

**Ninth Regional 3R Forum in Asia and the Pacific**

*“3R as a way for moving towards sufficiency economy – Implications for  
SDGs”* 4-6 March 2019, Bangkok, Thailand

# **Country Report**

**(Draft)**

**<India>**

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

# Country 3R Progress Report

Name of the Country: India

Name, Designation and Organization Respondent:

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Other Ministries, Organizations, Agencies contributing to Country  
Report:

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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 interest and commitment 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 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 not only help the member countries to learn various 3R best practices in place across the region, but it would also help bi-lateral and multi-lateral development agencies, donors, development banks in assessing the sustainable needs and challenges to better devise their existing as well as future capacity building programmes and technical assistance in the areas of 3Rs and sustainable waste management.

We request you to kindly fill in the below table as much as possible with relevant data/information. If additional spaces are required, separate sheets could be attached.

Thank you very much for your kind cooperation.

Secretariat of the Regional 3R Forum in Asia and the Pacific  
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## Indore 3R Declaration of Asian Mayors on Achieving Clean Land, Clean Water and Clean Air in Cities

### PREAMBLE

Achieving access to Clean land, clean water and clean air are fundamental rights of citizens. The 2030 Agenda for Sustainable Development, the Sustainable Development Goals (SDGs) and the New Urban Agenda (NUA) have, inter-alia, a common objective to make cities and human settlements safe, resilient, inclusive and sustainable. In order to achieve this objectives sound management of, 3R (Reduce, Reuse, Recycle), circular economic development, sustainable waste management and resource efficiency assume paramount importance. Pursuing 3R as an economic industry could further enable cities to move towards on the path of sound material cycle societies and circular economic development to achieve necessary socio-economic and industrial transformation through the sustainable use of natural resources, enhanced water and energy security, reduced carbon foot-print, and improved land, water and air quality.

### THE DECLARATION

Cognisant of the above socio-economic context in achieving the 2030 Agenda for Sustainable Development, the SDGs and the NUA, we, the Mayors, city and local government authorities and representatives at the Asian Mayors' Policy Dialogue on Achieving Clean Water, Clean Land and Clean Air through 3R and Resource Efficiency, as part of the 8<sup>th</sup> Regional 3R Forum in Asia and the Pacific held at Indore, Madhya Pradesh (India), do hereby declare and adopt, on this 11<sup>th</sup> day of April 2018, our commitment to:

1. **Accelerate** movement of holistic waste management in our cities through prevention, reduction, reuse and recycling of all waste streams (including industrial waste, municipal solid waste, and domestic waste water) with an objective to achieve clean land, clean water and clean air, including Greenhouse gas (GHG) reduction;
2. **Implement** local-level actions to make cities clean, safe, smart, resilient, resource efficient, inclusive and sustainable through the effective implementation of 3R policies and promote tenets of circular economy for moving towards a zero waste society;
3. **Foster** sustainable urban development planning and practices focusing on eco-products, green energy, rainwater harvesting, conservation of water bodies, urban farming with composting, safe disposal of agricultural waste, green city development, green construction materials, etc. for maintaining bio-diversity;
4. **Inspire** citizens to take proactive ownership for managing their own waste, including segregation at source, on-site processing of bio-degradable waste, safe handling of other waste forms and safe disposal by concerned agencies;
5. **Partner** and collaborate with civil society organizations, including integration of informal sector with formal waste management chain in order to provide decentralized approaches to 3R, along with providing sustainable livelihood opportunities, while minimizing health and environmental impacts;

6. **Leverage** national and international collaborations to promote (i) 3R as an economic industry, 3R-related science, technology and infrastructure, inter-municipal, inter-industry and city-to-city cooperation, (ii) public-private-partnerships (PPPs) for integrated waste management, and expand investment opportunities in the 3R space;
7. **Strive** towards complete ban of illegal disposal of plastics in eco-sensitive or eco-fragile areas, including in tourist areas close to oceans, rivers, lakes, wetlands, other water bodies and mountains, to preserve coastal, marine and mountains ecosystems and resources, keeping in mind the widespread plastic littering which affects eco-systems;
8. **Undertake** to work towards sound and sustainable wastewater management and treatment and reuse with an objective to achieve water security and water quality for sustaining livelihood, in view of the the critical nexus between water quality, water security and effective implementation of 3R policies, programmes and infrastructure development;
9. **Focus** on sound and effective management of new emerging waste streams such as micro-plastics, chemicals and hazardous waste, e-waste, medical waste and construction and demolition waste;
10. **Promote** and facilitate the use and development of viable existing and emerging technology, including Information and Communication technologies to strengthen the waste management value chain; and
11. **Engage** in dissemination and acceptance of national and international best practices in 3R among all stakeholders for wide-scale adoption and replication.

*Adopted in Indore, Madhya Pradesh (India), this Eleventh Day of April in the Year of Two Thousand and Eighteen.*

**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?***

Ministry of Housing and Urban Affairs (MoHUA), Govt. of India is implementing Swachh Bharat Mission (SBM) in Urban areas of the country. MoHUA is implementing the SBM by providing the viable gap funding/ grants to the States/UTs in urban area of the country. Under the Mission, one of the admissible components is Municipal Solid Waste management with an objective to reduce, reuse and recycle at the point of generation and proper collection, segregation, transportation, and processing at the decentralized / centralized level. The wet waste shall be used for waste to compost production and waste to energy from non-organic waste under the Mission in the country and dry waste shall follow the path of recycling.

Bureau of Indian Standard (BIS), Govt. of India has published IS 383:2016 to permit the use of manufactured aggregates namely recycled aggregate (RA) and recycled concrete aggregate (RCA) in lean concrete, PCC and RCC by any concerned from Construction & Demolition waste in urban areas.

Govt. of India has notified Solid Waste Management Rules, 2016 which is applied to every urban local body, outgrowths in urban agglomerations, census towns as declared by the Registrar General and Census Commissioner of India, notified areas, notified industrial townships, areas under the control of Indian Railways, Airports, Airbases, Ports and harbours, Defence establishments, special economic zones, State and Central Government organisations, places of pilgrims, religious and historical importance as may be notified by respective State government from time to time and to every domestic, institutional, commercial and any other non-residential solid waste generator situated in the areas except industrial waste, hazardous waste, hazardous chemicals, bio medical wastes, e-waste, lead acid batteries and radio-active waste, that are covered under separate rules framed under the Environment (Protection) Act, 1986. The emphasis has been given on to segregate and store the waste generated by waste generator in three separate streams namely bio-degradable, non-biodegradable and domestic hazardous wastes in suitable bins for reduce, recycle and reuse of waste.

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

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

***Q-3 Total annual government expenditure per capita (US\$ per capita) in municipal solid waste management in 2018-2019***

Swachh Bharat Mission (Urban) is under implementation by the Ministry from 2<sup>nd</sup> October, 2014 to 2<sup>nd</sup> October, 2019. The allocation of funds for municipal solid waste management to the States/ Union Territories (UTs) is \$1230 million during the mission period. Not less than one-third amount of the central Govt. allocation shall also be contributed by the States/UTs. Total

**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.

expenditure per capita in municipal solid waste management at present, may not be assessed and shall be assessed at the end of the Mission period

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

The States/UTs are implementing the municipal solid waste management in the cities/towns with their own policy/ institutional/ technological/ financial as the subject matter is dealt with by the States/UTs. At the Central level, all policy/ institutional/ technological/ financial support is provided to the States/UTs.

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

As the implementation of municipal solid waste management is with State Governments/UTs, States/UTs are developing pilot projects and master plans as per their policies. Govt. of India has recently issues Solid Waste Management Rules, 2016 for further implementation with due consideration of reduce, reuse and recycle of waste so as to transfer the minimum waste at the processing plant.

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

Swachh Bharat Mission(Urban), launched by Govt. of India, with one of the objectives of municipal solid waste management in all cities/towns are under implementation upto October, 2019 (2014-2019) in all the States/UTs. This is very prestigious program of Govt. of India, is being implemented by the States/UTs.

***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 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?***

Under the Swachh Bharat Mission, emphasis has been given on door to door collection of waste, source segregation in different streams which helps the urban local body to decide for proper treatment and processing facilities as waste to compost and waste to energy. Segregation of waste at door step level shall also reduce the generation of waste at source level.

***Q-2 What is happening to country's organic waste? (Please check the appropriate box)***

- mostly landfilled
- mostly incinerated
- both landfilled and incinerated
- mostly open dumped or open burned

However, the steps have already been taken for proper collection, transportation and processing of organic waste. Use of organic waste has been promoted as waste to compost, waste to bio-methanation, etc. in the Country. Since the launched of the Mission, the installation of waste to compost based on wet waste has increased many folds in the country

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

Govt. of India has taken initiative for providing market development assistance to the waste to compost producer to encourage the production and usages of compost in the country. The farmers in the country are encouraged to adopt the compost as natural manure in their field as soil conditioners.

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

As a result of market development assistance, many of the waste to compost plants have been put in operation and increased the production many folds. State have changed their policy with providing additional assistance to the urban local body for development of waste to compost sectors.

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

Swachh Bharat Mission(Urban), with one of the objectives of municipal solid waste management in all 4041 towns/cities are under implementation upto October, 2019 (2014-2019) in all the States/UTs.

***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 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		<input checked="" type="checkbox"/>				
Plastic		<input checked="" type="checkbox"/>				
Metal			<input checked="" type="checkbox"/>			
Construction waste				<input checked="" type="checkbox"/>		
e-waste			<input checked="" type="checkbox"/>			
others						

\*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?**

Govt. of India has notified Solid Waste Management Rules, 2016 including Construction & Demolition waste, Plastic Waste Management Rules, 2016, E-Waste (Management) Rules, 2016 which is applied to every urban local body and notified & non-notified areas, may prevent or reduce the generation of waste namely paper, plastic, metal, construction & demolition waste, etc. The Rules have given the responsibility to all the concerned including Government organization at Central/State/Local Level, Public and Private organization and individual also. SWM Rules 2016 indicates that every concerned shall ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities and also to ensure separate storage, collection and transportation of construction and demolition wastes within 2 years of its notification.

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

Type \ Rate	Very High (>90%)	High (>70%)	Average (50~60%)	Poor (<50%)	Recycling does not exist
Paper			<input checked="" type="checkbox"/>		
Plastic			<input checked="" type="checkbox"/>		
Metal				<input checked="" type="checkbox"/>	
Construction waste				<input checked="" type="checkbox"/>	
e-waste				<input checked="" type="checkbox"/>	

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



**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-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		<input checked="" type="checkbox"/>			
Plastic		<input checked="" type="checkbox"/>			
Metal		<input checked="" type="checkbox"/>			
Construction waste		<input checked="" type="checkbox"/>			
e-waste		<input checked="" type="checkbox"/>			

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

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

As per the SWM Rules, 2016, the Local Authorities have given responsibility for setting-up material recovery facilities or secondary storage facilities with sufficient space for sorting of recyclable materials to enable informal or authorized waste pickers and waste collectors to separate recyclables from the waste and provide easy access to waste pickers and recyclers for collection of segregated recyclable waste such as paper, plastic, metal, glass, textile from the source of generation or from material recovery facilities; Bins for storage of bio-degradable wastes shall be painted green, those for storage of recyclable wastes shall be printed white and those for storage of other wastes shall be printed black;

Local Authorities shall allow only the non-usable, non-recyclable, non-biodegradable, non-combustible and non-reactive inert waste and pre-processing rejects and residues from waste processing facilities to go to sanitary landfill. However, every effort shall be made to recycle or reuse the rejects to achieve the desired objective of zero waste going to landfill.

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

Many of the State Governments have issued authorized identity card to waste recyclers for collection of segregated waste for use of recycle materials.

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

Swachh Bharat Mission (Urban), with one of the objectives of municipal solid waste management in all towns/cities are under implementation upto October, 2019 (2014-2019) in all the States/UTs.

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

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

**Goal 4** Build **sustainable cities /green cities** by encouraging “**zero waste**” through sound policies, strategies, institutional mechanisms, and multi - stakeholder partnerships (giving specific importance to private sector involvement) with a primary goal of **waste minimization**

***Q-1 What specific waste management policies and programmes are introduced to encourage private sector participation in municipal waste management?***

The SBM program has been framed to build sustainable cities/ green cities by encouraging zero waste with primary goal of waste minimization. The estimated cost of implementation of SBM (Urban) for its various components is \$10,000 million. The Government of India share is about 25% of total fund estimated and in addition, a minimum additional amount equivalent to 25% of Govt. of India funding shall be contributed by the States/UTs as State/ULB share. The balance funds are proposed to be generated through various sources of fund including Private Sector Participation, Market Borrowing, Corporate Social Responsibility, External Assistance, etc.

***Q-2 What are the major waste management areas that have strong involvement of private and business sector?*** (Please check appropriate boxes and add other areas if not listed below)

- waste collection
- resource recovery
- waste recycling
- waste to energy, composting, etc.
- PPP projects in waste sector

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

Generation of funds through various organization/ private sectors is challenging task and the Central/State Government and Local Government have managed the funds through them.

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

Many of the State Governments like Chhattisgarh, Madhya Pradesh have taken initiatives towards zero waste management which shall be reflected in due course of time.

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

Swachh Bharat Mission (Urban), with one of the objectives of municipal solid waste management in all towns/cities are under implementation upto October, 2019 (2014-2019) in all the States/UTs.

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

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

**Goal 5** Encourage the **private sector**, including small-and medium-sized enterprises (SMEs) to implement measures to increase **resource efficiency and productivity**, creation of decent work and to improve environmentally-friendly practices through applying environmental standards, clean technologies, and cleaner production.

***Q-1 What are the major clean technology related policies aiming to increase energy and resource efficiency of SMEs?***

- Central Electricity Regulatory Commission (CERC), Govt. of India has recently notified Generic tariff for Waste-to-Energy of Rs. 7.04 per unit of power for plant with municipal solid waste and Rs 7.90 per unit of power for plant based on Refused Derived Fuel (RDF) which has increased the potential for setting up the waste to energy plants in the country. State Governments have also initiated process for determining the power tariff for waste to energy plants.
- Ministry of Power, Govt. of India has recently revised the Tariff Policy 2006, under the Indian Electricity Act, 2003, making it mandatory for State DISCOMS to purchase 100% power generated from Waste-to-Energy plants in the country.
- Guidelines on Usage of Refuse Derived Fuel in Various Industries, 2018 has been released to the States/UTs which will serve as reference for all stakeholders to implement/promote use of RDF across different industries.

These initiatives taken by the Govt. of India under Swachh Bharat Mission will certainly boost the municipal solid waste management sector in due course of time.

***Q-2 What are the capacity building programmes currently in place to build the technical capacity of SMEs in 3R areas?***

Under the SBM(U), one of the admissible components is Capacity Building programme. Central as well as State Governments are conducting many national level workshop and State level consultative workshop to impart the knowledge to the municipal workers. To strengthen the manpower capacity, Project Management Unit have also been engaged by the States/UTs for speedy implementation of the Mission.

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

With the change in policy adopted by the Govt. of India, private sector, including small-and medium-sized enterprises (SMEs) are encouraged 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.

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

Many of the States/UTs are in process of establishment of green technology for processing of municipal solid waste management.

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

Swachh Bharat Mission (Urban)

***Is this Goal relevant for your country?***     Highly     Partially     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.

***Q-1 What percent of companies and industries have introduced green accounting and voluntary environmental performance evaluation (Ref: ISO 14000)?***

- Very High (> 90%)
- High (>70%)
- Average (50~70%)
- Low or not satisfactory (< 50%)
- None

As per the Business Rules of Govt. of India, Ministry of Urban Development is not responsible for Industrial application and separate Ministry has been dealing the same issues.

***Q-2 What percent of companies and industries have introduced social accounting (Ref: SA 8000) in consultation with their workers?***

- Very High (> 90%)
- High (>70%)
- Average (50~70%)
- Low or not satisfactory (< 50%)
- None

Not applicable to MoHUA

***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?***

Not applicable to MoHUA

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

Not applicable to MoHUA

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

Not applicable to MoHUA

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

Not applicable to MoHUA

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

I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste)	
<b>Goal 7</b>	Promote <b>industrial symbiosis</b> (i.e., recycling of waste from one industry as a resource for another), by providing relevant incentives and support.
<b><i>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?</i></b>	
As per the Business Rules of Govt. of India, Ministry of Urban Development is not responsible for Industrial waste and related issues and the same is dealt with by another Ministry.	
<b><i>Q-2 How many eco-industrial parks or zones or the like, which is supported by the government, are there in the country?</i></b>	
Not applicable to MoHUA	
<b><i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i></b>	
Not applicable to MoHUA	
<b><i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i></b>	
Not applicable to MoHUA	
<b><i>Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)</i></b>	
Not applicable to MoHUA	
<b><i>Is this Goal relevant for your country?</i></b> <input 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 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.

***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.?***

As per the Business Rules of Govt. of India, Ministry of Urban Development is not responsible for issues related to SMEs and the same is dealt with by another Ministry.

***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.?***

Not applicable to MoHUA

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

Not applicable to MoHUA

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

Not applicable to MoHUA

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

Not applicable to MoHUA

***Is this Goal relevant for your country?***     Highly     Partially     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

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

Govt. of India has notified Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

- As per the Rules, for the management of hazardous and other wastes, an occupier shall follow the steps, namely (a) prevention; (b) minimization; (c) reuse, (d) recycling; (e) recovery, utilization including co-processing; (f) safe disposal.
- The occupier shall be responsible for safe and environmentally sound management of hazardous and other wastes.
- The hazardous and other wastes generated in the establishment of an occupier shall be sent or sold to an authorized actual user or shall be disposed of in an authorized disposal facility.
- The hazardous and other wastes generated in the establishment of an occupier shall be sent or sold to an authorized actual user or shall be disposed of in an authorized disposal facility.
- The hazardous and other wastes shall be transported from an occupier's establishment to an authorized actual user or to an authorized disposal facility in accordance with the provisions of these rules.
- The occupier who intends to get its hazardous and other wastes treated and disposed of by the operator of a treatment, storage and disposal facility shall give to the operator of that facility, such specific information as may be needed for safe storage and disposal.
- The occupier shall take all the steps while managing hazardous and other wastes.

Every State Government/UTs may prepare integrated plan for effective implementation of these provisions and to submit annual report to the Ministry of Environment, Forest and Climate Change, in the Central Government.

The occupiers of facilities may store the hazardous and other wastes for a period not exceeding ninety days and shall maintain a record of sale, transfer, storage, recycling, recovery, pre-processing, co-processing and utilization of such wastes and make these records available for inspection.

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

No challenges faced at present

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

Not applicable

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

The act is being implemented in totality

**Is this Goal relevant for your country?**     **Highly**       **Partially**       **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.

*Q-1 What specific policies, rules and regulations, including awareness programmes, are introduced to minimize food or crop waste?*

MoHUA deals with the Municipal Solid Waste and the food and crop waste are dealt with by another Ministry of Govt. of India.

*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?*

*Q-3 What is the average wastage of crops or agricultural produce between farms to consumers, if there is a study in your country?*

- Very High (> 20~ 30%)
- High (10~20%)
- Medium (5~10%)
- Low (< 5%)
- Negligible (<1%)

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

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

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

*Is this Goal relevant for your country?*     Highly         Partially         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?***

MoHUA deals with the Municipal Solid Waste and the agricultural biomass waste and livestock waste in rural areas is dealt with by another Ministry of govt. of India.

***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.***

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

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

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

***Is this Goal relevant for your country?***     Highly         Partially         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.

***Q-1 What specific policies and regulations are in place to address the issue of plastic wastes in coastal and marine environment?***

According to reports for the year 2017-18, Central Pollution Control Board (CPCB) has estimated that India generates approximately 9.4 Million tonnes per annum plastic waste, (which amounts to 26,000 tonnes of waste per day), and out of this approximately 5.6 Million tonnes per annum plastic waste is recycled (i.e. 15,600 tonnes of waste per day), while 3.8 Million tonnes per annum plastic waste is left uncollected or littered (i.e. 9,400 tonnes of waste per day). Out of this 60% of recycled plastic, 70% is recycled at registered facilities, 20% is recycled by unorganized Sector, and 10% of the plastic is recycled at home. While these figures are 38% higher than the global average of 22%, there is no comprehensive methods in place for plastic waste management. Additionally, there is a constant increase in plastics waste generation. One of the major reasons for this is that 50% of plastic is discarded as waste after single use. This also adds to increase in the carbon footprint since single use of plastic products increase the demand for virgin plastic products.

Govt. of India has notified recently Plastic Waste Management Rules, 2016. As per the Rule, every Municipal Corporation and the authorities in the rural area have been asked to recycle, reuse and handle the plastic in such a way that no harm is caused to the environment. The guidelines have been put in place for proper handling and recycling it if that is not done the agency will be penalized. In all the coastal area and marine environment, the same guidelines are applicable.

***Q-2 What extent issue of plastic waste is considered in integrated coastal zone management (ICZM)? (Please check the appropriate box)***

Very much       Somehow       Not at all

***Q-3 Please provide a list of centre of excellences or dedicated scientific and research programmes established to address the impacts of micro-plastic particples (<5 mm) on coastal and marine species? If yes, please provide relevant websites.***

The center for excellence has not been created till yet.

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

No challenges at present.

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

Not initiated

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

The act will be implemented in totality.

***Is this Goal relevant for your country?***     **Highly**       **Partially**       **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	
	1	Take to recycling center / resource recovery facilities
	5	Take to landfill
	3	Take to the retailer
	4	Take to local charity for re-use
	2	Take to second-hand shop for re-use
	6	Ship back to the manufacturer
		Recycle in another country
		Do not know how people dispose

**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)?**

Govt. of India has recently notified E-Waste (Management) Rules, 2016. Agencies have been designated to handle the e-waste and these agencies trained their staff for handling the waste and recycling it too. One other agencies are authorized to handle the e-waste in the country.

E-waste (Management) Rules, 2016 is being implemented by the Ministry of Environment, Forests and Climate Change, Govt. of India, as the subject matter is dealt with by them.

**Q-3 How much amount of e-waste is generated and recycled per year? Hard to give estimates**

Type of e-waste	Estimated total volume generated (ton/year)	% of collected by permitted recycler	% of volume recycled in collected
Television			
Computer			
Mobile phone			
Refrigerators			
Washing machines			
Air conditioners			
Others...			

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

No challenges are being faced.

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

The act is being implemented in totality and the process is in place.

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

The act is in place and the policies have been formed accordingly

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

**III. 3R Goals for New and Emerging Wastes**

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

***Q-1 What specific policies and regulations are introduced to prevent illegal import and export of e-waste?***

E-waste (Management) Rules, 2016, the import of electrical and electronic equipment shall be allowed by only to producers having Extended Producer Responsibility authorization. Liability of manufacturer, producer, importer, transporter, refurbisher, dismantler and recycler.- (1) The manufacturer, producer, importer, transporter, refurbisher, dismantler and recycler shall be liable for all damages caused to the environment or third party due to improper handling and management of the e-waste; (2) The manufacturer, producer, importer, transporter, refurbisher, dismantler and recycler shall be liable to pay financial penalties as levied for any violation of the provisions under these rules by the State Pollution Control Board with the prior approval of the Central Pollution Control Board.

The subject matter is dealt with Ministry of Environment, Forests and Climate Change, Govt. of India

***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?***

Yes       No

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

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

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

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

III. 3R Goals for New and Emerging Wastes

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

***Q-1 What specific Extended Product Responsibility (EPR) policies are enacted or introduced? (If there is none, then skip Q-2 below)***

E-waste (Management) Rules, 2016, notified by the Ministry of Environment, Forests and Climate Change and the Extended Product Responsibility is in use as per the Rules.

***Q-2 Please provide a list of products and product groups targeted by EPR nationally?***

All the electronic products have been listed.

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

No challenge being faced

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

No pilot project initiated.

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

As the act is in place all the work is being as per the act.

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

III. 3R Goals for New and Emerging Wastes

**Goal 16** Promote the 3R concept in health-care waste management.

***Q-1 What specific policies and regulations are in place for healthcare waste management?***

MoHUA does not deal with this aspect as the subject matter is dealt with by the Ministry of Health and Family Welfare, Govt. of India.

***Q-2 What is the total annual government expenditure towards healthcare waste management (US\$ per year)?***

***Q-3 List the agencies or authorities responsible for healthcare waste management.***

***Q-4 What is the common practice for disposal of healthcare wastes?***

(Please check the appropriate box and add if any other practice followed)

- open dumping (untreated)
- open burning (untreated)
- ordinary landfilling (untreated)
- sanitary landfilling (treated)
- Low cost small scale incineration (do not meet air emission standards)
- Highly controlled air incineration (dedicated/modern medical waste incinerators)
- Other methods (please specify names: \_\_\_\_\_)

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

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

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

***Is this Goal relevant for your country?***     Highly       Partially       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)?*

MoHUA is not dealt with the issues on resource efficiency and resource productivity by greening jobs nation.

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

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

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

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

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

*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.

***Q-1 Please share how climate mitigation is addressed in waste management policies and programmes for co-benefits?***

Under the Swachh Bharat Mission program, municipal solid waste management is one of the important components. The management of solid waste management shall mitigate to the great extent the addressed in waste management policies and programmes for co-benefits.

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

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

The Mission is under implementation by the States/UTs.

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

***Is this Goal relevant for your country?***     Highly     Partially     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?*

Under the Swachh Bharat Mission, all stakeholders, including governments, municipalities, the private sector, and scientific communities are linked for its implementation on mission mode.

*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.)?*

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

No challenges is faced in the implementation of the Mission.

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

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

*Is this Goal relevant for your country?*     Highly     Partially     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.

**Q-1 Does central government have official dialogue with multi-stakeholders in the process to formulate 3R-related policies and regulations? Which stakeholders are involved in the dialogue?**(Please check all applicable)

- NGOs
  Industrial Association  
 Local Government
  Academic Institution  
 Others, please add/specify ( )

**Q-2 What is the level of NGOs' involvement in 3R, sustainable production and consumption, resource efficiency related promotional activities?** (Please check the appropriate box)

- Very high
  Moderate
  Low
  Almost Negligible

**Q-3 What is the level of citizens' awareness on beneficial aspects of 3R, sustainable production and consumption and resource efficiency.** (Please check the appropriate box)

- Very high
  Moderate
  Low
  Almost Negligible

**Challenges (policy/ institutional/ technological/ financial) faced in implementation:**  
No challenges faced till yet.

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

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

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

**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?***

Under the Swachh Bharat Mission, information, education and communication and capacity building are also the components to educate the community for its development. It has also been decided to include in the academic curriculum.

***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.***

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

***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?***

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

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

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

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

**IV. 3R Goals for Cross-cutting Issues**

**Goal 22** **Integrate the 3R concept** in relevant policies and programmes, of key ministries and agencies such as Ministry of Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Industry, Ministry of Trade and Commerce, Ministry of Energy, Ministry of Water Resources, Ministry of Transport, Ministry of Health, Ministry of Construction, Ministry of Finance, Ministry of Labour, Ministry of Land and Urban Development, Ministry of Education, and other relevant ministries towards transitioning to a resource-efficient and zero waste society.

**Q-1 Please list the name of the Ministries and major Government Agencies which are promoting 3R and resource efficiency as part of their policy, planning and developmental activities at local and national level.**

- Ministry of Housing and Urban Affairs
- Ministry of Environment, Forests and Climate Change
- Ministry of Drinking Water and Sanitation

**Q-2 What type of coordination mechanism are there among ministries and agencies for a resource efficient economic development?**

- Official regular coordination meeting among ministries and agencies
- Official ad-hoc coordination meeting among ministries and agencies
- Informal meeting among ministries and agencies
- Other coordination mechanisms (please add/specify)

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

Challenges are faced by the Steta/UTs in the implementation and resolved from time to time.

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

Bureau of Indian Standard (BIS), Govt. of India has published IS 383:2016 to permit the use of manufactured aggregates namely recycled aggregate (RA) and recycled concrete aggregate (RCA) in lean concrete, PCC and RCC by any concerned for Construction & demolition waste.

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

Currently, Swachh Bharat Mission is being implemented by the Ministry from 2nd Oct., 2014 until 2nd Oct., 2019. Any further programmes will be launched once the current Mission is over.

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

IV. 3R Goals for Cross-cutting Issues

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

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

Not Applicable.

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

Not Applicable.

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

Not Applicable.

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

Not Applicable.

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

Not Applicable.

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

Not Applicable.

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

Not Applicable.

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

Not Applicable.

*Is this Goal relevant for your country?*     Highly             Partially             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.

*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.*

As far as urban water supply and sanitation is concerned no such programmes are in existence.

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

Not Applicable.

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

Not Applicable.

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

Not Applicable.

*Is this Goal relevant for your country?*     Highly             Partially             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.

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

- Solid Waste Management Rules, 2016
- Construction and Demolition Waste Management Rules, 2016

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

The subject matter of rivers, as water resources, is dealt with Ministry of Water Resources and Ganga Rejuvenation, Government of India.

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

- Solid Waste Management Rules, 2016
- Construction and Demolition Waste Management Rules, 2016
- Plastic Waste Management Rules, 2016

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

- Solid Waste Management Rules, 2016
- Construction and Demolition Waste Management Rules, 2016
- Plastic Waste Management Rules, 2016

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

The Rules are under implementation by the Central and State Governments.

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

All the solid waste management projects implemented/under implementation with Swachh Bharat Mission Urban.

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

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



**IV. 3R Goals for Cross-cutting Issues**

**Goal 26** Facilitate the international circulation of re-usable and recyclable resources as well as remanufactured products as mutually agreed by countries and in accordance with international and national laws, especially the Basel Convention, which contributes to the reduction of negative environmental impacts and the effective management of resources.

***Q-1 What are major recycling industries in your country?***

There is separate Ministry for dealing with the re-usable and recyclable resources as well as remanufactured products.

***Q-2 Please specify the regulation on transboundary movement of hazardous waste.***

Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

***Q-3 If your government has restriction on import of non-hazardous waste or quality control of non-hazardous waste, please list it up.***

The subject matter is dealt with Ministry of Environment, Forests & Climate Change.

***Q-4 Does your government restrict import of remanufactured goods?***

The subject matter is dealt with Ministry of Finance.

***Q-5 Does your government regard remanufactured goods as secondhand goods, and regulate it as secondhand goods?***

The subject matter is dealt with Ministry of Finance and Ministry of Commerce and Industry.

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

The subject matter is dealt with Ministry of Finance, Ministry of Commerce and Industry and Ministry of Environment, Forests & Climate Change.

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

The subject matter is dealt with Ministry of Finance, Ministry of Commerce and Industry and Ministry of Environment, Forests & Climate Change.

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

The subject matter is dealt with Ministry of Finance, Ministry of Commerce and Industry and Ministry of Environment, Forests & Climate Change.

***Is this Goal relevant for your country?***     Highly     Partially     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	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
Material flow	Not Applicable.				
Cyclical use					
Amount of final disposal	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
Disposal to land	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
Direct disposal to water		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Import of waste	The necessary information may be provided by Ministry of Environment, Forests & Climate Change, as the subject matter is being dealt with by them.				
Export of waste					
Total landfilled waste		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Import of recyclables	Not Applicable.				
Export of recyclables					
Hazardous waste generation (solid, liquid, sludge, etc.)	The necessary information may be provided by Ministry of Environment, Forests & Climate Change, as the subject matter is being dealt with by them.				
e-waste generation					

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

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

- Solid Waste Management Rules, 2016
- Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- E-Waste (Management) Rules, 2016

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

Challenges faced by the States/UTs during implementation are being resolved together.

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

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

**Is this Goal relevant for your country?**  Highly  Partially  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.

**Q-1** *What are the government policies and programmes, including incentives, for waste-to-energy programmes?*

- Swachh Bharat Mission (2<sup>nd</sup> Oct., 2014 – 2<sup>nd</sup> Oct., 2019) – All Waste processing/treating technologies including Waste to Energy are eligible for Central VGF/Grant.
- Government of India is taking various initiatives to make the waste to energy plants in the Country financially viable. As per the latest amendment to the Electricity Tariff Policy 2006 by Ministry of Power it has been made mandate for the State Electricity DISCOMs to purchase all power generated from municipal solid waste at the rate determined by appropriate authority.
- Further, Central Electricity Regulatory Commission (CERC) has notified the generic tariff of Rs.7.04 per unit and Rs.7.90 per unit for Municipal Solid Waste and Refuse Derived Fuel based waste to energy plants, respectively for year 2015-16.

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

- Inadequate Infrastructure and awareness and Lack of funds

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

- There are many WtE plants are already functional in the Country and many are at various stage of completion to boot the processing of the waste in the country.

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

- Currently, Swachh Bharat Mission is being implemented by the Ministry from 2<sup>nd</sup> Oct., 2014 until 2<sup>nd</sup> Oct., 2019. Any further programmes will be launched once the current Mission is over.

**Is this Goal relevant for your country?**     Highly     Partially     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.

***Q-1 Please provide a list of on-going bilateral/multi-lateral technical cooperation in 3R areas?***

Govt. of India 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. Many are different stage of execution.

***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?***

Govt. of India provides funds to the States/UTs for resource recovery, recycling, and waste-to-energy.

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

Challenges are being resolved.

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

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

***Is this Goal relevant for your country?***     Highly             Partially             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.

***Q-1 Please describe any past and on-going cooperation with SIDS (Small Island Developing States) countries in 3R areas.***

Not applicable

***Q-2 Please list 3R related projects linked to climate change, biodiversity, disaster management and sustainable tourism. (This is to be reported by SIDS countries only)***

Not applicable

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

Not applicable

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

Not applicable

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

Not applicable

***Is this Goal relevant for your country?**    Highly    Partially    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.

***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)***

Not applicable

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

Not applicable

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

Not applicable

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

Not applicable

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

IV. 3R Goals for Cross-cutting Issues

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

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

Information is not available

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

Information is not available

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

Many of the States/UTs are providing health insurance to the informal workers.

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

The Child Labour (Prohibition and Regulation) Act, 1986, Govt. of India prohibits the employment of children below 14 years and 15 years in certain prohibited employments.

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

Data not available.

**Q-6** *Average life span of informal waste workers?*

Not Available.

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

States/UTs are providing vaccination facilities to informal waste workers.

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

Central and States/UTs are providing awareness for informal waste workers on health and safety measures.

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

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

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

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

IV. 3R Goals for Cross-cutting Issues

**Goal 33** Promote 3Rs taking into account gender considerations.

*Q-1 Please give a brief assessment on how the national, provincial and municipal governments incorporate gender considerations in waste reduction, reuse and recycle.*

As per the SWM Rules, 2016, everyone, irrespective of gender, is responsible to reduce the waste at source, reuse and recycle the waste so as to reduce the waste transporting to processing/ landfill site.

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

Rules are under implementation.

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

Not Applicable.

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

Not Applicable.

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