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

"Integrating Circular Economy in Major Development Sectors towards Achieving Zero Waste Societies and the SDGs" 8-10 February 2023, Siem Reap, Kingdom of Cambodia

### **Country Report**

(Draft)

### <Viet Nam>

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

## Country 3R Progress Report

Name of the Country: Vietnam

Name, Designation and Organization Respondent: Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) Other Ministries, Organizations, Agencies contributing to Country Report: Timeline of Submission: <u>15 January 2023</u> (Email: 3R@uncrd.or.jp)

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

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

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

Thank you very much for your kind cooperation.

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

**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?

According to the Law on Environmental Protection (LEP) 2020, circular economy, EPR and sorting at source are key policies. Domestic solid waste sorting at source is mandatory for all individuals and households by end of 2024 at the latest. Domestic solid waste arising from households and individuals is sorted into: reusable & recyclable solid waste; food waste; other domestic solid waste. Decree No. 45/2022/ND-CP stipulates fines for failure to comply with the waste sorting regime.

The LEP 2020 also stipulates the cost of collection, transportation and treatment of domestic solid waste based on the pay-as-you-throw principle: Dischargers must pay fees, charges which is calculated based on waste quantity/volume instead of averaging per household or per capita as of now. On January 10, 2022, the Prime Minister issued Decree No. 08/2022/ND-CP detailing regulations on collection costs, transportation and treatment of domestic solid waste.

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

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

Q-3 Total annual government expenditure per capita (US per capita) in municipal solid waste management in 2014-2015

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

- Lack of detailed guidelines of sorting waste at source and volume-based waste fee.

- Low awareness of the public

- Waste even if sorted, are still often stored, transported and disposed of together because of lack of appropriate treatment facilities

- Weak enforcement due to lack of resources and political will at local levels.

- Low domestic waste collection fee

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

Many waste sorting at source programs have been piloted but are neither sustainable nor widely replicated.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2022~2027)

- The LEP 2020: sorting at source; EPR; circular economy

- National strategy on integrated solid waste management to 2025, vision to 2050

- Decision No. 889/QD-TTg dated June 24, 2020 of the Prime Minister approved the National Action Program on Sustainable Production and Consumption in the 2021-2030 period

<i>Is this Goal relevant for your country</i> ?  Highly  Partially  Not at all	Is this Goal relevant for your country?	🗹 Highly	$\Box$ Partially	$\Box$ Not at all
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**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?

- Decision No. 31/2014/QD-TTg dated May 5, 2014 of the Prime Minister on the mechanism to support the development of power generation projects using solid waste in Vietnam;

- Directive No. 41/CT-TTg dated December 1, 2020 on a number of urgent solutions to strengthen solid waste management, proposing many proactive solutions to prevent and reduce environmental pollution, in which focuses on the classification of waste at source; applying modern advanced waste treatment technology, taking advantage of useful components in waste as raw materials, fuel and production materials, minimizing the generation of secondary waste to be treated.

- Resolution No. 55-NQ/TW dated February 11, 2020 of the Politburo on orientations of Vietnam's national energy development strategy to 2030, with a vision to 2045, encouraged investment in construction building power plants using municipal waste, biomass and solid waste in parallel with environmental protection and circular economy development.

- Vietnam's renewable energy development strategy to 2030 with a vision to 2050 approved in Decision No. 2068/QD-TTg dated November 25, 2015 of the Prime Minister set the orientation to raise the municipal waste treatment rate for energy purposes to 30% by 2020, about 70% by 2030 and most of it to be utilized for energy purposes by 2050.

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

☑ mostly landfilled

 $\Box$  mostly incinerated

□ both landfilled and incinerated

 $\Box$  mostly open dumped or open burned

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

- Waste sorting at source is poorly implemented

- Limited experience and technological, financial capacity

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

Many composting and energy recovery facilities have been planned, under construction or in operation.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2022~2027)

- National strategy on integrated solid waste management to 2025, vision to 2050

- Decision No. 889/QD-TTg dated June 24, 2020 of the Prime Minister approved the National Action Program on Sustainable Production and Consumption in the 2021-2030 period

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)

Rate		High	Average	Poor	Recycling	Definition
	(>90%)	(>70%)	(50-~60%	(<50%)	does not	
Туре			)		exist	rate*
Paper						
Plastic						
Metal						
Construction						
waste						
e-waste						
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?

- The LEP 2020 and its guiding documents: EPR regulations

- Decision No. 1316/QD-TTg dated July 22, 2021 of the Prime Minister approving the Project to strengthen the management of plastic waste in Vietnam

- Directive No. 33/CT-TTg dated August 20, 2020 on strengthening management, reuse, recycling, treatment and reduction of plastic waste

- National strategy on integrated solid waste management to 2025, vision to 2050

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

Rate	Very High (>90%)	High (>70%)	Average (50-~60%)	Poor (<50%)	Recycling does not
Туре	(>90%)	(>70%)	(30-~00%)	(<30%)	exist
Paper					
Plastic					
Metal					
Construction					
waste					
e-waste					

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

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

Country Name VIETNAM

Q-4 What is the level of existence of resource recovery facilities/ infrastructures in cities?								
	Level	Every Major	Few Major	Does not	Supportive	No		
		City	Cities only	exist	policy or	supportive		

Туре	programmes policy or exists programmes
Paper	
Plastic	
Metal	
Construction	
waste	
e-waste	

Country Name

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:

- Recycling technologies are obsolete, mainly at household scale in craft villages. Some domestic technologies have been certified but has not been replicated across the country.

- Recycling enterprises have not yet received incentives such as support for consumption, advertising products, subsidizing product price...

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)

- The LEP 2020 and its guiding documents: EPR regulations.

- National strategy on integrated solid waste management to 2025, vision to 2050

- Decision No. 1316/QD-TTg dated July 22, 2021 of the Prime Minister approving the Project to strengthen the management of plastic waste in Vietnam

Is this Goal relevant for your country?	🗹 Highly	□ Partially	□ Not at all
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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 LEP 2020 stipulates that the Government encourages and has preferential policies for organizations and individuals to invest in and provide domestic solid waste treatment services.

Directive No. 41/CT-TTg on some urgent solutions to strengthen solid waste management in 2020 requires provinces to develop and promulgate mechanisms and policies to encourage investment attraction in waste treatment projects with advanced and modern technologies; simplify procedures for investment preparation, construction and operation of waste treatment facilities. The Ministry of Industry and Trade is tasked with developing mechanisms and policies to encourage investment; exempt/reduce procedures for power plants using solid waste and biomass to connect to the grid. Review the mechanism to support the development of power generation projects using solid waste in Vietnam, to ensure stable incentives for at least 10 years to promote investment; study the electricity cost calculation mechanism for waste treatment plants combined with energy recovery to generate electricity using additional fuels other than waste in case the volume or calorific value of waste is not enough to generate electricity according to the designed capacity and have a reasonable monitoring mechanism.

*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)

 $\Box$  waste collection

 $\Box$  resource recovery

 $\blacksquare$  waste recycling

 $\blacksquare$  waste to energy, composting, etc.

☑ PPP projects in waste sector

*Challenges (policy/ institutional/ technological/ financial) faced in implementation:* Lacking necessary technical standards and monitoring mechanism.

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

Da Nang has a program to be an environmental city.

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

- The LEP 2020

- National strategy on integrated solid waste management to 2025, vision to 2050

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

□ Partially

# **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?

- Law on economical and efficient of energy dated June 17, 2010

- Decision No. 280/QD-TTg dated 13 March 2019 of the Prime Minister on approval the National Energy Efficiency Program for the period of 2019-2030

- Resolution No. 24-NQ-TW of the 7th Conference of the 11th Central Party Committee on Proactive responses to climate change, enhanced natural resource management and environmental protection

- Politburo's Resolution 55-NQ/TW on the Orientation of the Viet Nam's National Energy Development Strategy to 2030 and vision to 2045.

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

- Decision No. 1463 / QD-TTg daded 22 July 2016 of the Prime Minister on approving the scheme on development of the network of environmental service enterprises up to 2020 with a vision to 2030

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

- Most SMEs have obsolete and backward technologies.

- Lack of financial resources.

- Low awareness and sense of responsibility of a part of authorities and businesses.

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

- Decision No. 1419/QD-TTg dated September 07, 2009 of the Prime Minister approved the Strategy on cleaner industrial production to 2020.

http://www.chinhphu.vn/portal/page/portal/English/strategies/strategiesdetails?categoryId=30&articleId=10051863

- Decision No. 2612/QD-TTg dated December 30, 2013 of the Prime Minister approved the Strategy for using clean technologies by 2020 with a vision to 2030.

http://vanban.chinhphu.vn/portal/page/portal/chinhphu/hethongvanban?class\_id=2&mode=detail& document\_id=171573

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

- Decision No. 889/QD-TTg dated June 24, 2020 of the Prime Minister approved the National Action Program on Sustainable Production and Consumption in the 2021-2030 period <u>https://vanban.chinhphu.vn/default.aspx?pageid=27160&docid=200310</u>

Country Name VIETNAM

I. 3R Goals in U	Jrban/Industrial Areas (3Rs ir	n Industrial waste)	ı.	
Goal 6	Promote the greening of			dustries and associated
Gual U	suppliers and vendors in s			
~ 1	rcent of companies and ind	lustries have in	troduced green acc	
	al performance evaluation	(Ref: ISO 1400	0)?	
□ Very High				
□ High (>709				
$\Box$ Average (5				
	satisfactory (< 50%)			
$\Box$ None				
8000) in cons	ercent of companies and a sultation with their workers		e introduced social	accounting (Ref: SA
□ Very High				
□ High (>709				
$\Box$ Average (5				
	satisfactory (< 50%)			
$\Box$ None				
	vernment have a progran ies, programmes and inc			
- National Ac 2030 approve	ction Program on sustainab d by the Prime Minister in ystem (sustainable distribution	which defined t	he Program on the o	development of a green
Challenges (p	oolicy/ institutional/ techno	logical/ financi	ial) faced in implen	nentation:
- •	pilot projects, master pla ites where relevant	ans and/or poli	icies developed or	under development –
Important po	licies/programmes/projects	s/master plans t	he government pla	ns to undertake within
	rs (2022~2027)	I	<b>8</b>	
	b. 1658/QD-TTg dated Oct	ober 01, 2021 o	on the National Gree	en Growth Strategy for
1	riod, vision to 2050	1 20 422 6 9 4	1 60 / 1	
https://chinh	phu.vn/?pageid=27160&do	$c_{1d}=204226$ & ta	<u>agid=6&amp;type=1</u>	
	ster Decision No. 882/QD-		22, 2022 on the the	e National Action Plan
	wth for the 2021-2030 period		wan han awy nham	nhan lust/august dinh a
-	ankien.dangcongsan.vn/he- gay-2272022-cua-thu-tuon			
· · ·	anh-giai-doan-8790	<u>e emm phu ph</u>	e aujet ke nouen-ne	and doing quote gia ve-
Is this Goal r	elevant for your country?	□ Highly	☑ Partially	$\Box$ Not at all

**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?

- Decree No. 35/2022/ND-CP dated May 28, 2022 on management of industrial parks and economic zones in Vietnam stipulates in detail a number of industrial park development models, including the eco-industrial park models, with policies and incentives to encourage their development.

The Decree No. 35/2022/ND-CP also stipulates the state management authority and responsibility of the Ministry of Natural Resources and Environment in which defines "Guiding the handling, recycling and reuse of waste and scraps in eco-industrial parks according to the provisions of the legislation on environmental protection"

- Decree 08/2022/ND-CP dated January 10, 2022 on elaboration of several articles of the LEP stipulates: "Encouraging the reuse of waste, application of cleaner production technologies, energy saving, industrial symbiosis and circular economy".

- From 2014-2019, the project "Eco-industrial parks intervention in Viet Nam - Perspective from the Global Eco-Industrial Park Programme" funded by the Swiss State Secretariat for Economic Affairs (SECO) and implemented by the United Nations Industrial Development Organization (UNIDO) in cooperation with the Ministry of Planning and Investment (MPI) supported the development of policy documents for the implementation of the eco-industrial park models in the country and, at the same time, promoted and demonstrated the implementation of eco-industrial park solutions in selected localities.

### Q-2 How many eco-industrial parks or zones or the like, which is supported by the government, are there in the country?

Currently, almost all eco-industrial parks have implemented pilot models.

*Challenges (policy/ institutional/ technological/ financial) faced in implementation:* There have been some initiatives but no model of industrial symbiosis has been replicated widely in Viet Nam.

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

- There are some study on ecological Industrial park (EIP) where symbiosis is a basis principle: <a href="http://www.thiennhien.net/2013/08/02/kha-nang-phat-trien-mo-hinh-khu-cong-nghiep-sinh-thai-tai-tp-hcm/">http://www.thiennhien.net/2013/08/02/kha-nang-phat-trien-mo-hinh-khu-cong-nghiep-sinh-thai-tai-tp-hcm/</a>

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2022~2023)

- LEP 2020: National Action Plan on circular economy is developed by end of 2023.

*Is this Goal relevant for your country*? Highly

✓ Partially

**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.?

No available data

**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.? No available data

*Challenges (policy/ institutional/ technological/ financial) faced in implementation:* Small and medium enterprises have weak capacity to innovate, absorb and manage technology & access fundings. They also face challenges to access government programs in environmental sector.

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

Measures for implementation of the Strategy on Cleaner Production in Industry to 2020, approved in PM Decision No. 1419/QD-TT September 7, 2009 include: (i) The development and dissemination of technical guidelines on cleaner production in industry; (ii) Providing training and capacity building for management staff, consultants and experts working in the field of industrial cleaner production.

http://www.chinhphu.vn/portal/page/portal/English/strategies/strategiesdetails?categoryId=30&articleId=10051863

- Training activities in cleaner production, waste audits have been implemented in a number of industrial facilities in quite some projects such as UNDP project on "environmental pollution control", project on "green action plan for SMEs in Viet Nam"; project on "application of waste audit in environmental management in Viet Nam industry"...

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

- Decision No. 889/QD-TTg dated June 24, 2020 of the Prime Minister approved the National Action Program on Sustainable Production and Consumption in the 2021-2030 period https://vanban.chinhphu.vn/default.aspx?pageid=27160&docid=200310

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?

Decree No. 08/ND-CP and Circular No. 02/2022/TT-BTNMT detailing the implementation of a number of articles of the LEP 2020.

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

- Most of the household hazardous wastes are not separated at source but collected and transported together with non-hazardous waste to the landfill.

- Lack of technologies and processing equipment, resulting in ineffective and unsafe treatment and disposal of waste. Many type of hazardous waste are not treated or poorly treated.

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)

Decision No. 170/QD-TTg of the Prime Minister approving the master plan of hazardous medical solid waste treatment system up to 2025.

Decision No. 1598/QD-TTg of the Prime Minister dated 17 Oct, 2017 on the promulgation of the National Plan for the Implementation of the Stockholm Convention on Persistent Organic Pollutants by 2025, with a vision to 2030.

Country Name VIETNAM

#### 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?

National Strategy for Environmental Protection to 2030, vision to 2050 sets out the task "reduce post-harvest losses in agriculture, reduce, reuse and recycle food waste".

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?

 $\Box$  Very High (> 20~ 30%)

 $\Box$  High (10~20%)

 $\Box$  Medium (5~10%)

□ Low (< 5%)

 $\Box$  Negligible (<1%)

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

- Backward technology in harvesting, and conserving of agricultural products.

- Domestic solid waste has not been classified at source, the main method of treatment of domestic solid waste is currently landfilling (accounting for 71%), only 16% is treated at composting plants.

- There has not been any comprehensive study on food loss and waste in Viet Nam to identify sources, food loss, food waste generation as well as food waste management.

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)

The National Action Plan on Food System Transformation in Vietnam towards Transparency, Responsibility, and Sustainability by 2030 has been developing.

Country Name

#### 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?

According to Ministry of Agriculture and Rural Development (MARD), it's estimated that over 104 million tons crop by-products waste and nearly 70 million tons livestock waste generated in 2021.

### **Q-2** How are most of the agricultural biomass wastes utilized or treated? (Please <u>check all</u> <u>appropriate boxes</u>)

- □as secondary raw material input (for paper, bioplastic, furniture, etc.)
- □ biogas/electricity generation
- ☑ composts/fertilizers
- $\Box$  mostly left unutilized or open dumped
- $\blacksquare$  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:* Only a part of crop by-products is recycled and reused, the rest is burned in the field, causing a haze phenomenon, sets for the vicinity after each harvest season.

Spontaneous, uncontrolled burning of straw generates pollutants, which adversely affect human health. In particular, in some localities, the situation of burning straw on the road not only affects the environment but also causes social disorder and affects the traffic safety.

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 (2022~2027)

The National Action Plan on Food System Transformation in Vietnam towards Transparency, Responsibility, and Sustainability by 2030 is developed.

 $\Box$  Not at all

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

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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?

The LEP 2020 stipulates separate provisions on plastic and microplastic waste, specifically Article 73 Reduction, reuse, recycling and treatment of plastic waste, prevention and control of plastic waste pollution.

The Law on Environmental Protection Tax 2010 stipulates that plastic bags are subject to tax with a tax rate of 30,000-50,000 VND/kg.

National Action Plan on Marine Plastic waste (Decision 1746/QD-TTg in 2019)

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

 $\blacksquare$  Very much  $\square$  Somehow  $\square$  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 participles (<5 mm) on coastal and marine species? If yes, please provide relevant websites.

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

Vietnam has applied environmental protection tax for products such as plastic bags since 2010, with a tax rate of 50,000 VND/kg. However, in practice, the implementation of this tool still encounters some difficulties and problems that need to be resolved. Firstly, the tax rate is still low, so it has not had much impact on restricting the production and use of plastic bags. Secondly, it is very difficult to monitor and manage plastic bag production and business activities because most plastic bag manufacturers (about 70%) are small production establishments paying flat tax, so the revenue Environmental protection tax from plastic bags over the years is negligible and gradually decreasing, plastic bags are still consumed a lot with low prices.

Microplastic pollution has not been studied and regulated in environmental standards and technical regulations and in wastewater treatment.

There is a lack of specific incentives for recycling, reuse of waste, and energy recovery from waste treatment; lack of guidance on the implementation of preferential policies, investment capital support, and post-treatment product consumption support, the number of solid waste treatment projects receiving loans from preferential capital sources is very small; lack of mechanism to promote socialization of solid waste collection and treatment, have not attracted investment resources for solid waste collection and treatment.

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)

Decision No. 1746/QD-TTg dated December 4, 2019 of the Prime Minister on the promulgation of the National Action Plan on ocean plastic waste management to 2030

Directive No. 33/CT-TTg dated August 20, 2020 of the Prime Minister on strengthening management, reuse, recycling, treatment and reduction of plastic waste

Decision No. 1316/QD-TTg issued on July 22, 2021 on the Project to strengthen the management of plastic waste in Vietnam

Directive No. 10/CT-BGTVT dated October 7, 2020 of the Ministry of Transport on

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Goal 12 Strengthen regional, national, and local efforts to address the issue of waste, in particular plastics in the marine and coastal environment.

strengthening the management, reuse, recycling and reduction of plastic waste in transportation activities.

Decision No. 2395/QD-BTNMT dated October 28, 2020 of the Ministry of Natural Resources and Environment on implementing Directive No. 33/CT-TTg dated August 20, 2020 of the Prime Minister on strengthening management, reuse, recycling, treatment and reduction of plastic waste and Decision No. 1746/QD- TTg dated December 4, 2019 of the Prime Minister on the promulgation of the National Action Plan on ocean plastic waste management to 2030.

Directive No. 7804/CT-BNN-BKHCN dated November 10, 2020 of the Ministry of Agriculture and Rural Development on strengthening the management, use, recycling, treatment and reduction of plastic waste in the agricultural sector.

Is this Goal relevant for your country?	🗹 Highly	$\Box$ Partially	□ Not at all
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Country Name VIETNAM

#### 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 i	f Nun	ıber	in	
applicable	e prio	rity or	der	
				Take to recycling center / resource recovery facilities
				Take to landfill
				Take to the retailer
				Take to local charity for re-use
$\checkmark$				Take to second-hand shop for re-use
				Ship back to the manufacturer
				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)?

The LEP 2020 has a chapter regulating waste management including hazardous waste and e-waste. The regulations on hazardous waste management are concretized in Decree 08/ND-CP and Circular 02-TT/BTNMT guiding the implementation of the LEP.

The LEP 2020 has EPR regulations, which is more specific regulations than the previous LEP on the responsibility for waste recycling and treatment of manufacturers and importers. The Decree 08/ND-CP guiding the implementation of the LEP stipulates that electronic devices have been included in the List of must-be-recycled product and packaging together with the required recycling rate and recycling specifications.

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

No official statistics on e-waste. In 2015, it was estimated that 115,000 tons of e-waste were generated in Vietnam [Honda et al., 2017], with an emission rate per capita of 1.34kg. By 2019, the amount of e-waste generated increased to 257,000 tons, with an average generation rate per capita is 2.7 kg [Forti et al., 2020]. Data on recycled e-waste are not available.

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:

- There is shortage of specific guidelines for implementing EPR for e-waste.

- There is a lack of management mechanisms for small and spontaneous private units operating

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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.

in e-waste collection, transportation, and recycling.

- There are lacks of formal, large scale e-waste recycling industries and some e-waste components such as light bulbs from TVs do not yet have recycling technology.

- Lack of a complete, synchronous, and shared electronic waste database system to support policymaking

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

- LEP 2020: https://vanban.chinhphu.vn/default.aspx?pageid=27160&docid=202613 - Decree 08/ND-CP:

https://vanban.chinhphu.vn/?pageid=27160&docid=205092

- Circular 02-TT/BTNMT:

https://monre.gov.vn/Pages/thong-tu-so-022022tt-btnmt.aspx?cm=V%C4%83n+b%E1%BA%A3n+quy+ph%E1%BA%A1m+ph%C3%A1p+lu%E1%BA%ADt

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

LEP 2020 and its guiding documents.

*Is this Goal relevant for your country?* Highly

 $\Box$  Partially

**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?

The LEP 2020 does not allow import of waste but import of certain regulated types of scrap. The LEP stipulates madatory conditions to import scrap (Article 71). Regarding the import of used machinery, equipment and industrial technology lines, the Government issued Decision No. 18/2019/QD-TTg dated April 19th, 2019.

The Circular 02-TT/BTNMT regulates in details about registration of hazardous waste export. 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?

 $\blacksquare$  Yes  $\Box$  No

*Challenges (policy/ institutional/ technological/ financial) faced in implementation:* - For plastic scraps, imported scrap is still preferred rather than domestic scrap due to higher quality.

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

- LEP 2020: https://vanban.chinhphu.vn/default.aspx?pageid=27160&docid=202613

- Circular 02-TT/BTNMT

- Decision No. 18/2019/QD-TTg:

https://vanban.chinhphu.vn/?pageid=27160&docid=196855

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

LEP 2020 and its guiding documents.

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

 $\Box$  Partially

**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)

LEP 2020 has specific regulations on the responsibility for waste recycling and treatment of manufacturers and importers (EPR).

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

Decree 08/ND-CP stipulates a list of 6 groups of products and product groups targeted by EPR nationally: (i) Packaging, (ii) batteries and accumulators, (iii) oil and lubricants, (iv) tires and inner tubes, (v) electronic and electric equipment, and (vi) vehicles.

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

- Lack of specific guidelines for implementation of EPR.

- Shortage of management mechanisms for small and spontaneous private units operating in collection, transportation, and recycling.

- Lacks of formal, large scale e-waste recycling industries.

- Lack of a complete, synchronous, and shared database system to support policymaking.

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

- LEP 2020: https://vanban.chinhphu.vn/default.aspx?pageid=27160&docid=202613

- Decree 08/ND-CP:

https://vanban.chinhphu.vn/?pageid=27160&docid=205092

- Circular 02-TT/BTNMT:

https://monre.gov.vn/Pages/thong-tu-so-022022tt-btnmt.aspx?cm=V%C4%83n+b%E1%BA%A3n+quy+ph%E1%BA%A1m+ph%C3%A1p+lu%E1%BA%ADt

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

LEP 2020 and its guiding documents.

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

 $\square$  Partially

Country Name VIETNAM

#### III. 3R Goals for New and Emerging Wastes Promote the 3R concept in health-care waste management. Goal 16 *Q-1* What specific policies and regulations are in place for healthcare waste management? - The LEP 2020. - Circular No. 20/2021/TT-BYT on management of medical waste within the premises of medical facilities. Q-2 What is the total annual government expenditure towards healthcare waste management (US\$ per year)? O-3 List the agencies or authorities responsible for healthcare waste management. - MONRE - Ministry of Health Q-4 What is the common practice for disposal of healthcare wastes? (Please check the appropriate box and add if any other practice followed) $\Box$ open dumping (untreated) $\Box$ 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) $\Box$ Other methods (please specify names: Challenges (policy/institutional/technological/financial) faced in implementation: - Lack of financial resource for building up waste treatment facilities for medical waste. 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*? U Highly $\Box$ Partially $\Box$ Not at all

**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)?

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

Implementation of energy audit in the big energy consumption establishments. This is regulated by the Law on energy efficiency.

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

Decision 1658/QD-TTg approving the National Green Growth Strategy for the 2021-2030 period, with a vision to 2050: The Strategy assigns Ministry of Labour-Invalids and Social Affairs to be responsible for developing and implementing policies to encourage green job creation.

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

- Still lack of strong legal regulations to improve resource efficiency and resource productivity by greening jobs nation-wide in all economic and development sectors.

- The current growth model is based partly on the intensive use of natural resources with the large intensity of resource use (water, energy...)

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

Decision 1658/QD-TTg:

https://chinhphu.vn/?pageid=27160&docid=204226&tagid=6&type=1

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

National Green Growth Strategy for the 2021-2030 period, with a vision to 2050

Country Name

#### 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?

Waste management/recycling has been addressed in National Climate Change strategy as well as one of measures for GHG reduction in National Communications to United Nation Framework Convention on Climate Change and Vietnam NDC.

National Action Plan for reduction of methane.

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

- Lack of financial resource for investment in GHG reduction project in waste sector.

- There are still limited number of waste-to-energy projects due to high cost.

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 (2022~2027)

 $\Box$  Partially

National Determined Contribution (NDC). National Action Plan for reduction of methane.

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

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? According to Strategy for Science, Technology and Innovation Development to 2030:

- Promote the development of the science and technology market, gradually increase the proportion of domestic supply of technology and equipment, step up the intermediary activities of the science and technology market, towards synchronization with other markets: commodity, labor and financial markets.

- Focus on promoting the transfer and application of advanced technologies along with improving capacity to absorb and innovate technology of enterprises

- Increase the use of intellectual property, focus on developing the enterprise's intellectual property along with strengthening the protection and enforcement of intellectual property rights.

# 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.)?

- Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE), MONRE

- Institute of Environmental Technology (IET), Vietnam Academy of Science and Technology

- Vietnam National Cleaner Production Center, Institute of Environmental Science and Technology, Hanoi University of Science and Technology

 Center for Environmental Consultancy and Technology, Vietnam Environment Administration
Center of Industrial Environment, National Institute of Mining - Metallurgy Science and Technology, MOIT

*Challenges (policy/ institutional/ technological/ financial) faced in implementation:* Low awareness of consumers & private sectors and some authorities, lack of supporting legal instruments.

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)

National Action Program on sustainable production and consumption for the period 2021 - 2030 (Decision No. 889/QD-TTg dated June 24, 2020)

National strategy on green growth for the period of 2021 - 2030, with a vision to 2050 (Decision No. 1658/QD-TTg dated October 1, 2021)

Circular Economy Development Project in Vietnam (Decision No. 687/QD-TTg in 2022)

Strategy for Science, Technology and Innovation Development to 2030 (Decision 569/QD-TTg in 2022)

**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)

MONRE organize National Environment Conference every 5 years with the participation of stakeholders:

☑ NGOs

☑ Industrial Association☑ Academic Institution

☑ Local Government
☑ Academic Instit
□ Others, please add/specify (Ministries, companies, and experts)

**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)

resource ejjieteney i	ciaica promotionai ac	ivilies. (I lease cheel	the uppropriate box)
□ Very high	☑ Moderate	$\Box$ 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)

 $\Box Very high \qquad \Box Moderate \qquad \Box Low \qquad \Box Almost Negligible$ 

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

Low awareness of consumers & private sectors and some authorities, lack of supporting legal instruments.

*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)

National Action Program on sustainable production and consumption for the period 2021 - 2030 (Decision No. 889/QD-TTg dated June 24, 2020)

National strategy on green growth for the period of 2021 - 2030, with a vision to 2050 (Decision No. 1658/QD-TTg dated October 1, 2021)

Circular Economy Development Project in Vietnam (Decision No. 687/QD-TTg in 2022)

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

Many universities in Vietnam such as Hanoi National University, Hanoi University of Science and Technology, Hanoi University of Civil Engineering, Ha Noi University of Natural Resources and Environment, Ho Chi Minh University of Natural Resources and Environment, National Economics University, Foreign Trade University... have relevant programs.

# 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.

Organize propaganda and campaigns to raise awareness about sustainable production and consumption for agencies, organizations, businesses and consumers at central and local levels.

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

Hanoi University of Science and Technology, Hanoi National University, Hanoi University of Civil Engineering, Ha Noi University of Natural Resources and Environment, Ho Chi Minh University of Natural Resources and Environment, Institute of Environmental Technology...

# 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?

National Economics University, University of Economics Ho Chi Minh City...

*Challenges (policy/ institutional/ technological/ financial) faced in implementation:* Although environmental protection had been legally required to be included in the formal education system at all level since 2001, there is little attention and weak enforcement.

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*? I Highly

 $\Box$  Partially

**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 Planning and Investment Ministry of Finance Ministry of Natural Resources and Environment Ministry of Construction Ministry of Industry and Trade

Ministry of Health

Ministry of Agriculture and Rural Development

### 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

 $\blacksquare$  Official ad-hoc coordination meeting among ministries and agencies

 $\blacksquare$  Informal meeting among ministries and agencies

□ Other coordination mechanisms (please add/specify)

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

- Policies and legislation on 3R and waste management are available but enforcement is weak.

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)

National Action Program on sustainable production and consumption for the period 2021 - 2030 (Decision No. 889/QD-TTg dated June 24, 2020)

National strategy on green growth for the period of 2021 - 2030, with a vision to 2050 (Decision No. 1658/QD-TTg dated October 1, 2021)

Circular Economy Development Project in Vietnam (Decision No. 687/QD-TTg in 2022)

National Strategy for Environmental Protection to 2030, vision to 2050 (Decision No. 450/QD-TTg dated April 13, 2022)

**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?

According to the National Strategy on Green Growth in the 2021 - 2030 period, with a vision to 2050: by 2030, the proportion of green public procurement in total public procurement will reach at least 35% and increase to 50% by 2050.

According to Law on Environmental Protection 2020, items of public procurement or investment in investment projects and tasks funded by the state budget must prioritize certified environmentally friendly products and services certified with the Vietnam Eco-label. The Ministry of Planning and Investment shall issue or submit to competent authorities for promulgation detailed regulations on prioritizing the procurement of environmentally friendly products and services.

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

The LEP 2020 and its guiding circular instruct on registering eco-labels with MONRE. MONRE has the authority to regulate eco-labels and stipulate eco-label criteria.

### *Q-3 Please provide a list of criteria for eco-labeled products and services in your country.* According to Circular 02/2022/TT-BTNMT guiding the LEP:

- The Vietnam Ecolabel criteria is built on the basis of the impact of the entire life cycle of products and services from the extraction of raw materials, production, distribution, use and recycling after disposal is less harmful to the environment than similar products.

- Criteria: Raw materials, materials, fuel; production technology; environmental management system; technical characteristics, permissible limits of pollution parameters of products and services; recovery, recycling, treatment and disposal; other relevant criteria.

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

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

*Challenges (policy/ institutional/ technological/ financial) faced in implementation:* Lack of detailed guidelines

The previous green label scheme wasn't attractive for participation of enterprises. The awareness of consumers on this subject is still low.

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 (2022~2027)

National strategy on green growth for the period of 2021 - 2030, with a vision to 2050 (Decision No. 1658/QD-TTg dated October 1, 2021)

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.

Gasoline and coal prices are indirectly subsidized.

Electricity price (~45% from coal) is capped.

*Challenges (policy/ institutional/ technological/ financial) faced in implementation:* Lack of awareness on sustainability by authorities Lack of funding for investment on sustainable energy Need to maintain economic stability after COVID

Need to maintain economic stability after COVID

*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)

Vietnam's renewable energy development strategy to 2030, vision to 2050 (Decision 2068/QD-TTg 2015)

National strategy on green growth for the period of 2021 - 2030, with a vision to 2050 (Decision No. 1658/QD-TTg dated October 1, 2021)

Circular Economy Development Project in Vietnam (Decision No. 687/QD-TTg in 2022)

Country Name VIETNAM

#### 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? - The LEP 2020 prohibits the transportation, burying, dumping, discharging, burning of solid waste and hazardous waste in contravention of technical processes and regulations of the LEP.

- Decree No. 45/2022/ND-CP on sanctioning of administrative violations in the field of environment stipulates specific fine levels for the above two acts.

- According to the Criminal Code, dumping or discharging into the environment 200.000 kg or more of non-hazardous solid waste or 3.000 kg or more of hazardous waste is an environmental crime.

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

From worst to best: Nhue - Day river basin Dong Nai river basin Cau river basin Ma river basin Hong - Thai Binh river basin (Source: National State of Environment Report 2016-2020)

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

Decree No. 45/2022/ND-CPA stipulates a fine ranging from VND 1,000,000 to VND 2,000,000 for dumping or disposing of garbage on sidewalks, roadways or into urban wastewater drainage systems or surface water drainage systems; Disposing of plastic waste into ponds, lakes, canals, rivers, streams and sea.

Decree 03/2022/ND-CP stipulates fines for dumping garbage and waste within the protection area of irrigation works.

### *Q-5 What are the specific laws, rules and regulations in place to prevent marine littering?* Decree No. 45/2022/ND-CP stipulates fines for dumping in the oceans:

- A fine ranging from VND 1,000,000 to VND 2,000,000 shall be imposed for dumping or disposing of plastic waste into ponds, lakes, canals, rivers, streams and sea.

- A fine ranging from VND 80,000,000 to VND 150,000,000 shall be imposed for failure to meet environmental technical regulations on waste and other polluting factors from production, business, service, construction, traffic, transportation and exploitation activities at sea.

- A fine ranging from VND 150,000,000 to VND 250,000,000 shall be imposed for one of the following acts, except for environmental crimes:

a) Dumping ordinary waste from vehicles & drilling rigs operating at sea into the sea untreated or not treated up to technical regulations;

b) Dumping ordinary solid waste from the land into the sea.

- A fine ranging from VND 250,000,000 to VND 500,000,000 shall be imposed for dumping toxic chemicals and hazardous waste into the sea; or dumping wastewater that is not treated up

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

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.

to technical standards into protected waters.

- A fine ranging from VND 500,000,000 to VND 1,000,000,000 shall be imposed for dumping hazardous waste into the sea.

*Challenges (policy/ institutional/ technological/ financial) faced in implementation:* Not enough financial, technological and human resources for monitoring and enforcement.

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)

National action plan on ocean plastic waste management to 2030 (Decision No. 1746/QD-TTg dated December 4, 2019)

Country Name

#### 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?* Major materials are recycled in Vietnam such as:

- Metal
- Plastic
- Paper

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

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

According to Law on Environmental Protection 2020, scrap imported from abroad into Vietnam must meet environmental technical regulations and be on the List of scrap permitted to be imported from abroad as production materials (Decision 28/2020/QĐ-TTg). The list included metals, platics, papers and slags.

Organizations and individuals may only import scrap from abroad as raw production materials for their production facilities and must satisfy the following environmental protection requirements:

a) Having production facilities with technology, equipment, warehouses and yards meeting requirements on environmental protection; having a plan to deal with the accompanying impurities suitable for imported scrap;

b) Having an environmental permit;

c) Environmental protection deposit before the time of import into Vietnam;

d) There is a written commitment on the re-export or treatment of scrap in case the imported scrap does not meet the requirements for environmental protection.

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

Circular No. 12/2018/TT-BCT dated 15 June 2018 issued by Ministry of Industry and Trade stipulates in detail the List of consumables, medical equipment and used vehicles banned from import according to the commodity codes (HS codes) under the management of the Ministry of Industry and Trade.

Regulation on import management of refurbished goods as committed in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership is being developed.

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

*Challenges (policy/ institutional/ technological/ financial) faced in implementation:* Lack of legal instruments, expertise & experience

Examples of pilot projects, master plans and/or policies developed or under development -

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

Country Name

**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.

include websites where relevant

Draft Decree on import management of refurbished goods as committed in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership is being developed.

https://moj.gov.vn/qt/tintuc/Pages/chi-dao-dieu-hanh.aspx?ItemID=3315

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

**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  $(X \text{ or } \checkmark)$  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	$\checkmark$			$\checkmark$	
Material flow		$\checkmark$			$\checkmark$
Cyclical use			$\checkmark$		$\checkmark$
Amount of final disposal		$\checkmark$		$\checkmark$	
Disposal to land		$\checkmark$			$\checkmark$
Direct disposal to water			$\checkmark$		
Import of waste		$\checkmark$			
Export of waste		$\checkmark$			
Total landfilled waste	$\checkmark$			$\checkmark$	
Import of recyclables		$\checkmark$			
Export of recyclables					
Hazardous waste generation (solid, liquid, sludge, etc.)	~			$\checkmark$	
e-waste generation		$\checkmark$			$\checkmark$

(Please add any other date 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?

The LEP 2020 and its guiding documents regulate on Environmental Information System & Database

Decision 3196/QD-BTNMT promulgating the e-Government Architecture for the natural resources and environment 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

Project "Investigating, evaluating, classifying and building a database on waste sources" was approved by the Prime Minister in Decision No. 140/QD-TTg dated January 26, 2018 Solid Waste Information System - https://chatthairan.ceid.gov.vn/

Ministries and provinces are also developing their own waste databases with the goal of integrating and harmonizing.

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

Country Name

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.

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

The LEP 2020 and its guiding documents on Environmental Information System & Database

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

□ Not at all

**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?

Decision 31/2014/QD-TTg on mechanism to support the development of power generation projects using solid waste in Vietnam

- Resolution No. 55-NQ/TW dated February 11, 2020 of the Politburo on orientations of Vietnam's national energy development strategy to 2030, with a vision to 2045, encouraged investment in construction building power plants using municipal waste, biomass and solid waste in parallel with environmental protection and circular economy development.

- Vietnam's renewable energy development strategy to 2030 with a vision to 2050 approved in Decision No. 2068/QD-TTg dated November 25, 2015 of the Prime Minister set the orientation to raise the municipal waste treatment rate for energy purposes to 30% by 2020, about 70% by 2030 and most of it to be utilized for energy purposes by 2050.

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

- Incineration for heat recovery is still an expensive and high cost technology for Viet Nam
- Imported technology might not be suitable due to humid climate.
- Wastes are not separated at source, high water content.
- Low solid waste treatment fee has been one of the constraints.
- Electricity price is relatively low.

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

A number of waste-to-energy plants have been planned, are under construction or in operation.

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

National Electricity Development Plan for the period 2021-2030, vision to 2045

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?

- Within the framework of cooperation between MONRE Vietnam and Ministry of Environment Japan on sharing experiences in waste management, especially the research and application of domestic solid waste treatment technology to generate electricity. In Vietnam, MONRE Vietnam coordinated with Ministry of Environment Japan to establish a Joint Committee on Waste Management and 3R, which is expected to hold annual meetings to discuss specific contents on planning policies and technical support related to waste management. In response to the Vietnam-Japan cooperation week in 2022, MONRE Vietnam coordinated with relevant agencies under Ministry of Environment Japan to organize the Fifth Workshop of the Joint Committee on Waste Management and 3R in December 2022.

- An innovative initiative to establish the Alliance of Supermarkets to reduce the consumption of single-use plastic bags in Viet Nam (PLASTIC ALLIANCE Project) supported by EU/Expertise France, 2020-2022.

- Project Research, investigate the recycling situation and propose solutions to promote plastic waste recycling in Vietnam supported by WWF, 2021-2022.

- Project Promotion of Community Resilience Against Plastic Pollution and Climate Change in the Mekong River Basin supported by UNEP, 2021-2022.

- Project Reducing ocean plastic waste in Vietnam supported by WWF, 2019-2023.

- etc.

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?

*Challenges (policy/ institutional/ technological/ financial) faced in implementation:* Investment in waste management sector are still limited due to low profit.

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 (2022~2027)

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

 $\Box$  Partially

Country Name

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.

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)

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)

**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)

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

**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?

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

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

Health insurance is mandatory for labor contracts with a duration of 3 months or more, or unspecified duration. However, many informal workers in waste sector don't have labor contracts.

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

The Labour Code generally forbid use of child labor but the informal waste sector is poorly regulated.

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

Q-6 Average life span of informal waste workers?

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

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

Challenges (policy/ institutional/ technological/ financial) faced in mplementation: The informal waste sector is very decentralized and unmanaged.

There is not enough awareness and attention of the authorities and communities on this issue.

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

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

Country Name VIETNAM

IV. 3R Goal	s for Cross-cutting Issues							
Goal 32	Complete elimination of ill	0 0 0						
	sector and gradually impr	ove the wo	rking conditions an	d livelihood security,				
	including mandatory provision of health insurance, for all workers.							
Important policies/programs/projects/master plans the government plans to undertake within next five years (2016~2021)								
Is this Go	al relevant for your country?	□ Highly	☑ Partially	$\Box$ Not at all				

Country Name VIETNAM

#### 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.

National Strategy for Environmental Protection to 2030, vision to 2050 provides a solution "Raising awareness on gender equality and children's rights in the field of environment; strengthen the role and position of women in environmental protection".

*Challenges (policy/ institutional/ technological/ financial) faced in implementation:* There is not enough awareness and attention of the authorities and communities on this issue.

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

 $\Box$  Not at all

Q- Please provide a brief comprehensive summary of important 3R and resource efficiency policies /programmes/ projects/ master plans of your country.