

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

Timeline of Submission: **15 February 2022** (Email:
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Note: Kindly fill in Computer-typed and send it in PDF file

*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 and COMPUTER-TYPED in the below table and send in PDF format 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.

Secretariat of the Regional 3R Forum in Asia and the Pacific
United Nations Centre for Regional Development (UNCRD)
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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?	
<ul style="list-style-type: none"> ➤ Japan states that the government will strengthen 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)	
<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"/> Does not exist	
Q-3 Total annual government expenditure per capita (US\$ per capita) in municipal solid waste management in 2019-2020	
US\$ 153 per capita (20,885 108JPY / 1.23731 10 ⁸ person) US\$=110 JPY	
The cost for waste management for April 2019 to March2020 : 2,088,500,000,000	
Source: https://www.env.go.jp/press/109290.html (Only available in Japanese)	
The population as of October 2019 : 123,731,000	
Source: Statistics Bureau of Japan	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
<ul style="list-style-type: none"> ➤ Strengthening linkages between production and consumption ➤ Transition of service provision systems to encourage Supply Chain Planning 	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
➤ We established “The 4 th Fundamental Plan for Establishing a Sound Material-Cycle Society” in July	

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.
	<p>2018. For details, please refer to the attachment.</p> <ul style="list-style-type: none"> ➤ 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 initiative related to 3R and Circular Economy are introduced as “best practice”. https://j4ce.env.go.jp/en ➤ Other attempts are as follows, Reduction of plastic shopping bags by banning to provide with free plastic bags at stores from July 2020. Reduction and recycling of food waste Promote the use of my bottle and etc.
	<p><i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</i> “The 4th Fundamental Plan for Establishing a Sound Material-Cycle Society” issued in July 2018.</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 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>The Food Recycling Act was established in May, 2001, and revised twice in 2008 and in 2015. It focuses mainly 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.</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"> ➤ The utilization of the organic waste by household is quite low. ➤ Further efforts to systematically reduce and recycle food wastes are needed across all other stages in the food supply chain. 	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
<ul style="list-style-type: none"> ➤ Recycling businesses registration system ➤ Recycling loop system ➤ Other measures such as “No-Foodloss Project”, “Eat-Up Movements (3010 campaign)”, and “Salvage Party” for food waste reduction. 	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)	
<p>In July 2019, The government issued new basic policy based on The Food Recycling Act. In the basic policy,</p> <ul style="list-style-type: none"> ➤ Considering the convergence to SDGs, it is stated that we halve the amount of food loss in 2030 compared to that of 2000 was also introduced. ➤ 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 group achieved the target value. In response to this result, the target value for these 31 industry groups was raised and new target value for additional 3 industry groups was set. ➤ 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 in 2019. Revised target value by March 2024 are 95% for food manufacturers, 75% for wholesaler, 60% for retailer, and 50% for restaurants. 	

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

Country Name JAPAN

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.
<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 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 in order 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 will take 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)				

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 to reduce/reuse that have been delayed as 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 Reduce 25% 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

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

Country Name
JAPAN

- ④ 100% utilization of used plastics by 2035
 < **Recycled Plastics / Biomass Plastics** >
 ⑤ Use recycled plastics volume to be doubled by 2030
 ⑥ Introduce 2 million tons of biomass plastics by 2030

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)

Targets of 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

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

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

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
<i>Q-1 What specific waste management policies and programmes are introduced to encourage private sector participation in municipal waste management?</i>	
Eco-Town programmes has 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 related stakeholders, policy and strategy development, to achieve “zero waste” by combining regional industries and financial supports from central government.	
<i>Q-2 What are the major waste management areas that have strong involvement of private and business sector?</i> (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	
<i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i>	
Although biomass technology like a methane fermentation facility has been widely applied into society after FIT system development, the technology targets mainly on industrial organic waste with continuous same waste characteristic. For the implementation of this technology to target on municipal food waste from household, further political and technological improvement will be required. Education is a common keyword in waste and resource sectors for environmentally sound technology application 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 Ministry of the Environment website. https://www.env.go.jp/recycle/ecotown/ (Only available in Japanese)	
<i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</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?</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 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.
<i>Q-1 What are the major clean technology related policies aiming to increase energy and resource efficiency of SMEs?</i>	
<p>Recycling industry is an open market to any stakeholders; however, recycler needs to provide an application to local government or related organizations to join in bidding process for recycling and recovery business. In the application form recycler inform their recycling and recovery performance, and it has to meet requirement standards set by laws or guidelines specific to individual materials.</p> <p>To encourage SMEs to promote energy efficiency, Ministry of Economy, Trade and Industry provides subsidy program for the application of energy-efficient equipment and the improvement of operation, to increase productivity of SMEs.</p>	
<i>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 central government, local administrative, and other organizations.	
<i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i>	
To improve resource efficiency and productive, secure project finance is a common challenge among 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 subsidy program for the application of energy-efficient equipment such as energy-efficient lightning, air-conditioner, heat pump, and boiler.	
<i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</i>	
In 2021, Ministry of the Environment has decided to establish the subsidy programme to compensate SMEs for the installation cost of the machinery and equipment with energy conservation and low carbon emission.	
<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 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>The Basic Act for Establishing a Sound Material-Cycle Society stipulates the two concepts of the Polluter Pays Principle (PPP) and Extended Producer Responsibility (EPR) as fundamental principles for policy making.</p> <p>Act on Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities (Act on Promoting Green Procurement) has been established as one of individual laws under the Basic Act for Establishing a Sound Material-Cycle Society.</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>	
Home Appliance Recycling Act stipulates physical and financial responsibilities for consumer (pay for collection and recycling), retailer (collect) and manufacturer (recycle) under the concept of EPR scheme.	
<i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</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.
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?	
<ul style="list-style-type: none"> ➤ 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 aiming to promote “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 has 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 exemption for establishing new recycling capacity during that time period to facilitate private investment to establish such recycling capacity. ➤ Also, municipal solid waste treatment facilities, such as recycle centers, are being developed in order to promote generation control, cyclical use and proper treatment of waste, through the Grant for Promoting the Establishment of a Sound Material-Cycle Society which will support municipalities with Local Plan for Establishment of a Sound Material Cycle Society. 	
Q-2 How many eco-industrial parks or zones or the like, which is supported by the government, are there in the country?	
26 areas were supported by this Eco-Town programme from 1997-2006.	
Eco town policy 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% in average of annual increase in national recycling capacity.	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
Original purpose to promote industrial symbiosis as well as environmental industry was not necessary achieved fully through this Eco-Town Programme. Rather it has later become a policy to establish recycling capacity to sustain Sound Material Cycle Policy of Japan.	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Detail of Eco-Town is introduced on Ministry of the Environment website. 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 (2016~2021)	
N.A.	
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 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> All training facilities and centers are open to SMEs.	
<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> There are several programmes supporting SMEs business, but it is difficult to count expenditure specific to the field of cleaner production, resource efficiency and environment-friendly technologies.	
<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> Ministry of Economy, Trade and Industry provides subsidy program for the application of energy-efficient equipment such as energy-efficient lightning, air-conditioner, heat pump, and boiler.	
<i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</i> In 2021, Ministry of the Environment has decided to establish the subsidy programme to compensate SMEs for the installation cost of the machinery and equipment with energy conservation and low carbon emission.	
<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 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

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 those which contain asbestos, or e-waste contaminated by trace amounts of PCB, and explore treatment 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) the route of mixed metal scrap in Japan, companies that engage in illegal collectors become object to regulate;
 - (2) Japanese government simplifies the import procedure to import hazardous waste easily and 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

Ministry of the Environment list each country's regulation for hazardous waste on its website.
http://www.env.go.jp/recycle/yugai/basel_info/index.html (Only available in Japanese)

**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.
<i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</i> Amended Domestic Basel Act	
<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 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>	
The Food Recycling Act	
<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>	
➤ Act on the Promotion of Environmental Conservation Activities through Environmental Education	
<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>	
➤ Reduction of the food losses generated on farm and at the post harvesting stage. ➤ 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</i>	
e.g. ➤ Changing the display method of “best-before date” ➤ Review of business practices: experiment of extending delivery & sales deadlines	
<i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</i>	
➤ Please refer to Goal 2.	
<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

Type of biomass	Amount generated in current year	Current utilization rate	Goal of FY 2025
Domestic animal wastes	Approximately 4.86 million tons	Approximately 87%	Approximately 90%
Sewage sludge	Approximately 0.90 million tons	Approximately 68%	Approximately 85%
Black liquor (*1)	Approximately 4.03 million tons (*2)	Approximately 100%	Approximately 100%
Paper	Approximately 10.00 million tons	Approximately 81%	Approximately 85%
Food waste	Approximately 0.65 million tons	Approximately 29%	Approximately 40%
Remainder material of saw mill etc.	Approximately 3.20 million tons (*2)	Approximately 97%	Approximately 97%
Construction generated wood	Approximately 2.20 million ton	Approximately 94%	Approximately 95%
Non-food part of agricultural crops (Except plowing)	Approximately 4.38 million ton	Approximately 32%	Approximately 45%
Remainder material of forest	Approximately 4.20 million tons (*2)	Approximately 13%	Approximately above 30%

*1: 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.

*2: 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>	
➤ Promote efficient use of agricultural biomass waste and livestock waste within local areas	
<i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i>	
Please refer to the HP of Ministry of Agriculture, Forestry and Fisheries. HP: https://www.maff.go.jp/e/policies/env/biomass.html	
<i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</i>	
Goals set to be achieved by 2025 (see the above table) include formulating a biomass utilization promotion plan for 600 municipalities, creating new industries of JPY500 billion which will use biomass and aiming to use 26 million tons of biomass yearly via carbon conversion.	
<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>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.</p>	
<i>Q-2 What extent issue of plastic waste is considered in integrated coastal zone management (ICZM)? (Please check the appropriate box)</i>	
<p><input checked="" type="checkbox"/> Very much <input type="checkbox"/> Somehow <input type="checkbox"/> Not at all</p>	
<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>-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 is formed under collaborative project among Kyushu University (Prof. Atsuhiko Isobe), Tokyo University of Agriculture and Technology (Prof. Hideshige Takada), and Tokyo University of Marine Science and Technology (Prof. Tadashi Tokai) from 2018 to 2020.</p>	
<i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i>	
<p>➤ 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 was 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.</p>	
<i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i>	
<p>➤ A symposium on marine litter was held in January 2016. http://www.env.go.jp/en/water/marine_litter/2016nys_r.html</p> <p>➤ 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. https://rkcmpd-eria.org/</p>	
<i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</i>	
<p>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 revised basic policy are as follows.</p> <p>➤ Implementation of smooth treatment of coastal drift in cooperation with different stakeholders in basin</p> <p>➤ Reduction of generation amount of plastic waste by implementing 3R</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 12	Strengthen regional, national, and local efforts to address the issue of waste, in particular plastics in the marine and coastal environment.
<ul style="list-style-type: none">➤ Countermeasures for marine plastic flowing into the ocean➤ Support of private sector's activity by government➤ International cooperation	
<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
		Recycle in another country
		Do not know how people dispose

※This will be applied to PC
Among end of life appliances emitted 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 the factories are applied to recycling facilities of e-waste. Health and safety guidelines applied to recycling facilities and waste management facilities are developed by Ministries as well as industrial associations.

Specific guidelines for collection, handling, recycling are 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?

Type of e-waste	Estimated total volume generated (ton/year)	% of collected by permitted recycler	% of volume recycled in collected
Television	4.52 million units	73.0%	N.A.
Refrigerators	4.12 million units	86.7%	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.

Washing machines	4.77 million units	89.3%	N.A.
Air conditioners	9.57 million units	37.6 %	N.A.
Others...	N.A.	N.A	N.A.

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)

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

- Increase in collection rate
- Transparency in how recyclers and waste treatment businesses are actually treating these recyclables.
- Regulation of informal collectors in collaboration with municipalities
- Illegal dumping

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

- Act on Recycling of Specified Home Appliances (Home Appliance Recycling Act)
- Small Home Appliances Recycling Act

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)

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.
Steady implementation and review of the progress of Home Appliance Recycling Act and Small Home Appliances Recycling Act	
<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.
<i>Q-1 What specific policies and regulations are introduced to prevent illegal import and export of e-waste?</i>	
<ul style="list-style-type: none"> ➤ Waste Management and Public Cleansing Act ➤ Domestic Basel Act <p>Started activities of “The Asian Network for Prevention of Illegal Transboundary Movement of Hazardous Wastes”, 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 partnership 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.</p>	
<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?</i>	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 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. https://www.env.go.jp/en/recycle/asian_net/Annual_Workshops/2010_PDF/Session2/S2_04_Japan_Customs.pdf	
<i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i>	
Illicit reporting of items for export such as waste contamination or hazardous substance mixture to mixed metal scraps	
<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"> ➤ Waste Management and Public Cleansing Act ➤ Domestic Basel Act ➤ 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 (2016~2021)</i>	
The annual Asian Network workshops have been organized since 2004 with the objective to enhance cooperation	

**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.
and promote information exchange between Competent Authorities and Focal Points in the Asian region https://www.env.go.jp/en/recycle/asian_net/Annual_Workshops/Annual_Workshops.html	
<i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> 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"> ➤ EPR principle is stated in Fundamental Act of Sound Material Cycle Society (framework policy for Japan’s Sound Material Cycle Society and the 3Rs). ➤ Act on the Promotion of Sorted Collection and Recycling of Containers and Packaging ➤ Home Appliance Recycling Act ➤ End-of-Life Vehicle Recycling Law ➤ Small Home Appliances Recycling Act ➤ Act on the Promotion of Effective Utilization of Resources 	
Q-2 Please provide a list of products and product groups targeted by EPR nationally?	
<ul style="list-style-type: none"> ➤ Containers and packaging (glass bottles, PET, paper containers and packaging, plastic containers and packaging, Aluminum cans, steel cans, paper carton / tetrapak style), cardboard ➤ Automobiles ➤ 4 type of home appliances (TV, refrigerator, air-conditioner, washing machine) ➤ Personal Computers under Act on the promotion of effective utilization of resources ➤ Compact researchable batteries under Act on the Promotion of Effective Utilization of Resources ➤ Small home appliances including PCs, mobile phones, and other small electronic devices 	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
<ul style="list-style-type: none"> ➤ Increase in collection rate ➤ Transparency in how recyclers and waste treatment businesses are actually treating these recyclables. ➤ Regulation of informal collectors in collaboration with municipalities ➤ Improvement in quality of material recycling 	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Please refer to Q-1	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)	
<ul style="list-style-type: none"> ➤ The 4th Fundamental Plan for Establishing a Sound Material Cycle Society issued in June 2018 ➤ The Plastic Resource Circulation Act will take 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. 	
Is this Goal relevant for your country? <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all	

III. 3R Goals for New and Emerging Wastes	
Goal 16	Promote the 3R concept in health-care waste management.
Q-1 What specific policies and regulations are in place for healthcare waste management? Infection waste is designated 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.	
Q-2 What is the total annual government expenditure towards healthcare waste management (US\$ per year)? The financial and physical responsibilities for healthcare waste management are on waste generator and the government expenditure is not directly used for its management.	
Q-3 List the agencies or authorities responsible for healthcare waste management. Local government has responsibility to manage/monitor waste generator to secure environmentally friendly waste management by checking report about waste information (waste category, amount, packaging, contract with transporter and disposer) provided by generator.	
Q-4 What is the common practice for disposal of healthcare wastes? (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:	
<ul style="list-style-type: none"> ➤ Along with aging society, the amount of medical waste is increasing. ➤ Increase the volume of infectious and medical waste due to COVID 19 	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Ministry of the Environment developed “Infectious Waste Treatment Guideline” to apply newly healthcare waste dispose technologies (High pressure steam sterilization, Microwave sterilization).	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)	
During the spread of COVID-19, the Japanese Government developed “Guidelines on Measures for COVID-19 in Waste Management”.	
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.

Q-1 What specific policies and guidelines are introduced for product standard (towards quality/durability, environment/eco-friendliness, labour standard)?

Based on the concept of the Act on Promoting Green Procurement, “Eco-Mark” a product standard system, has been applied to product with a small burden on environment in a supply chain, and it enables consumer to select environmentally-sound product and contributes producer continue to improve their product to be fitted into green society.

Q-2 What specific energy efficiency schemes are introduced for production, manufacturing and service sector?

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 product. The program applies to several major items including automobiles, TV, window, motor and PC, and other appliances.

The Energy Conservation Act obligates private sector with high energy demand (application not only to large manufacture company, but to service providers such as restaurant, hotel and hospital 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 will be required when energy consumption is evaluated to be high.

Q-3 What specific policies are introduced to create green jobs in product and waste sector?

Some recycling policies are based on the EPR concept, and it incentives producer and manufacture to take more consideration on Design for the Environment.

Subsidy programme from central or local government is provided into waste treatment sector for their EPC and O&M of waste treatment facility, encourage them to keep environmentally friendly operation securing required environmental standards.

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
Please refer to Q-1.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)
N.A.

Is this Goal relevant for your country? Highly Partially 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>	
<ul style="list-style-type: none"> ➤ Japan has a legal system for establishing a "Sound Material-Cycle Society", in which consumption of natural resources will be conserved and the environmental load will be reduced to the greatest extent. 	
<i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i>	
<p>According the "The 4th Fundamental Plan for Establishing a Sound Material Cycle Society" in Japan</p> <ul style="list-style-type: none"> ➤ Integrated measures towards a sustainable society; ➤ Regional vitalization based on regional circulation and harmony sphere; ➤ Resource circulation throughout the entire lifecycle; ➤ Promotion of appropriate treatment and restoration of environment; ➤ Creation disaster waste disposal system; ➤ Creation of international resource recycling system and international expansion of material-cycle industries; ➤ Improved infrastructure for a sound material-cycle 	
<i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</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>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</i>	
4 th Fundamental Plan for Establishing a Sound Material Cycle Society has been issued in June 2018.	
<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.
Q-1 What specific policies are introduced to encourage triangular cooperation between government, scientific & research institutions and private/business sector in 3R areas?	
<ul style="list-style-type: none"> ➤ There is a specific category of research and development in relation to the 3Rs and waste management under research grant programme called Environment Research and Technology Development Fund as R&D budget managed by Ministry of the Environment. ➤ NEDO's R&D for Recycling Technology Development for Highly Efficient Resource Circulation System (About 570 million JPY for FY 2021) ➤ 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. 	
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>There are many research institutes and research universities in Japan in this area. The followings are the examples of such research institutes/coordination bodies.</p> <ul style="list-style-type: none"> ➤ Japan Society of Material Cycles and Waste Management ➤ Center for Material Cycles and Waste Management Research, National Institute of Environmental Studies (NIES) ➤ Institute for Global Environmental Strategies: 1) Sustainable Consumption and Production Area, 2) Center Collaborating UNEP on Environmental Technologies ➤ National Institute of Advanced Industrial Science and Technology (AIST) ➤ Japan Waste Research Foundation (JWRF) ➤ Japan Environmental Sanitation Centre (JESC) ➤ 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 https://rkcmpd-eria.org/ 	
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	
Please refer to Q-1.	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)	
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 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><i>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?</i> (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 (Media, associations of waste management businesses and recyclers, labor union) </p> <p><i>Q-2 What is the level of NGOs' involvement in 3R, sustainable production and consumption, resource efficiency related promotional activities?</i> (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><i>Q-3 What is the level of citizens' awareness on beneficial aspects of 3R, sustainable production and consumption and resource efficiency.</i> (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><i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> How to shift high awareness of citizens into actual behavioral change.</p> <p><i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i></p> <ul style="list-style-type: none"> ➤ 3R Promotion Meister scheme for those who can advise citizens for how to recycle containers and packaging ➤ Public campaign for food loss issue ➤ Making gold, silver and bronze medals from used small appliances under Small Home Appliances Recycling Act. <p><i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</i> 4th Fundamental Plan for Establishing a Sound Material Cycle Society have issued in June 2018</p> <p><i>Is this Goal relevant for your country?</i> <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 the programmes because they is 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 and recycling, and promoting efforts toward the realization of a zero-waste society and the formation of a recycling-oriented society, the Ministry of the Environment, the 3R activity promotion forum, local governments, etc. It is held jointly.
- 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 container 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 since 3R and resource efficiency are considered as one of the basic concept for Environmental Science, Resource Management, Engineering and so on.

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?

N.A.

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>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-2.	
<i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</i> Please refer to Q-2.	
<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	<p>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.</p>
<p>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.</p> <ul style="list-style-type: none"> ➤ Ministry of the Environment(Major coordinating ministries in relation to sound material cycle society policy) ➤ Ministry of Economy, Trade and Industry ➤ Ministry of Agriculture, Forestry and Fisheries ➤ Ministry of Land, Infrastructure, Transport and Tourism ➤ Consumer Affairs Agency ➤ Other relevant ministries including Ministry of Foreign Affairs, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labor and Welfare, etc. 	
<p>Q-2 What type of coordination mechanism are there among ministries and agencies for a resource efficient economic development?</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Official regular coordination meeting among ministries and agencies 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. <input checked="" type="checkbox"/> Official ad-hoc coordination meeting among ministries and agencies <input checked="" type="checkbox"/> Informal meeting among ministries and agencies <input type="checkbox"/> Other coordination mechanisms (please add/specify) 	
<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 N.A.</p>	
<p>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021) N.A.</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 23	Promote green and socially responsible procurement at all levels, thereby creating and expanding 3R industries and markets for environmentally-friendly goods and products.
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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 application proposed by manufacture whether their product meet the certification criteria that the association set to each types 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.

You can find the detail 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, or receiving the provision of 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 questionnaire survey in 2019, 61.2% municipalities answered that they are systematically implementing green procurement.

Source: Survey on green procurement, environmentally friendly contract 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 feel difficulty to judge whether a product is green procure product or not.

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

N.A.

**Voluntary Progress/Achievements/Initiatives in
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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>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</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 (2016~2021)</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 government 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 (Tonegawa river system)	Saitama, Tokyo	2.1	2.6
Nakagawa (Tonegawa 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 HP <http://www.env.go.jp/water/suiiki/h28/h28-3.pdf>; and MLIT HP 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:

Continue proper operation of the laws, efforts on raising environment awareness, and strengthening cooperation with residents.

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

Illegal dumping

Related information site: https://www.env.go.jp/recycle/ill_dum/index.html

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.
<p><i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</i></p> <p>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 revised basic policy are as follows.</p> <ul style="list-style-type: none"> ➤ Implementation of smooth treatment of coastal drift in cooperation with different stakeholders in basin ➤ Reduction of generation amount of plastic waste by implementing 3R ➤ Countermeasures for marine plastic flowing into the ocean ➤ Support of private sector's activity by government ➤ International cooperation 	
<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>	

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.
<i>Q-1 What are major recycling industries in your country?</i> Recycling market for ferrous and non-ferrous metal, plastic, paper and other popular recyclable resources can be concluded domestically, and re-use market 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 reduce 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 benefit 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 (2016~2021)</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 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	✓ (sometimes limited)			✓ (sometimes limited)	
Hazardous waste generation (solid, liquid, sludge, etc.)	✓			✓	
e-waste generation	✓			✓	

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:

Comprehend the status of environmental and economic activities in the form of scientific statistical information, as well as comprehend the quantity of resources and energy flow among different industries in an objective and quantitative manner. Also, develop scientific, first-order statistical information on environmental, economic and social conditions, as well as the existence and distribution of natural resources. In addition, ensure the credibility and accuracy of environmental information in partnership with related entities, and 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
- The 4th Fundamental Plan for Establishing a Sound Material-Cycle Society
- Annual report on environmental statistics
<http://www.env.go.jp/en/statistics/index.html>

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Country Name
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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.
<i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</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>	
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 FIT system enables to increase financial sustainability of operation and management of waste-to-energy facility.	
<i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i>	
<ul style="list-style-type: none"> ➤ As waste amount decreases because of population decrease, it may be difficult for more and more municipalities to collect over 300 ton of waste per day, which is desirable amount for efficient heat recovery. ➤ Due to narrowness of land area, it is difficult to find the new place for final disposal site. 	
<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 (2016~2021)</i>	
Please refer to Q-1.	
<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"> ➤ Regional 3R and Circular Economy Forum in Asia and the Pacific ➤ African Clean City Platform (ACCP) ➤ Contributing to Climate and Clean Air Coalition/Municipal Solid Waste Initiative ➤ Contributing to G7 Alliance on Resource Efficiency ➤ Contributing to G20 Resource Efficiency Dialogue ➤ Contributing to OECD Working Party on Resource Productivity and Waste ➤ Contributing to UNEP International Resource Panel ➤ World Circular Economy Forum ➤ 3R Conference for Asian Local Governments ➤ Support in development of Waste to Energy guideline ➤ International Promotion of Circular Business 	
<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"> ➤ Facilitate joint international cooperation among local governments and Japanese businesses for improving waste management and climate benefits in Asian countries 	
<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 (2016~2021)</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 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"> ➤ 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) ➤ J-PRISM phase two (2017-2022) to support and monitor implementation of the Pacific Regional Solid Waste Management Strategy. 	
<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 (2016~2021)</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>	
Ministry of the Environment has invited the central or local government officials in charge of waste management to the training programme.	
<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 (2016~2021)</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.
<i>Q-1 What is the approximate market size (in US\$) of the informal waste sector?</i> N.A. Illegal waste collector without official license is sometimes exposed.	
<i>Q-2 Number of annual labor inspections in waste sector?</i> N.A.	
<i>Q-3 Is health insurance a mandatory to all informal workers in waste sector by law?</i> Every individual in Japan is legally obligated to enroll in either Employee's Health Insurance or National Health Insurance.	
<i>Q-4 What specific policies and enforcement mechanisms are in place to prevent illegal engagement of children in waste sector?</i> Although it is not a specific matter to children, Waste Management and Public Cleaning Act prescribes penalties for illegal waste collection and treatment	
<i>Q-5 Number of landfill sites accessible to register waste pickers?</i> All landfill sites are monitored by local authority or commissioned private sector and waste pickers are not able to access these sites.	
<i>Q-6 Average life span of informal waste workers?</i> N.A.	
<i>Q-7 Any government vaccination programmes for informal waste workers?</i> Total number of illegal dumping in 2020 was 139 in Japan. Ministry of the Environment continues to expand illegal dumping eradication campaign and strength monitoring, dispatch expert in waste regulations into local government for advising and consulting in order to strength prevention of illegal waste activities.	
<i>Q-8 Any public awareness programmes for informal waste workers on health and safety measures?</i> N.A.	
<i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> Prevention of illegal waste collection and prevention of illegal dumping	
<i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> Ministry of the Environment and local administrative caution on the website not to use illegal waste company without official license.	
<i>Important policies/programs/projects/master plans the government plans to undertake within next five years (2016~2021)</i> N.A.	

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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.
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<i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all
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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.	
<i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> With the working women increasing, waste separation at source need to match the new lifestyle.	
<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 (2016~2021)</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	

Q- Please provide a brief comprehensive summary of important 3R and resource efficiency policies /programmes/ projects/ master plans of your country.
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The Basic Environmental Act (1993) and Plan (1994, revised in 2000, 2006, and 2012, 2018)

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 be 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.

The Fundamental Act (2000) and Plan (2003, revised in 2008, 2013, 2018) for Establishing Sound Material Cycle Society

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 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 will be 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 treatment. 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) putting 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 industry 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 industries, steel industries, non-ferrous metal industries, 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 a market

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 a market 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 laws, 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 central government on policies. It is important for central government to reflect these opinions in the revision of 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 (to be enacted from 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 policy of this Act is

- 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 sectors

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

Country Name JAPAN
