#### Seventh Regional 3R Forum in Asia and the Pacific

"Advancing 3R and Resource Efficiency for the 2030 Agenda for Sustainable Development" Adelaide, SA, Australia, 2-4 November 2016

# **Country Report**

(Draft)

<Lao PDR>

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

Country Name

Country
3R
Progress
Report

Name of the Country: Lao PDR

Name, Designation and Organization Respondent:

Ministry of Natural Resource and Environment, MONRE

Other Ministries, Organizations, Agencies contributing to Country

**Report:** 

Ministry of Public Work and Transportation, MPWT

Timeline of Submission: 15 September 2016 (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 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 United Nations Centre for Regional Development (UNCRD)

Email: 3R@uncrd.or.jp

I. 3R Goals in Urban	/Industrial Areas (3Rs i	n municipal solid	waste)	
institut both p	ting policies, programi	mes, and project ners to reduce	s at national and loo the waste through	waste generated, by cal levels, encouraging greening production,
Q-1 What specifi	ic 3R policies, progr	ammes and pr	ojects, are implen	nented to reduce the
quantity of munic		•	• , .	
The base for 3R in	nplement is refer to Er	nvironmental Pr	otection Law, Envi	ronmental Sustainable
City Guideline and	d other policy from lin	e Ministry conc	erning.	
~			"source" segregati	on of municipal waste
,	check the appropriate l	box)		
$\square$ Very High (> 9	0%)			
☐ High (>70%)				
✓ Average (50-~7	'0%)			
☐ Low or not sati	sfactory (< 50%)			
$\square$ Does not exist	•			
Q-3 Total annual waste managemen	_	liture per capit	a (US\$ per capita	a) in municipal solid
The government e	xpenditure for MSW i	s small percenta	ige from governme	nt budget.
9 4	y/ institutional/ technolicy such as National			
include websites w		_	_	under development – ncy concern.
within next five ye		_	_	t plans to undertake
Is this Goal relevo	unt for your country?	☐ Highly	✓ Partially	□ Not at all

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)
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?
The government support to reduction of organic waste to composting technology.
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
Challenges (policy/institutional/technological/financial) faced in implementation: Lack of specific policy such as National 3R Strategy, regulation and budget to implementation.
Examples of pilot projects, master plans and/or policies developed or under development -
include websites where relevant
Ministry of Natural resource and Environment, line Ministries concern and Local government
agency concern.
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)  The policies, programmes, projects and master plans should be implementation.
<i>Is this Goal relevant for your country?</i> □ Highly ✓ Partially □ Not at all

Country Name	

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

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	Very High	High	Average	Poor	Recycling	Definition
	(>90%)	(>70%)	(50-~60%)	(<50%)	does not	of recycling
Type					exist	rate*
Paper			✓			
Plastic			✓			
Metal				✓		
Construction				✓		
waste						
e-waste				✓		
others						

<sup>\*</sup>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?

National Strategy and Action plan, technical guideline, regulation and Law.

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

g 5 What is the rate of resource recovery from various waste streams.						
	Rate	Very High	High	Average	Poor	Recycling
Type		(>90%)	(>70%)	(50-~60%)	(<50%)	does not exist
Paper				✓		
Plastic				✓		
Metal				✓		
Construct	ion				✓	
waste						
e-waste					✓	

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

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

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

1 2D G 1 :					
I. 3R Goals in	Urban/Industrial Areas (3Rs i	n municipal solid v	vaste)		
me me pr	chieve significant increase et al, etc.), by introducing echanisms and institutions oducers, consumers, recyclyclopment of modern recyclyclopment.	policies and nal frameworks eling industry, u	neasures, and by involving relevant	setting up financial stakeholders (e.g.,	
Challenges (	policy/ institutional/ techno	ological/ financi	al) faced in implen	nentation:	
	fic policy, institutional fran	0	, 0		
	f pilot projects, master pla	ns and/or polici	ies developed or u	nder development –	
include websites where relevant					
Ministry of 1 agency conce	Natural resource and Envirger.	conment, line Mi	nistries concern ar	nd Local government	
Important p	olicies/programmes/projec	ts/master plans	the government	plans to undertake	
within next five years (2016~2021)					
The policies, programmes, projects and master plans should be implementation.					
Is this Goal	relevant for your country?	☐ Highly	✓ Partially	☐ Not at all	

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)
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 National 3R strategy, technical guideline and regulation to introduce for private sector involve.
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: Lack of specific policy, institutional framework, technical support, budget, regulation and law.
Examples of pilot projects, master plans and/or policies developed or under development -
include websites where relevant Ministry of Natural resource and Environment, line Ministries concern and Local government agency concern.
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)  The policies, programmes, projects and master plans should be implementation.
Is this Goal relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

I. 3R Goals i	in Urban/Industrial Areas (3Rs in Industrial waste)
Goal 5	Encourage the <b>private sector</b> , including small-and medium-sized enterprises (SMEs) to implement measures to increase <b>resource efficiency and productivity</b> , creation of decent work and to improve environmentally-friendly practices through applying environmental standards, clean technologies, and cleaner production.
resource ej	fare the major clean technology related policies aiming to increase energy and fficiency of SMEs?  e policy for clean technology of waste.
capacity of	are the capacity building programmes currently in place to build the technical f SMEs in 3R areas?  budget from government and private sector to promote of SME in 3R area.
	s (policy/ institutional/ technological/ financial) faced in implementation: ecific policy, institutional framework, technical support, budget, regulation and law.
include we	of pilot projects, master plans and/or policies developed or under development – ebsites where relevant  f Natural resource and Environment, line Ministries concern and Local government acern.
within nex	policies/programmes/projects/master plans the government plans to undertake et five years (2016~2021) es, programmes, projects and master plans should be implementation.
Is this God	al relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

Country Name	

I. 3R Goals i	n 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.
~	percent of companies and industries have introduced green accounting and voluntary ntal performance evaluation (Ref: ISO 14000)?
	gh (> 90%)
☐ High (>'	
•	(50-~70%)
□ Low or	not satisfactory (< 50%)
□ None	
8000) in co	percent of companies and industries have introduced social accounting (Ref: SA onsultation with their workers?
•	gh (> 90%)
$\square$ High (>	, , , , , , , , , , , , , , , , , , ,
_	(50-~70%)
	not satisfactory (< 50%)
□ None	
specific po	government have a programme for promoting greening of the value chain? What plicies, programmes and incentives are introduced to promote greening of value ment has policy to promote green development policy.
Challenges	s (policy/ institutional/ technological/ financial) faced in implementation:
Lack of tec	hnical and financial support to implementation.
include we	of pilot projects, master plans and/or policies developed or under development – bsites where relevant Planning and Investment and line Ministries Concerning.
-	policies/programmes/projects/master plans the government plans to undertake t five years (2016~2021)
	s, programmes, projects and master plans should be implementation.
Is this God	d relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

I. 3R Goals	in Urban/Industrial Areas	(3Rs in Ind	ustrial waste	)	
Goal 7	Promote <b>industrial sy</b> for another), by provid		-	-	one industry as a resource
industrial promote in The gover	parks or zones? What s ndustrial symbiosis?	omote indu	<i>icies, prog</i> i istrial park	rammes and inco	entives are introduced to ones, the specific policy
are there i	many eco-industrial par in the country? eco-industrial supported			e, which is suppo	orted by the government,
	es (policy/ institutional/ chnical and financial su				olementation:
include w	of pilot projects, mass ebsites where relevant of Industry and Commen	_	_	_	r under development –
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)  The policies, programmes, projects and master plans should be implementation.					
Is this God	al relevant for your cou	ntry?	Highly	✓ Partially	□ Not at all

I. 3R Goals	in Urban/Industrial Areas (3Rs in Industrial waste)
Goal 8	Build <b>local capacity</b> 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 n	nany dedicated training facilities or centers are there to cater the needs of SMEs and
practitione	ers in the areas of cleaner production, resource efficiency and environment-friendly
- technologi	es, etc.?
_	of training facilities for SME and practitioner of cleaner product, resource efficiency
-	nment-friendly technology.
O-2 Please	e provide an indicative figure on annual government (US \$) expenditure on building
~	capacity of SMEs and practitioners in the areas of cleaner production, resource
	and environment-friendly technologies, etc.?
	capacity and practitioner of SME the government expenditure about 10,000,0000 \$.
To build the	eapacity and practitioner of 51412 the government experientare about 10,000,0000 v.
Challongo	s (policy/ institutional/ technological/ financial) faced in implementation:
	ecific policy, technical and financial support to implementation.
Lack of spe	ecine poncy, technical and infancial support to implementation.
Examples	of pilot projects, master plans and/or policies developed or under development -
_	ebsites where relevant
	f Industry and Commercial and line Ministries concerning.
	and the second s
Important	policies/programmes/projects/master plans the government plans to undertake
within nex	et five years (2016~2021)
	es, programmes, projects and master plans should be implementation.
Is this God	al 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?				
Lack of rule and regulation for hazardous waste management.				
Challenges (policy/ institutional/ technological/ financial) faced in implementation:				
Lack of specific policy, institutional framework, technical and financial support to				
implementation.				
Examples of pilot projects, master plans and/or policies developed or under development -				
include websites where relevant				
Ministry of Natural Resource and Environment and Ministry of Industry and Commercial.				
Important policies/programmes/projects/master plans the government plans to undertake				
within next five years (2016~2021)				
The policies, programmes, projects and master plans should be implementation.				
<i>Is this Goal relevant for your country?</i> □ Highly ✓ Partially □ Not at all				

Country Name	

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II. 3R Goals	in Rural Areas
Goal 10	<b>Reduce losses in the overall food supply chain</b> (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.
~	specific policies, rules and regulations, including awareness programmes, are
Environme	It to minimize food or crop waste? ental Protection Law and Environmental Sustainable City Guideline and Ministry of e and Forestry policy.
agriculture	re any continuing education services or awareness programmes for the farmers or all marketing associations on reduction of crop wastes for increased food security? If Agriculture and Forestry responsibility and implement.
_	is the average wastage of crops or agricultural produce between farms to consumers, a study in your country?
□ Very Hi	gh (> 20~ 30%)
☐ High (10	0~20%)
✓ Medium	1 (5~10%)
□ Low (<	5%)
□ Negligil	ble (<1%)
Challongo	s (policy/ institutional/ technological/ financial) faced in implementation:
	specific policy, institutional framework, technical and financial support to
include we	of pilot projects, master plans and/or policies developed or under development – bsites where relevant
Ministry of	f Agriculture and Forestry and line Ministry concerning
within nex	policies/programmes/projects/master plans the government plans to undertake at five years (2016~2021) es, programmes, projects and master plans should be implementation.
Is this God	al relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

implementation.

include websites where relevant

within next five years (2016~2021)

Is this Goal relevant for your country?

Country Name	

II. 3R Goals	s 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
0.1.11	areas and poverty reduction, among others.
	much amount of $-(a)$ agricultural biomass waste and $(b)$ livestock waste are grossly
_	per annum?
Lack of in	formation for agricultural waste and livestock waste.
O-2 How	are most of the agricultural biomass wastes utilized or treated? (Please check all
appropriate	
	ndary raw material input (for paper, bioplastic, furniture, etc.)
	electricity generation
	ts/fertilizers
_	eft unutilized or open dumped
□ mostly o	open burned
of agricult scale econ Ministry o	specific policies, guidelines, and technologies are introduced for efficient utilization tural biomass waste and livestock waste as a secondary material inputs towards full omic benefits? Relevant websites could be shared for additional information. f Agricultural and Forestry strategy and action plan.
Challenge	s (policy/ institutional/ technological/ financial) faced in implementation:

Lack of specific policy, institutional framework, technical and financial support to

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

Important policies/programmes/projects/master plans the government plans to undertake

☐ Highly

✓ Partially

The policies, programmes, projects and master plans should be implementation.

Ministry of Agriculture and Forestry and line Ministry concerning

□ Not at all

III. 3R Goal	s for New ar	d Emerging Waste	S			
Goal 12				efforts to address the stal environment.	he issue of waste, in	
			ations are in pl	ace to address the iss	ue of plastic wastes in	
		nvironment?				
Lao PDR i	is land lock	country.				
<i>(ICZM)? (</i>	Please che	ck the appropria	te box)		tal zone management	
□ Very m	uch	☐ Somehow	☐ Not at al	1		
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.						
Challenge	s (policy/ li	nstitutional/ tech	inological/ find	incial) faced in imple	mentation:	
		rojects, master p re relevant	olans and/or p	olicies developed or	under development –	
		rogrammes/proj s (2016~2021)	ects/master pl	ans the government	t plans to undertake	
Is this God	al relevant	for your country	v? □ Highly	☐ Partially	□ Not at all	

Country Name	

III. 3	3R (	Goals	for	New	and	Emer	ging	Wastes
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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.

**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)

example 1 =	> Highest prior	ny)			
Check if	Number in				
applicable	priority order				
	4	Take to recycling center / resource recovery facilities			
	3	Take to landfill			
	2	Take to the retailer			
	3	Take to local charity for re-use			
	3	Take to second-hand shop for re-use			
	4	Ship back to the manufacturer			
	4	Ship back to the manufacturer			
	4	Recycle in another country			
	4	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)? Environmental Protection Law and Strategy and Action Plan.

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

g 3 110 w miller amount of c waste is generated and recycled per year.					
Type of e-waste	Estimated total volume	% of collected by	% of volume recycled		
	generated	permitted recycler	in collected		
	(ton/year)				
Television	N/A				
Computer	N/A				
Mobile phone	N/A				
Refrigerators	N/A				
Washing machines	N/A				
Air conditioners	N/A				
Others					

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

Lack of specific policy, institutional framework, technical and financial support to implementation.

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

Ministry of Natural Resource and Environment, Ministry of Industry and Commercial and line Ministry concerning.

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

The policies, programmes, projects and master plans should be implementation.

Is this Goal relevant for your country?	$\square$ Highly	✓ Partially	☐ Not at all
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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?				
Environmental Protection Law and other Law concerning.				
Q-2 Do you have required number of well-trained custom or other officials (for airport. seaport, land border control, etc.) to track illegal export and import of e-waste?  ✓ Yes □ No				
Challenges (policy/ institutional/ technological/ financial) faced in implementation:  Lack of specific policy, institutional framework, technical and financial support to implementation.				
Examples of pilot projects, master plans and/or policies developed or under development -				
include websites where relevant				
Ministry of Natural Resource and Environment, Ministry of Industry and Commercial and line Ministry concerning.				
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)				
The policies, programmes, projects and master plans should be implementation.				
<i>Is this Goal relevant for your country?</i> □ Highly ✓ Partially □ Not at all				

Country Name	

III. 3R Goal	s for New and Emerging Wastes			
Goal 15	Progressive implementation encouraging producers, impo- fulfill their responsibilities for waste streams, in particular e-	orters, and retain r collecting, recy	lers and other rel	levant stakeholders to
(If there is	specific Extended Product Re none, then skip Q-2 below)		PR) policies are ei	nacted or introduced?
Lack of inf	formation for extended produce	er responsibility		
Q-2 Please	provide a list of products and	l product group:	s targeted by EPK	R nationally?
Challenge	s (policy/ institutional/ techno	logical/ financio	al) faced in imple	mentation:
-	of pilot projects, master plan bsites where relevant	ns and/or polici	es developed or	under development –
-	policies/programmes/project t five years (2016~2021)	s/master plans	the government	plans to undertake
Is this God	l 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?  Ministry of Health policy and regulation	
Q-2 What is the total annual government expenditure towards healthcare waste management (US\$ per year)?  The government expenditure for healthcare waste management about 15,000 US\$.	nt
Q-3 List the agencies or authorities responsible for healthcare waste management.  Vientiane Urban Development Administration Authority.	
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:  Lack of specific policy, institutional framework, technical and financial support implementation.	to
Examples of pilot projects, master plans and/or policies developed or under development	_
include websites where relevant Ministry of Health and line Ministry concerning.	
Willistry of Health and fine Willistry Concerning.	
Important policies/programmes/projects/master plans the government plans to undertak within next five years (2016~2021)  The policies, programmes, projects and master plans should be implementation.	te
Is this Goal relevant for your country? ☐ Highly ✓ Partially ☐ Not at all	

Country Name	

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)?  Ministry of Industrial and Commercial and line Ministries concerning.
Q-2 What specific energy efficiency schemes are introduced for production, manufacturing and service sector?  Hydropower sectors.
<b>Q-3</b> What specific policies are introduced to create green jobs in product and waste sector? Ministry of Industrial and Commercial policy and line Ministries policy concerning.
Challenges (policy/institutional/technological/financial) faced in implementation:  Lack of specific policy, institutional framework, technical and financial support to implementation.
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant Ministry of Industry and Commercial and line Ministry concerning.
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)  The policies, programmes, projects and master plans should be implementation.
<i>Is this Goal relevant for your country?</i> ☐ Highly ✓ Partially ☐ Not at all

IV. 3R Goals for Cross-cutting Issues								
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?								
The waste management policy is good exiting way for climate mitigation and gets many benefits.								
Challenges (policy/institutional/technological/financial) faced in implementation:								
Lack of specific policy, institutional framework, technical and financial support to								
implementation.								
Examples of pilot projects, master plans and/or policies developed or under development -								
include websites where relevant								
Ministry of Natural Resource and Environment and line Ministry concerning.								
Important policies/programmes/projects/master plans the government plans to undertake								
within next five years (2016~2021)								
The policies, programmes, projects and master plans should be implementation.								
<i>Is this Goal relevant for your country?</i> ☐ Highly ✓ Partially ☐ Not at all								

Is this Goal relevant for your country?

Country Name

IV. 3R Goa	als for Cross-cutting Issues					
Goal 19	Enhance <b>national and local knowledge base and research network on the 3Rs and resource efficiency</b> , through facilitating effective and dynamic linkages among all stakeholders, including governments, municipalities, the private sector, and scientific communities.					
governme Environm	at specific policies are introduced to encourage triangular cooperation between ent, scientific & research institutions and private/business sector in 3R areas? nental Protection Law, Environmental Strategy and Action plan and National 3R strategy minimization and waste efficiency.					
in the are recycling	see share the number and list of dedicated scientific institution, or coordinating centers eas of 3Rs (e.g., waste minimization technologies, eco-products, cleaner production, technologies, industrial symbiosis, resource efficiency, etc.)? Lao PDR is lack of specific institutional framework for 3r area, only some factories are plastic.					
	es (policy/institutional/technological/financial) faced in implementation: specific policy, institutional framework, technical and financial support to attain.					
include w	s of pilot projects, master plans and/or policies developed or under development – vebsites where relevant of Natural Resource and Environment and line Ministry concerning.					
within ne	t policies/programmes/projects/master plans the government plans to undertake ext five years (2016~2021) ies, programmes, projects and master plans should be implementation.					

☐ Highly

✓ Partially

IV. 3R Goa	ls 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.				
formulate	3R-relate				olders in the process to s are involved in the
uniogue: □ NGOs	,	ck an applicable)	□ Indu	strial Association	n
	s Governmer	nt			
	s, please ad		☐ Acac	lemic Institution	l
	s, pieuse au	a, specif (	,		
		l of NGOs' involven elated promotional a		-	etion and consumption, propriate box)
□ Very	high	☐ Moderate	✓ Low		☐ Almost Negligible
and consi	umption an	d resource efficiency	(Please check	-	
□ Very	high	✓ Moderate	□ Low		☐ Almost Negligible
	specific p	nstitutional/ technoloolicy, institutional			lementation: financial support to
include w	ebsites whe	rojects, master plan re relevant Resource and Environ	-	•	r under development – rning.
within ne	xt five year.	programmes/projects s (2016~2021) nmes, projects and m	_		nt plans to undertake
Is this Go	al relevant	for your country?	☐ Highly	✓ Partially	□ Not at all

Voluntary Progress/Achievements/Init	iatives in
Implementing Ha Noi 3R Declaration	$(2013 \sim 2023)$

Country Name	

IV	3R	Goals	for	Cross-	-cutting	Teenee
ıν.	$\mathcal{I}_{\mathcal{L}}$	Goars	101	C1088	cutting	122 nc2

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?

Almost of the educational institute they have environmental management programmes, for area of 3R is not yet.

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.

Environmental Protection Law, Environmental Management Strategy and Environmental Sustainable City Guideline, for the National 3R Strategy is not yet.

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

Do not has the academic and research institute for 3Rs area.

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?

Not yet.

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

Lack of specific policy, institutional framework, technical and financial support to implementation.

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

Ministry of Natural Resource and Environment and line Ministry concerning.

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

The policies, programmes, projects and master plans should be start and implementation.

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

Country Name

IVI	2D	Cools	for Cr	oss-cui	tting ]	[aanaa
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Is this Goal relevant for your country?

Integrate the 3R concept in relevant policies and programmes, of key ministries and Goal 22 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 Natural Resource and Environment and Ministry of Public Work and Transportation. 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: Lack of specific policy, institutional framework, technical and financial support to implementation. Examples of pilot projects, master plans and/or policies developed or under development include websites where relevant Ministry of Natural Resource and Environment and line Ministry concerning. Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021) The policies, programmes, projects and master plans should be start and implementation.

☐ Highly

✓ Partially

Country Name	

IV. 3R Goals for	Cross-cutting Issues
ane	omote <b>green and socially responsible procurement</b> at all levels, thereby creating a lexpanding 3R industries and markets for environmentally-friendly goods and educts.
<b>Q-1 What sprocurement?</b> Not yet.	pecific policies are introduced to promote green and social responsible
Q-2 Please pro	ovide details of eco-labelling schemes of your country.
Q-3 Please pro	ovide a list of criteria for eco-labeled products and services in your country.
Q-4 Please progreen procure	ovide the list of Ministries and major Government Agencies which have adopted ment policy.
Q-5 What % o	f municipalities has adopted the green procurement policy?
Challenges (p	plicy/ institutional/ technological/ financial) faced in implementation:
	oilot projects, master plans and/or policies developed or under development – es where relevant
	icies/programmes/projects/master plans the government plans to undertake e years (2016~2021)
Is this Goal re	<i>levant for your country</i> ? ☐ Highly ☐ Partially ☐ Not at all

Is this Goal relevant for your country?

Country Name	

IV. 3R Goals for Cross-cutting Issues
Phase out harmful subsidies that favor 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.  Non
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)

☐ Highly

☐ Partially

Is this Goal relevant for your country?

Country Name

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? Waste management is priority to protect the public health.
<b>Q-2</b> What are the rules and regulations to prevent open dumping and open burning of waste? Environmental Protection Law.
Q-3 Rank the five most important rivers in terms of water quality (BOD values) passing through major cities and urban areas?  National Environmental Standard.
Q-4 What are the specific laws, rules and regulations in place to prevent littering in river and water bodies?  Draft on water and water resource law.
Q-5 What are the specific laws, rules and regulations in place to prevent marine littering?  Non
Challenges (policy/institutional/technological/financial) faced in implementation:  Lack of specific policy, institutional framework, technical and financial support to implementation.
Examples of pilot projects, master plans and/or policies developed or under development -
include websites where relevant Ministry of Natural Resource and Environment and line Ministry concerning.
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)  The policies, programmes, projects and master plans should be start and implementation.

☐ Highly

✓ Partially

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

Country Name	

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IV. 3R Goal	s 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.
	are major recycling industries in your country?
Electronic	equipments such as computer and other.
	e specify the regulation on transboundary movement of hazardous waste.  ental Protection Law and refer to Basel Convention rule.
non-hazar	er government has restriction on import of non-hazardous waste or quality control of rdous waste, please list it up.  ta information.
Q-4 Does	your government restricts import of remanufactured goods?
	your government regard remanufactured goods as secondhand goods, and regulate dhand goods?
	s (policy/institutional/technological/financial) faced in implementation: specific policy, institutional framework, technical and financial support to tation.
-	of pilot projects, master plans and/or policies developed or under development –
	f Natural Resource and Environment and line Ministry concerning.
	policies/programmes/projects/master plans the government plans to undertake at five years (2016~2021)
	es, programmes, projects and master plans should be start and implementation.

✓ Partially

Country Name	

IV. 3R	C Goals	for	Cross-	-cutting	Issues
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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	No data	Good	Not good
		limited	exist		
Waste generation		<b>✓</b>			✓
Material flow		<b>√</b>			✓
Cyclical use		<b>✓</b>			✓
Amount of final disposal		<b>√</b>			<b>√</b>
Disposal to land		<b>√</b>			<b>√</b>
Direct disposal to water			✓		<b>√</b>
Import of waste			✓		<b>√</b>
Export of waste			✓		✓
Total landfilled waste			✓		<b>√</b>
Import of recyclables			✓		<b>√</b>
Export of recyclables			✓		✓
Hazardous waste generation (solid, liquid, sludge, etc.)			✓		✓
e-waste generation			✓		✓

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

<i>Q</i> -2	What are the current and planned government policies and programmes to strengthen date	a
and	information availability in waste sector?	

Not yet.

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C. C	(POLLE)			A	,	, ,	· ··· ···· ··· ·	

Lack of specific policy, institutional framework, technical and financial support to implementation.

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

Ministry of Natural Resource and Environment and line Ministry concerning.

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

The policies, programmes, projects and master plans should be start and implementation.

Is this Goal relevant for your country?	$\square$ Highly	✓ Partially	☐ Not at all
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IV. 3R Goals for Cross-cutting Issues		
Goal 28 Promote heat recovery (waste-to-energy), in case was recyclable and proper and sustainable management is secured.		
Q-1 What are the government policies and programmes, including energy programmes?	g incentives, for waste-to-	
Yes Ministry of Energy and Mine.		
Challenges (policy/institutional/technological/financial) faced in it Lack of specific policy, institutional framework, technical at implementation.		
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant Ministry of Energy and Mine and line Ministry concerning.		
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)  The policies, programmes, projects and master plans should be start and implementation.		
Is this Goal relevant for your country? ☐ Highly ✓ Partially	v □ Not at all	

Is this Goal relevant for your country?

Country Name

IV. 3R Goals	s 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	e provide a list of on-going bilateral/multi-lateral technical cooperation in 3R areas?	
Lack of inf	formation for on-going bilateral/multi-lateral technical cooperation in 3R areas.	
of waste ex	actions are being taken to promote inter-municipal or regional cooperation in areas schanges, resource recovery, recycling, waste-to-energy and trade of recyclables? ental Management Strategy and Environmental Protection Law.	
_	s (policy/ institutional/ technological/ financial) faced in implementation:	
Lack of implement	specific policy, institutional framework, technical and financial support to ation.	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant  Ministry of natural Resource and Environment and line Ministry concerning.		
within nex	policies/programmes/projects/master plans the government plans to undertake at five years (2016~2021) es, programmes, projects and master plans should be start and implementation.	

☐ Highly

✓ Partially

IV. 3R Goal	s for Cross-cutting Issues
Goal 30	Pay special attention to issues and challenges faced by developing countries including SIDS in achieving sustainable development.
	e describe any past and on-going cooperation with SIDS (Small Island Developing untries in 3R areas.
	e list 3R related projects linked to climate change, biodiversity, disaster management nable tourism. (This is to be reported by SIDS countries only)
Challenge	s (policy/ institutional/ technological/ financial) faced in implementation:
-	of pilot projects, master plans and/or policies developed or under development – ebsites where relevant
-	policies/programmes/projects/master plans the government plans to undertake et five years (2016~2021)
Is this Goo	al relevant for your country? ☐ Highly ☐ Partially ☐ Not at all

Country Name	

IV. 3R Goals	for Cross-cutting Issues			
	Promote 3R + "Return" cor "Return" where recycling is industries and limited scale of	difficult due to	o the absence of a	vailable recycling
~	specific policies, programme,	·		nented to promote
3R+ "Retur	n" concept? (This is <u>to be rep</u>	ported by SIDS o	countries only)	
Challenges	(policy/ institutional/ technol	logical/ financia	l) faced in implemei	ntation:
-	of pilot projects, master plan psites where relevant	s and/or policie	s developed or und	ler development –
	policies/programmes/projects five years (2016~2021)	s/master plans	the government pl	ans to undertake
Is this Goal	relevant for your country?	□ Highly	☐ Partially	☐ Not at all

Country Name	

IV. 3R Goals	s for Cross-cutting Issues
Goal 32	Complete elimination of illegal engagement of children in the <b>informal waste sector</b> and gradually <b>improve</b> the working conditions and livelihood security, including <b>mandatory provision of health insurance</b> , for all workers.
Q-1 What	is the approximate market size (in US\$) of the informal waste sector?
Q-2 Numb	er of annual labor inspections in waste sector?
Q-3 Is hea	lth insurance a mandatory to all informal workers in waste sector by law?
	specific policies and enforcement mechanisms are in place to prevent illegal nt of children in waste sector?
· · · · · · · · · · · · · · · · · · ·	n of chimien in hasie sector.
Q-5 Numb	er of landfill sites accessible to register waste pickers?
O-6 Avera	ge life span of informal waste workers?
Q-0 11,010,	ze uje span oj injormai wasie workers.
Q-7 Any go	overnment vaccination programmes for informal waste workers?
0 0 Am	willia mususassa nyanggamas for informal waste workers on health and safety
<i>Q-o Any p measures?</i>	public awareness programmes for informal waste workers on health and safety
Challenges	s (policy/ institutional/ technological/ financial) faced in implementation:
	of pilot projects, master plans and/or policies developed or under development -
include we	bsites where relevant
-	policies/programs/projects/master plans the government plans to undertake within ears (2016~2021)
Is this God	al relevant for your country?

IV. 3R Goal	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.  Gender is main target to incorporate of waste management reduction, reuse and recycle.				
Challenges (policy/ institutional/ technological/ financial) faced in implementation:  Lack of specific policy, institutional framework, technical and financial support to implementation.				
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant Ministry of natural Resource and Environment and line Ministry concerning.				
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)  The policies, programmes, projects and master plans should be start and implementation.				
Is this God	al relevant for your country? ☐ Highly ✓ Partially ☐ Not at all			