthcare waste management are on waste generators and the government expenditure is not directly used for its management.</i> | |
| <i>Q-3 List the agencies or authorities responsible for healthcare waste management.</i> | |
| <i>Local government has responsibility to manage/monitor waste generators to secure environmentally friendly waste management by checking their reports about waste information (waste category, amount, packaging, contracts with transporters and disposers) provided by generators.</i> | |
| <i>Q-4 What is the common practice for disposal of healthcare wastes?</i> | |
| (Please check the appropriate box and add if any other practice followed) | |
| <input type="checkbox"/> open dumping (untreated) | |
| <input type="checkbox"/> open burning (untreated) | |
| <input type="checkbox"/> ordinary landfilling (untreated) | |
| <input type="checkbox"/> sanitary landfilling (treated) | |
| <input type="checkbox"/> Low cost small scale incineration (do not meet air emission standards) | |
| <input checked="" type="checkbox"/> Highly controlled air incineration (dedicated/modern medical waste incinerators) | |
| <input type="checkbox"/> Other methods (please specify names: _____) | |
| Challenges (policy/ institutional/ technological/ financial) faced in implementation: | |
| ➤ <i>The amount of medical waste is increasing as society matures.</i> | |
| ➤ <i>Increase of the volume of infectious and medical waste due to COVID 19</i> | |
| Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant | |
| <i>Ministry of the Environment developed “Infectious Waste Treatment Guideline” to apply newly healthcare waste disposal technologies (High pressure steam sterilization, Microwave sterilization).</i> | |
| Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022) | |

**Voluntary Progress/Achievements/Initiatives in
Implementing Ha Noi 3R Declaration (2013~2023)**

| |
|-----------------------|
| Country Name Japan |
|-----------------------|

| | |
|---|--|
| III. 3R Goals for New and Emerging Wastes | |
| Goal 16 | Promote the 3R concept in health-care waste management. |
| <i>During the spread of COVID-19, Japanese Government developed “Guidelines on Measures for COVID-19 in Waste Management”.</i> | |
| Is this Goal relevant for your country? <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|--|---|
| Goal 17 | Improve resource efficiency and resource productivity by greening jobs nation - wide in all economic and development sectors. |
| <i>Q-1 What specific policies and guidelines are introduced for product standard (towards quality/durability, environment/eco-friendliness, labour standard)?</i> | |
| <p><i>Based on the concept of the Act on Promoting Green Procurement, “Eco-Mark” a product standard system, has been applied to products with a small burden on environment in a supply chain, and it enables consumers to select environmentally-sound products and contributes to producers so that they can continue to improve their products to be fitted into green society.</i></p> | |
| <i>Q-2 What specific energy efficiency schemes are introduced for production, manufacturing and service sector?</i> | |
| <p><i>The Top Runner Program is prescribed under the “Act on the Rational Use of Energy (Energy Conservation Act)” and it imposes obligations on manufacture of targeted machinery and equipment to achieve judgement standards of energy consumption for their products. The program applies to several major items including automobiles, TVs, windows, motors and PCs, and other appliances.</i></p> <p><i>The Energy Conservation Act obligates private sector with high energy demand (application not only to large manufacture companies, but to service providers such as restaurants, hotels and hospitals as well) to monitor energy consumption used for their business activities. Targeted private sector has to control their energy consumption and report it to government organizations. Further improvement is required if energy consumption is evaluated to be high.</i></p> | |
| <i>Q-3 What specific policies are introduced to create green jobs in product and waste sector?</i> | |
| <p><i>Some recycling policies are based on the EPR concept, and it incentivizes producers and manufacturers to take more consideration on Design for the Environment.</i></p> <p><i>Subsidy programmes from central or local governments are provided with waste treatment sector for their EPC and O&M scope of waste treatment facilities, to encourage them to keep environmentally friendly operation, securing required environmental standards.</i></p> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| N/A | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| Please refer to Q-1. | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| Circular Economy Roadmap published in September 2022 | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| | |
|---|---|
| IV. 3R Goals for Cross-cutting Issues | |
| Goal 18 | Maximize co-benefits from waste management technologies for local air, water, oceans, and soil pollution and global climate change. |
| <i>Q-1 Please share how climate mitigation is addressed in waste management policies and programmes for co-benefits?</i> | |
| <i>Japan has a legislative system for establishing a "Sound Material-Cycle Society", in which consumption of natural resources are to be conserved and the environmental load is eased to the greatest extent.</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>According to the "The 4th Fundamental Plan for Establishing a Sound Material Cycle Society" in Japan</i> | |
| <ul style="list-style-type: none"> ➤ <i>Integrated measures towards a sustainable society</i> ➤ <i>Regional vitalization based on regional circulation and harmony sphere</i> ➤ <i>Resource circulation throughout the entire lifecycle</i> ➤ <i>Promotion of appropriate treatment and restoration of environment</i> ➤ <i>Development of disaster waste disposal system</i> ➤ <i>Development of international resource recycling system and international expansion of material-cycle industries</i> ➤ <i>Improved infrastructure for a sound material-cycle</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Measures aimed at the establishment of "Regional Circular and Ecological Spheres" to improve local resource efficiency and vitalize local economies based on an integrated approach toward circulation, low carbon, and harmony with nature, utilizing renewable resources, stock resources, and circulative resources.</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| <i>4th Fundamental Plan for Establishing a Sound Material Cycle Society in June 2018.</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|--|---|
| Goal 19 | Enhance national and local knowledge base and research network on the 3Rs and resource efficiency , through facilitating effective and dynamic linkages among all stakeholders, including governments, municipalities, the private sector, and scientific communities. |
| <p>Q-1 What specific policies are introduced to encourage triangular cooperation between government, scientific & research institutions and private/business sector in 3R areas?</p> <ul style="list-style-type: none"> ➤ <i>There is a specific category of research and development in relation to the 3Rs and waste management under research a grant programme called Environment Research and Technology Development Fund as a R&D budget managed by Ministry of the Environment.</i> ➤ <i>NEDO's R&D for Recycling Technology Development for Highly Efficient Resource Circulation System (About 320 million JPY for FY 2022)</i> ➤ <i>State of the 3Rs in Asia and the Pacific was launched in 2018, as an assessment report of 3R policy progress in the region, coordinated by UNCRD and Institute for Global Environmental Strategies (IGES), and financially supported by Ministry of the Environment.</i> <p>Q-2 Please share the number and list of dedicated scientific institution, or coordinating centers in the areas of 3Rs (e.g., waste minimization technologies, eco-products, cleaner production, recycling technologies, industrial symbiosis, resource efficiency, etc.)?</p> <p><i>There are many research institutes and research universities in Japan in this area. The followings are examples of such research institutes/coordination bodies.</i></p> <ul style="list-style-type: none"> ➤ <i>Japan Society of Material Cycles and Waste Management</i> ➤ <i>Center for Material Cycles and Waste Management Research, National Institute of Environmental Studies (NIES)</i> ➤ <i>Institute for Global Environmental Strategies: 1) Sustainable Consumption and Production Area, 2) Center Collaborating UNEP on Environmental Technologies</i> ➤ <i>National Institute of Advanced Industrial Science and Technology (AIST)</i> ➤ <i>Japan Waste Research Foundation (JWRF)</i> ➤ <i>Japan Environmental Sanitation Centre (JESC)</i> ➤ <i>Regional Knowledge Centre for Marine Plastic Debris (RKC-MPD) was established in Economic Research Institute for ASEAN and East Asia (ERIA) by the financial contribution from Ministry of the Environment in October 2019</i> https://rkcmpd-eria.org/ | |
| <p>Challenges (policy/ institutional/ technological/ financial) faced in implementation: N/A</p> | |
| <p>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</p> <p><i>Please refer to Q-1.</i></p> | |

| | |
|--|---|
| IV. 3R Goals for Cross-cutting Issues | |
| Goal 19 | Enhance national and local knowledge base and research network on the 3Rs and resource efficiency , through facilitating effective and dynamic linkages among all stakeholders, including governments, municipalities, the private sector, and scientific communities. |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| <i>Circular Economy Roadmap published in September 2022</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|---|---|
| Goal 20 | Strengthen multi-stakeholder partnerships among governments, civil society, and the private sector in raising public awareness and advancing the 3Rs, sustainable consumption and production, and resource efficiency, leading to the behavioural change of the citizens and change in production patterns. |
| <p>Q-1 Does central government have official dialogue with multi-stakeholders in the process to formulate 3R-related policies and regulations? Which stakeholders are involved in the dialogue?(Please check all applicable)</p> <p> <input checked="" type="checkbox"/> NGOs <input type="checkbox"/> Industrial Association <input checked="" type="checkbox"/> Local Government <input type="checkbox"/> Academic Institution <input checked="" type="checkbox"/> Others, please add/specify () </p> | |
| <p>Q-2 What is the level of NGOs' involvement in 3R, sustainable production and consumption, resource efficiency related promotional activities? (Please check the appropriate box)</p> <p> <input checked="" type="checkbox"/> Very high <input type="checkbox"/> Moderate <input type="checkbox"/> Low <input type="checkbox"/> Almost Negligible </p> | |
| <p>Q-3 What is the level of citizens' awareness on beneficial aspects of 3R, sustainable production and consumption and resource efficiency. (Please check the appropriate box)</p> <p> <input checked="" type="checkbox"/> Very high <input type="checkbox"/> Moderate <input type="checkbox"/> Low <input type="checkbox"/> Almost Negligible </p> | |
| <p>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</p> <p><i>To shift high awareness of citizens into actual behavioral changes.</i></p> | |
| <p>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</p> <ul style="list-style-type: none"> ➤ <i>3R Promotion Meister scheme for those who can advise citizens for how to recycle containers and packaging</i> ➤ <i>Public campaigns for food loss issue</i> ➤ <i>Making gold, silver and bronze medals from used small appliances under Small Home Appliances Recycling Act.</i> | |
| <p>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</p> <p><i>4th Fundamental Plan for Establishing a Sound Material Cycle Society have issued in June 2018</i></p> <p><i>Circular Economy Roadmap published in September 2022</i></p> | |
| <p>Is this Goal relevant for your country? <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all</p> | |

IV. 3R Goals for Cross-cutting Issues

Goal 21 Integrate the 3Rs in formal education at primary, secondary, and tertiary levels as well as non-formal education such as community learning and development, in accordance with Education for Sustainable Development.

Q-1 Provide a list of formal programmes that addresses areas of 3R and resource efficiency as part of the academic curriculum?

3R and resource efficiency are included in almost all programmes because these are one of important contents in the curriculum of Environmental Science, Waste Management, Environmental Policy, Environmental Engineering, Resource Management, and so on.

Q-2 Please provide an overview of the Government policies and programmes to promote community learning and development (non-formal education) on 3R and sustainable waste management.

- *3Rs (Reduce, Reuse, and Recycle) Awards*
The awards program has been held annually since 1992 to recognize individuals, groups, schools, enterprises, and other entities for their outstanding levels of unique, community-based, and pioneering contributions to promoting the 3Rs (Reduce, Reuse, and Recycle) , thereby encouraging the development of further activities to this end. The program is hosted by the 3Rs Promotion Council and supported by seven related ministries.
- *3R promotion month*
To increase understanding and encourage participation in 3R-related activities, eight Japanese government ministries (Ministry of Finance; Ministry of Education, Culture, Sports, Science and Technology; Ministry of Health, Labour and Welfare; Ministry of Agriculture, Forestry and Fisheries; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure and Transport; Ministry of the Environment; Consumer Affairs Agency) have designated the month of October as 3R promotion month. Each year, the ministries conduct a variety of activities to raise awareness and promote the concept of 3R nationwide.
- *3R Promotion National Convention (since 2006)*
Ministry of the Environment organizes the 3R Promotion National Convention every year. People, businesses, and government officials can exchange knowledge and experiences regarding the formation of sound material cycle society, and provides opportunities for each participant to review their own lifestyle. With the aim of deepening the understanding of 3R promotion such as waste reduction recycling, and promoting efforts toward the realization of a zero-waste society and the formation of a recycling-oriented society.
- *3R Promotion Meister system*
Under the revised Containers and Packaging Recycling Law, Minister of the Environment commissioned a “3R Promotion Meister”, who raises consumer awareness about the emission control of plastic shopping bags and other containers and packaging waste and provides guidance and advice to consumers.

Q-3 Please provide a list of academic and research institutions offering PhD programmes in the areas of 3Rs and resource efficiency?

There are many organizations since 3R and resource efficiency are considered as one of the

| | |
|--|---|
| IV. 3R Goals for Cross-cutting Issues | |
| Goal 21 | Integrate the 3Rs in formal education at primary, secondary, and tertiary levels as well as non-formal education such as community learning and development, in accordance with Education for Sustainable Development. |
| <i>basic concept for Environmental Science, Resource Management, Engineering and so on.</i> | |
| <i>Q-4 Please provide a list of management institutions (offering BBA / MBA courses) which have integrated resource efficiency and life cycle assessment (LCA) as part of their curriculum or course development?</i> N/A | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> N/A | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> <i>Please refer to Q-2.</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> <i>Please refer to Q-2.</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| | |
|---|---|
| IV. 3R Goals for Cross-cutting Issues | |
| Goal 22 | Integrate the 3R concept in relevant policies and programmes, of key ministries and agencies such as Ministry of Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Industry, Ministry of Trade and Commerce, Ministry of Energy, Ministry of Water Resources, Ministry of Transport, Ministry of Health, Ministry of Construction, Ministry of Finance, Ministry of Labour, Ministry of Land and Urban Development, Ministry of Education, and other relevant ministries towards transitioning to a resource-efficient and zero waste society. |
| Q-1 Please list the name of the Ministries and major Government Agencies which are promoting 3R and resource efficiency as part of their policy, planning and developmental activities at local and national level. | |
| <ul style="list-style-type: none"> ➤ <i>Ministry of the Environment (Major coordinating ministry in relation to sound material cycle society policy)</i> ➤ <i>Ministry of Economy, Trade and Industry</i> ➤ <i>Ministry of Agriculture, Forestry and Fisheries</i> ➤ <i>Ministry of Land, Infrastructure, Transport and Tourism</i> ➤ <i>Consumer Affairs Agency</i> ➤ <i>Other relevant ministries including Ministry of Foreign Affairs, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labor and Welfare, etc.</i> | |
| Q-2 What type of coordination mechanism are there among ministries and agencies for a resource efficient economic development? | |
| <ul style="list-style-type: none"> ■ Official regular coordination meeting among ministries and agencies <i>Specific coordination meetings among relevant ministries especially for jointly administrated regulations such as Home Appliance Recycling Act, Act on the Promotion of Sorted Collection and Recycling of Containers and Packagin, The Food Recycling Act, End-of-Life Vehicle Recycling Act, etc.</i> ■ Official ad-hoc coordination meeting among ministries and agencies ■ Informal meeting among ministries and agencies <input type="checkbox"/> Other coordination mechanisms (please add/specify) | |
| Challenges (policy/ institutional/ technological/ financial) faced in implementation: | |
| N/A | |
| Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant | |
| N/A | |
| Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022) | |
| N/A | |
| Is this Goal relevant for your country? <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

IV. 3R Goals for Cross-cutting Issues

| | |
|----------------|--|
| Goal 23 | Promote green and socially responsible procurement at all levels, thereby creating and expanding 3R industries and markets for environmentally-friendly goods and products. |
|----------------|--|

Q-1 What specific policies are introduced to promote green and social responsible procurement?

Act on Promoting Green Procurement has been established as one of individual laws under the Basic Act for Establishing a Sound Material-Cycle Society to encourage the State, independent administrative institutions to procure eco-friendly goods and to provide information on eco-friendly goods, for the establishment of a society with sustainable development. Based on the concept of the Act on Promoting Green Procurement, Eco-Mark works as a judgement standard for procurement.

Q-2 Please provide details of eco-labelling schemes of your country.

Japan Environment Association assesses applications proposed by manufacturers whether their products meet the certification criteria that the association set to each type of products. As of February, 2022, 46,199 products have been certified as eco-mark products.

Q-3 Please provide a list of criteria for eco-labeled products and services in your country.

Please refer to the list in the following website of Japan Environment Association (English)
https://www.ecomark.jp/nintei/index_en.html

Q-4 Please provide the list of Ministries and major Government Agencies which have adopted green procurement policy.

In procuring goods and services, the State and Incorporated Administrative Agencies, etc. must endeavor to select Eco-Friendly Goods, etc., for the purpose of promoting a shift of demand to Eco-Friendly Goods, etc., while giving consideration to the proper use of the budget. Local governments are to endeavor to implement measures aimed at a shift of demand to Eco-Friendly Goods, etc., in accordance with the natural and social conditions of their local areas.

In the case of purchasing or leasing goods, services, business operators and citizens are to endeavor to select Eco-Friendly Goods, etc., to the extent possible.

Q-5 What % of municipalities have adopted the green procurement policy?

Act on Promoting Green Procurement has been adopted to all municipalities in Japan, and according to a questionnaire survey in 2019, 61.2% municipalities answered that they systematically implement green procurements.

Source: Survey on green procurement, environmentally friendly contracts and promotion for April 2019 to March 2020.

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Some municipalities report in the questionnaire survey that they have difficulty to judge whether a product is green procure product or not.

**Voluntary Progress/Achievements/Initiatives in
Implementing Ha Noi 3R Declaration (2013~2023)**

| |
|-----------------------|
| Country Name Japan |
|-----------------------|

| IV. 3R Goals for Cross-cutting Issues | |
|--|--|
| Goal 23 | Promote green and socially responsible procurement at all levels, thereby creating and expanding 3R industries and markets for environmentally-friendly goods and products. |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> N/A | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> N/A | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|---|---|
| Goal 24 | Phase out harmful subsidies that favour unsustainable use of resources (raw materials and water) and energy, and channel the freed funds in support of implementing the 3Rs and efforts to improve resource/energy efficiency. |
| <i>Q-1 Are there any government subsidy programmes that directly or indirectly favour unsustainable use of resources (raw materials, water, and energy)? If so, please provide a list of such programmes along with the responsible Ministry or Agency administering and implementing it.</i> | |
| N/A | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| N/A | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| N/A | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| N/A | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

IV. 3R Goals for Cross-cutting Issues

Goal 25 Protect public health and ecosystems, including freshwater and marine resources by eliminating illegal activities of open dumping, including dumping in the oceans, and controlling open burning in both urban and rural areas.

Q-1 Is waste management a public health priority in your country?

Yes. The responsibility of the central government and the local governments on waste management is stated in Article 4 of Waste Management and Public Cleansing Act.

https://www.env.go.jp/en/recycle/basel_conv/files/Waste_Management_and_Public_Cleansing.pdf

Q-2 What are the rules and regulations to prevent open dumping and open burning of waste?

Waste Management and Public Cleansing Act

Q-3 Rank the five most important rivers in terms of water quality (BOD values) passing through major cities and urban areas?

(As of 2016)

| Name of the river (Worst 5 polluted rivers) | Name of the prefecture | BOD (mg/L) | |
|--|------------------------|------------|-----------|
| | | Average | 75% value |
| Ayasegawa (Tonogawa river system) | Saitama, Tokyo | 2.1 | 2.6 |
| Nakagawa (Tonogawa river system) | Saitama, Tokyo | 2.4 | 2.6 |
| Yamatogawa (Yamatogawa river system) | Osaka, Nara | 2.3 | 3.1 |
| Inagawa (Yodogawa river system) | Osaka, Hyogo | 3.4 | 3.6 |
| Tsurumigawa (Tsurumigawa river system) | Kanagawa, Tokyo | 6.0 | 4.0 |

Source

Ministry of the Environment website: <http://www.env.go.jp/water/suiiki/h28/h28-3.pdf>

Ministry of Land, Infrastructure, Transport and Tourism website:

http://www.mlit.go.jp/river/toukei_chousa/kankyo/kankyousuisitu/pdf/h28_suisitu/ref4.pdf

Q-4 What are the specific laws, rules and regulations in place to prevent littering in river and water bodies?

- *Government Ordinance for Enforcement of the River Act*
- *Waste Management and Public Cleansing Act*

Q-5 What are the specific laws, rules and regulations in place to prevent marine littering?

- *Marine Pollution Prevention Law*
- *Waste Management and Public Cleansing Act*

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

To continue proper operation of the laws, efforts on raising environment awareness, and

| | |
|---|--|
| IV. 3R Goals for Cross-cutting Issues | |
| Goal 25 | Protect public health and ecosystems, including freshwater and marine resources by eliminating illegal activities of open dumping, including dumping in the oceans, and controlling open burning in both urban and rural areas. |
| <i>strengthening cooperation with residents.</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Prevention of illegal dumping</i> <i>Information website: https://www.env.go.jp/recycle/ill_dum/index.html</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| <i>Ministry of the Environment updated the Basic Policy based on Marine Litter Act on 2019 in accordance with the revision of Marine Litter Act. The main principles of the revised basic policy are as follows.</i> | |
| <ul style="list-style-type: none"> ➤ <i>Implementation of smooth treatment of coastal drift in cooperation with different stakeholders in basin</i> ➤ <i>Reduction of generation amount of plastic waste by implementing 3R</i> ➤ <i>Countermeasures for marine plastic flowing into the ocean</i> ➤ <i>Support of private sector's activity by government</i> ➤ <i>International cooperation</i> ➤ | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|--|--|
| Goal 26 | Facilitate the international circulation of re-usable and recyclable resources as well as remanufactured products as mutually agreed by countries and in accordance with international and national laws, especially the Basel Convention, which contributes to the reduction of negative environmental impacts and the effective management of resources. |
| Q-1 What are major recycling industries in your country? | |
| <i>Recycling market for ferrous and non-ferrous metals, plastics, papers and other popular recyclable resources can be concluded domestically, and re-use markets for automobile or household commodities are also developed as well.</i> | |
| Q-2 Please specify the regulation on transboundary movement of hazardous waste. | |
| <i>Domestic Basel Act</i> | |
| Q-3 If your government has restriction on import of non-hazardous waste or quality control of non-hazardous waste, please list it up. | |
| <i>Japan accepts waste when proper treatment is difficult in other countries but is possible in Japan, to achieve the effective use of resources and contribute to reduction of negative impacts on the environment and human health in other countries.</i> | |
| Q-4 Does your government restrict import of remanufactured goods? | |
| <i>N/A</i> | |
| Q-5 Does your government regard remanufactured goods as secondhand goods, and regulate it as secondhand goods? | |
| <i>N/A</i> | |
| Challenges (policy/ institutional/ technological/ financial) faced in implementation: | |
| <i>Although there are established domestic recycling routes, several resources are finally exported to foreign countries after collection or sorting out only valuable resources because of cost benefits for recycling process in other countries.</i> | |
| Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant | |
| <i>N/A</i> | |
| Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022) | |
| <i>Circular Economy Roadmap published in September 2022</i> | |
| Is this Goal relevant for your country? <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

IV. 3R Goals for Cross-cutting Issues

Goal 27 Promote data collection, compilation and sharing, public announcement and application of statistics on wastes and the 3Rs, to understand the state of waste management and resource efficiency.

Q-1 Please give an overview on availability of various data and information on material flow and waste management by checking (X or ✓) the appropriate boxes. (Please respond on both “Data Availability” and Monitoring Base”)

| Data Type | Data Availability | | | Monitoring Base | |
|--|-------------------------------|--------------|---------------|-------------------------------|----------|
| | Good | Very limited | No data exist | Good | Not good |
| Waste generation | ✓ | | | ✓ | |
| Material flow | ✓ | | | ✓ | |
| Cyclical use | ✓ | | | ✓ | |
| Amount of final disposal | ✓ | | | ✓ | |
| Disposal to land | ✓ | | | ✓ | |
| Direct disposal to water | | | | | |
| Import of waste | ✓ | | | ✓ | |
| Export of waste | ✓ | | | ✓ | |
| Total landfilled waste | ✓ | | | ✓ | |
| Import of recyclables | ✓ | | | ✓ | |
| Export of recyclables | ✓ <i>sometimes limited</i> | | | ✓ <i>sometimes limited</i> | |
| Hazardous waste generation (solid, liquid, sludge, etc.) | ✓ | | | ✓ | |
| e-waste generation | ✓ | | | ✓ | |

(Please add any other data type relevant to your country)

Q-2 What are the current and planned government policies and programmes to strengthen data and information availability in waste sector?

N/A

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

To comprehend the status of environmental and economic activities in the form of scientific statistical information, as well as the quantity of resources and energy flow among different industries in an objective and quantitative manner. Also, to develop scientific, first-order statistical information on environmental, economic and social conditions, as well as the existence and distribution of natural resources. In addition, to ensure the credibility and accuracy of environmental information in partnerships with relevant entities, and to work to enhance information archives of environmental policies.

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

➤ **Basic Environmental Act**

**Voluntary Progress/Achievements/Initiatives in
Implementing Ha Noi 3R Declaration (2013~2023)**

| |
|-----------------------|
| Country Name Japan |
|-----------------------|

| | |
|---|---|
| IV. 3R Goals for Cross-cutting Issues | |
| Goal 27 | Promote data collection, compilation and sharing, public announcement and application of statistics on wastes and the 3Rs, to understand the state of waste management and resource efficiency. |
| <ul style="list-style-type: none"> ➤ <i>The 4th Fundamental Plan for Establishing a Sound Material-Cycle Society</i> ➤ <i>Annual report on environmental statistics</i> http://www.env.go.jp/en/statistics/index.html | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> N/A | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|---|---|
| Goal 28 | Promote heat recovery (waste-to-energy), in case wastes are not re-usable or recyclable and proper and sustainable management is secured. |
| <i>Q-1 What are the government policies and programmes, including incentives, for waste-to-energy programmes?</i> | |
| <i>Government subsidy program can be applied to develop high-efficient energy recovery waste treatment facility, covering 1/2 or 1/3 of the total cost of the project. The development of Feed-In-Tariff (FIT) system enables to increase financial sustainability of operation and management of waste-to-energy facilities.</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <ul style="list-style-type: none"> ➤ <i>As waste amount decreases because of population decrease, it might be difficult for more and more municipalities to collect over 300 ton of waste per day, which is desirable amount for efficient heat recovery.</i> ➤ <i>Due to narrowness of the land area, it is difficult to find new places for final disposal sites.</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| N/A | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| N/A | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|---|---|
| Goal 29 | Promote overall regional cooperation and multi-stakeholder partnerships based on different levels of linkages such as government-to-government, municipality-to-municipality, industry-to-industry, (research) institute-to-institute, and NGO-to-NGO. Encourage technology transfer and technical and financial supports for 3Rs from developed countries to less developed countries. |
| <i>Q-1 Please provide a list of on-going bilateral/multi-lateral technical cooperation in 3R areas?</i> | |
| <ul style="list-style-type: none"> ➤ <i>Regional 3R and Circular Economy Forum in Asia and the Pacific</i> ➤ <i>African Clean City Platform (ACCP)</i> ➤ <i>Contributing to Climate and Clean Air Coalition/Municipal Solid Waste Initiative</i> ➤ <i>Contributing to G7 Alliance on Resource Efficiency</i> ➤ <i>Contributing to G20 Resource Efficiency Dialogue</i> ➤ <i>Contributing to OECD Working Party on Resource Productivity and Waste</i> ➤ <i>Contributing to UNEP International Resource Panel</i> ➤ <i>World Circular Economy Forum</i> ➤ <i>3R Conference for Asian Local Governments</i> ➤ <i>Support in development of Waste to Energy guideline</i> ➤ <i>International Promotion of Circular Business</i> | |
| <i>Q-2 What actions are being taken to promote inter-municipal or regional cooperation in areas of waste exchanges, resource recovery, recycling, waste-to-energy and trade of recyclables?</i> | |
| <ul style="list-style-type: none"> ➤ <i>Facilitate joint international cooperation among local governments and Japanese businesses for improving waste management and climate benefits in Asian ant the Pacific countries.</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> N/A | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> N/A | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> N/A | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|--|---|
| Goal 30 | Pay special attention to issues and challenges faced by developing countries including SIDS in achieving sustainable development. |
| <i>Q-1 Please describe any past and on-going cooperation with SIDS (Small Island Developing States) countries in 3R areas.</i> | |
| <ul style="list-style-type: none"> ➤ <i>J-PRISM (2011-2016) (Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries) by JICA which supported 11 countries for capacity building of waste management in pacific island countries as well as assisted to formulate the Pacific Regional Solid Waste Management Strategy (2016-2025)</i> ➤ <i>J-PRISM phase two (2017-2022) to support and monitor implementation of the Pacific Regional Solid Waste Management Strategy.</i> | |
| <i>Q-2 Please list 3R related projects linked to climate change, biodiversity, disaster management and sustainable tourism. (This is <u>to be reported by SIDS countries only</u>)</i> | |
| N/A | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| N/A | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| N/A | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> | |
| N/A | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|---|--|
| Goal 31 | Promote 3R + “Return” concept which stands for Reduce, Reuse, Recycle and “Return” where recycling is difficult due to the absence of available recycling industries and limited scale of markets in SIDS, especially in the Pacific Region. |
| <i>Q-1 What specific policies, programme, including pilot projects, are implemented to promote 3R+ “Return” concept? (This is to be reported by SIDS countries only)</i> | |
| <i>Ministry of the Environment has invited the central or local government officials in charge of waste management to training programmes.</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> N/A | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> N/A | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022)</i> N/A | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

IV. 3R Goals for Cross-cutting Issues

Goal 32 Complete elimination of illegal engagement of children in the **informal waste sector** and gradually **improve** the working conditions and livelihood security, including **mandatory provision of health insurance**, for all workers.

Q-1 What is the approximate market size (in US\$) of the informal waste sector?

N/A. Illegal waste collectors without official license are sometimes exposed.

Q-2 Number of annual labor inspections in waste sector?

N/A

Q-3 Is health insurance a mandatory to all informal workers in waste sector by law?

Every individual in Japan is legally obligated to enroll in either Employee's Health Insurance or National Health Insurance.

Q-4 What specific policies and enforcement mechanisms are in place to prevent illegal engagement of children in waste sector?

Although it is not a specific matter on children, Waste Management and Public Cleaning Act prescribes penalties for illegal waste collection and treatment.

Q-5 Number of landfill sites accessible to register waste pickers?

All landfill sites are monitored by local authorities or commissioned private sector. Waste pickers are not able to access these sites.

Q-6 Average life span of informal waste workers?

N/A

Q-7 Any government vaccination programmes for informal waste workers?

Total number of illegal dumping in 2021 was 107 in Japan. Ministry of the Environment continues to expand illegal dumping eradication campaign and strength monitoring, dispatch experts in waste regulations into local governments for advising and consulting in order to strength prevention of illegal waste disposal activities.

Q-8 Any public awareness programmes for informal waste workers on health and safety measures?

N/A

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Prevention of illegal waste collection and prevention of illegal dumping

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Ministry of the Environment and local administrations caution on websites not to use illegal waste management companies without official license.

**Voluntary Progress/Achievements/Initiatives in
Implementing Ha Noi 3R Declaration (2013~2023)**

| |
|-----------------------|
| Country Name Japan |
|-----------------------|

| IV. 3R Goals for Cross-cutting Issues | |
|--|---|
| Goal 32 | Complete elimination of illegal engagement of children in the informal waste sector and gradually improve the working conditions and livelihood security, including mandatory provision of health insurance , for all workers. |
| <i>Important policies/programs/projects/master plans the government plans to undertake within next five years (2017~2022)</i> N/A | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|---|--|
| Goal 33 | Promote 3Rs taking into account gender considerations. |
| <i>Q-1 Please give a brief assessment on how the national, provincial and municipal governments incorporate gender considerations in waste reduction, reuse and recycle.</i> N/A | |
| Challenges (policy/ institutional/ technological/ financial) faced in implementation: <i>With the increase in the number of working women, 3R needs to be adapted to suit their new lifestyles.</i> | |
| Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant N/A | |
| Important policies/programmes/projects/master plans the government plans to undertake within next five years (2017~2022) N/A | |
| Is this Goal relevant for your country? <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| |
|---|
| Q- Please provide a brief comprehensive summary of important 3R and resource efficiency policies /programmes/ projects/ master plans of your country. |
| <p><i>The Basic Environmental Act (1993) and Plan (1994, revised in 2000, 2006, and 2012, 2018)</i> <i>Basic Environment Act in 1993 provides the overall framework for environmental policy including waste management and recycling. With enactment of this law, the emphasis of Japan’s environmental policy has shifted from environmental pollution prevention to global environmental issues and sustainability issues. Some of the key principles of waste management such as Extended Producer Responsibility as well as Polluter Pays Principle are mentioned in the Basic Act as a responsibility of producers and businesses. Basic Environment Plan shows the basic direction of environmental policy and are revised every six years. The current plan was its 5th plan and developed in 2018. It emphasizes Regional Circular and Ecological Sphere (Regional CES) integrated approach toward circulation, low carbon, and harmony with nature, utilizing renewable resources, stock resources, and circulative resources.</i></p> <p><i>The Fundamental Act (2000) and Plan (2003, revised in 2008, 2013, 2018) for Establishing Sound Material Cycle Society</i> <i>The Fundamental Act for Establishing Sound Material Cycle Society is positioned as a law to supplement realization of the idea expressed in Basic Environmental Act in the area of waste management and recycling and resource-efficient society. A variety of existing and new measures were placed within the framework of the “Fundamental Act for Establishing a Sound Material-Cycle Society” (2000). Also, the Fundamental Plan for Establishing a Sound</i></p> |

Material-Cycle Society establishes numerical targets based on material flow accounting (MFA)-based indicators, designates particular roles for stakeholders, and provides directions so that individual efforts are consistent with the national goal of establishing a “sound material-cycle society”. Three major indicators and targets set by the Fundamental Plan are, resource productivity (GDP/resource input), cyclical use rate [cyclical use amount/ (cyclical use amount+ natural resource input)], and amount of final disposal. As for the 4th Fundamental Plan, please refer to the attachment.

“Sound material-cycle society” is defined under the Fundamental Act for Sound Material-Cycle Society as “a society in which the consumption of natural resources is minimized and the environmental load is reduced as much as possible by preventing products, etc., from becoming wastes, etc., promoting appropriate recycling of products, etc., when they have become recyclable resources, and securing appropriate disposal (as wastes) those recyclable resources that are not recycled.”

Waste Management and Public Cleansing Act and Act for Promotion of Effective Utilization of Resources

Waste Management and Public Cleansing Act, enacted in 1971 replacing the earlier Public Cleansing Act, is at the core of the waste management policy and regulations. The law regulates proper treatment of two basic categories of wastes in Japan: municipal solid waste and industrial waste. In both categories of wastes, it provides basic regulation in the following issues of waste management; 1) placing reduction of waste generation as a principle, 2) promotion of proper treatment of waste (including recycling), 3) clarification of the responsibilities for waste management (municipalities for municipal waste and industries for industrial waste), 4) regulation for establishment of waste treatment facilities, 5) regulation for waste treatment operators, and 6) establishment of waste treatment standards.

On the other hand, Act for Promotion of Effective Utilization of Resources is to promote recycling as well as other 2Rs (reduce and reuse). It defines actual implementation of the 3Rs in specific industrial sectors as well as in the specific products and recyclables. It demands promotion of the 3Rs to the 10 different industrial sectors (such as pulp and paper industry, chemical industry, steel industry, non-ferrous metal industry, auto-mobile manufacturers) and 69 items (such as personal computers, small secondary batteries).

“Various Recycling-related Acts” to sort, collect and treat specific types of recyclables

To realize the idea of Sound Material Cycle Society and to minimize waste generation, Japan introduced a series of specific recycling laws targeting specific product categories. These include, Containers and Packaging Recycling Act of 1995, Home Appliances Recycling Act of 1998, Food Waste Recycling Act of 2000, Construction Materials Recycling Act of 2000, End of Life Vehicles Recycling Act of 2002, and Small Home Appliance Recycling Act of 2012. For

specific features of each law see chapter 3.2-3.6.

“Act on Promoting Green Procurement” to build up markets

Original purpose of Green Purchasing Act in 2000 is to generate demands for products using recyclables. With specific recycling-related laws, Japan tried to establish collection and treatment systems for specific recyclables. However, this is not enough to establish a material circulation in a society. Thus, green purchasing act was originally developed to build up markets for green products to close the loop. This law requires the national government, local governments, national institutes and agencies to promote the procurement of recycled products.

“Eco-town programme” to build up recycling infrastructure

The eco-town program was established in Japan in 1997 and continued until 2007 to create synergies between urban waste management and the promotion of recycling industries. One of its main goals was to realize “zero emissions”. This means to minimize waste by recycling all waste and by-products into materials and using those in other industries. Another goal was to help to revitalize the economies of local areas. Aiming at environmentally-sustainable local development, the Ministry of Economy, Trade and Industry (METI) claimed that this program would promote environmental industry, industrial and technological accumulation, and an environmentally-harmonized social system. The eco-town program sought to promote competition among local governments to promote environmental management projects. Under the plan, local governments would develop plans in conjunction with other stakeholders and apply for recognition as an eco-town. The accepted plans would be subsidized jointly by METI and Ministry of the Environment. The eco-town program subsidized both “hardware” projects, such as product recycling or renewable energy facilities, and “software” projects, such as feasibility studies and awareness building. Although the applicant should be a local government, the project proposals would not be approved unless they included cooperative efforts of both business and local government. The 26 eco-town projects (1997 to 2007) include Kawasaki City and Kita-Kyushu City. National eco-town projects were expected to contribute to the establishment of proper recycling capacity by constructing recycling facilities and to provide a solution to the shortage of recyclables by promoting networks of recyclers.

Governance for Policy Implementation

Basic environment plan, Fundamental Plan for Establishing Sound Material Cycle Society, and each product-specific recycling law will be reviewed periodically (every 5 years except 6 years for Basic Environment Plan). Therefore, every 5-6 years, different stakeholders should convey their opinions and messages to the central government on policies. It is important for the central government to reflect these opinions in the revision of the recycling laws.

“Resource Circulation Strategy for Plastics” issued in May 2019

- Define “3Rs + Renewable” as the basic principle*

- *Reduce the use of single-use plastics*
(add “value” such as through mandating payment for plastic bags)
- *Easy to understand and effective sorted collection and recycling of plastic resources*
- *Development of a domestic resource circulation system given the embargoes of Asian countries*
- *Support technical innovation and infrastructure development in Recycled plastics / Bio-plastics technologies*
- *Government procurement in Recycled plastics / Bio-plastics products*

Milestones in the Strategy are as follows,

<Reduce>

① *Cumulative suppression of 25% of single-use plastics by 2030*

<Reuse/Recycle>

② *Reusable/recyclable design by 2025*

③ *Reuse/recycle 60% of containers and packaging by 2030*

④ *Effective use of 100% of used plastics by 2035 by reuse and recycling etc.*

<Recycling and Biomass Plastics>

⑤ *Double recycling by 2030*

⑥ *Introduce about 2 million tons of biomass plastics by 2030*

The Plastic Resource Circulation Act (enacted in April 2022)

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

The basic policies of this Act are:

- *Design for the Environment by manufacturers*
- *Reduction of single-use plastics by retailers and service providers*
- *Separation, collection, and recycling of plastic waste by municipalities and private sector*

Circular Economy Roadmap (published in September 2022)

This Roadmap sets comprehensive policy directions on resource circulation and circular economy toward 2030 to aim for achieving carbon neutrality in 2050.

- *Policy directions are by materials (Waste plastic and oils, Biomass, Metals, Construction materials), products (Buildings, Automobiles, Electronics, Climate friendly products and materials, Fashion) and other sectors (Circular economy businesses, Waste disposal systems, Regional circulation systems, Proper disposal, International promotion on circular economy, Collaboration and human resources development).*
- *As milestone in 2030, market volume of circular economy-related businesses is aimed to expand to 80 trillion yen through plastic recovery volume doubled, food loss 4 million tons or less, metal recycling / raw materials volume processed doubled, etc.*