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

"Achieving Clean Water, Clean Land and Clean Air through 3R and Resource Efficiency- A 21<sup>st</sup> Century Vision for Asia-pacific Communities" Indore, Madhya Pradesh, India, 9-12 April 2018

#### **Country Report**

(Draft)

< Republic of the Union of Myanmar>

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

# Country 3R Progress Report

Name of the Country: Myaanmar

Name, Designation and Organization Respondent: Mr. Min Maw, Director, Pollution Control Division, Environmental Conservation Department, Ministry of Natural Resources and Environmental Conservation

Other Ministries, Organizations, Agencies contributing to Country Report:

**Timeline of Submission:** 31 January 2018 (Email: 3R@uncrd.or.jp)

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

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

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

Thank you very much for your kind cooperation.

Country Name- Myanmar

United Nations Centre for Regional Development (UNCRD)

Email: 3R@uncrd.or.jp

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)
Significant <b>reduction</b> in the quantity of <b>municipal solid waste</b> 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?
A-1 There are no specific 3R policies. We are preparing the National Waste Management Strategy
and Action Plan (final draft).
Q-2 What is the level of participation of households in "source" segregation of municipal waste streams? (Please check the appropriate box)
□ Very High (> 90%)
$\square$ High (>70%)
✓ Average (50-~70%)
$\square$ Low or not satisfactory (< 50%)
☐ Does not exist
<i>Q-3 Total annual governmen</i> t expenditure per capita (US\$ per capita) in municipal solid waste management in 2014-2015 -
Challenges (policy/ institutional/ technological/ financial) faced in implementation: - policy/ institutional/ technological/ financial
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant
- Waste Management Strategy and Action Plan for Mandalay City is now already launched.
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)
- Solid Waste Management Action Plan for Cities and Industrial Zones will implement next
five years.

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? A-1 - No
Q-2 What is happening to country's organic waste? (Please check the appropriate box)  ☐ mostly landfilled ☐
☐ mostly incinerated ☐ both landfilled and incinerated ✓ mostly open dumped or open burned
Challenges (policy/ institutional/ technological/ financial) faced in implementation:  - policy/ institutional/ technological/ financial
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)  - Solid Waste Management Action Plan for Cities and Industrial Zones will implement next five years.
Is this Goal relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

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

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

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

We have no specific data for the recycling rate of various recyclables. Actually, Informal sector are recycling the waste (paper, plastic, metal, etc).

Rate	Very High	High	Average	Poor	Recycling	Definition of
	(>90%)	(>70%)	(50-~60%)	(<50%)	does not	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

#### 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?

- We have no specific policies.

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

- We have no specific data for that.

Ra	ate	Very High	High	Average	Poor	Recycling
Type		(>90%)	(>70%)	(50-~60%)	(<50%)	does not exist
Paper						
Plastic						
Metal						
Construction						
waste						
e-waste						

(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?

- We have no specific data for that.

Туре	Level	Every Major City	Few Major Cities only	Does not exist	Supportive policy or programmes exists	No supportive policy or programmes
Paper						
Plastic						

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)

Implemen	iting Ha Noi 3.	R Declaration (	(2013~2023)			
Metal						
Construc	ction					
waste						
e-waste						
I. 3R Goal	s in Urban/Indust	rial Areas (3Rs ir	n municipal solid	waste)		
Goal 3	etc.), by introc institutional fa	lucing policies a rameworks invo- ustry, users of	and measures, a olving relevant	nd by setting stakeholder	g up financial s (e.g., produ	stic, paper, metal, mechanisms and icers, consumers, ment of modern
_		itutional/ techn nal/ technologic	•	cial) faced i	in implement	tation:
-	s of pilot project where relevant	•	and/or policies -	developed o	r under devel	opment – include
next five	years (2016~2)	021)			_	undertake within

✓ Partially

□ Not at all

Voluntary Progress/Achievements/Initiatives in

five years.

*Is this Goal relevant for your country?*  $\square$  Highly

I. 3R Goals in	Urban/Industrial Areas (3Rs in municipal solid waste)
Goal 4	Build sustainable cities /green cities by encouraging "zero waste" through sound
	policies, strategies, institutional mechanisms, and multi - stakeholder partnerships
	(giving specific importance to private sector involvement) with a primary goal of waste
	minimization
_	pecific waste management policies and programmes are introduced to encourage or participation in municipal waste management?
Stra	onal Waste Management Strategy and Action Plan and City level Waste Management tegy and Action Plan will introduce to encourage private sector participation in icipal waste management.
	re the major waste management areas that have strong involvement of private and ctor? (Please check appropriate boxes and add other areas if not listed below) lection
$\square$ resource	recovery
□ waste rec	cycling
□ waste to	energy, composting, etc.
☐ PPP proj	ects in waste sector
Challenges	(policy/ institutional/ technological/ financial) faced in implementation:
- polic	cy/ institutional/ technological/ financial
	f pilot projects, master plans and/or policies developed or under development – include ere relevant
	olicies/programmes/projects/master plans the government plans to undertake within ars (2016~2021)
	d Waste Management Action Plan for Cities and Industrial Zones will implement next years.
Is this Goal	relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

I. 3R Goals	in Urban/Industrial Areas (3Rs in Industrial waste)
Goal 5	Encourage the <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.
Q-1 What efficiency	are the major clean technology related policies aiming to increase energy and resource of SMEs?
- No	specific policies.
	are the capacity building programmes currently in place to build the technical capacity n 3R areas?
Challenge	s (policy/ institutional/ technological/ financial) faced in implementation:
- pol	icy/ institutional/ technological/ financial
Examples	of pilot projects, master plans and/or policies developed or under development – include here relevant -
_	policies/programmes/projects/master plans the government plans to undertake within ears (2016~2021)
	id Waste Management Action Plan for Cities and Industrial Zones will implement next e years.
Is this God	al relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

I. 3R Goals i	n Urban/Industrial Areas (3Rs in Industrial waste)
Goal 6	Promote the <b>greening of the value chain</b> by encouraging industries and associated
O-1 What r	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)?
□ Very Hi	• • • • • • • • • • • • • • • • • • • •
☐ High (>7	
•	(50-~70%)
_	not satisfactory (< 50%)
$\square$ None	
in consulta	vercent of companies and industries have introduced social accounting (Ref: SA 8000) tion with their workers?
□ Very Hi	
☐ High (>7	<i>'</i>
C	(50-~70%)
	not satisfactory (< 50%)
□ None	
	government have a programme for promoting greening of the value chain? What licies, programmes and incentives are introduced to promote greening of value chain?
- We	are preparing the Green Economy Policy and Framework.
Challenges	(policy/ institutional/ technological/ financial) faced in implementation:
- poli	cy/ institutional/ technological/ financial
-	f pilot projects, master plans and/or policies developed or under development – include here relevant -
	policies/programmes/projects/master plans the government plans to undertake within ears (2016~2021) -
Is this Goa	l relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

I. 3R Goals in	Urban/Industrial Areas (3Rs in Industrial waste)
	Promote <b>industrial symbiosis</b> (i.e., recycling of waste from one industry as a resource for another), by providing relevant incentives and support.
industrial po promote ind	our government have policies and programmes promoting industrial symbiosis in arks or zones? What specific policies, programmes and incentives are introduced to dustrial symbiosis?  have no specific policies.
Q-2 How mo	any eco-industrial parks or zones or the like, which is supported by the government, the country?
- No	
Challenges	(policy/ institutional/ technological/ financial) faced in implementation:
- polic	y/ institutional/ technological/ financial
Examples of websites who	fpilot projects, master plans and/or policies developed or under development – include ere relevant -
	olicies/programmes/projects/master plans the government plans to undertake within ars (2016~2021)
Is this Goal	relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

I. 3R Goals in	n Urban/Industrial Areas (3Rs in Industrial waste)
	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.
<b>Q-1</b> How m	any dedicated training facilities or centers are there to cater the needs of SMEs and
practitione	rs in the areas of cleaner production, resource efficiency and environment-friendly
technologie	· · · · · · · · · · · · · · · · · · ·
<b></b>	.,,
- Six	JCM Projects are implementing
technical c	provide an indicative figure on annual government (US \$) expenditure on building apacity of SMEs and practitioners in the areas of cleaner production, resource and environment-friendly technologies, etc.?
Challenges	(policy/ institutional/ technological/ financial) faced in implementation:
- poli	cy/ institutional/ technological/ financial
- '	f pilot projects, master plans and/or policies developed or under development – include nere relevant -
	policies/programmes/projects/master plans the government plans to undertake within ars (2016~2021)
- CDI	M and JCM will be implementing
	·
is this Goal	<i>relevant for your country?</i> ☐ 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
- As a party of Basel Convention, now we are drafting the classification of the hazardous waste.
Q-2 What specific rules and regulations are introduced to separate, store, treat, transportation
and disposal of hazardous waste?
- We have no specific rules and regulations.
Challenges (policy/institutional/technological/financial) faced in implementation:
nolicy/institutional/technological/financial
- policy/ institutional/ technological/ financial
Examples of pilot projects, master plans and/or policies developed or under development – include
websites where relevant
- Hazardous Waste Management Project
Important policies/programmes/projects/master plans the government plans to undertake within
next five years (2016~2021)
- Hazardous Waste Management Master Plan
<i>Is this Goal relevant for your country?</i> $\checkmark$ Highly $\Box$ Partially $\Box$ Not at all

II. 3R Goals in Rural Areas
Goal 10 Reduce losses in the overall food supply chain (production, post harvesting and
storage, processing and packaging, distribution), leading to reduction of waste while
increasing the quantity and improving the quality of products reaching consumers.
Q-1 What specific policies, rules and regulations, including awareness programmes, are
introduced to minimize food or crop waste?
<del>-</del>
Q-2 Is there any continuing education services or awareness programmes for the farmers or agricultural marketing associations on reduction of crop wastes for increased food security?
Q-3 What is the average wastage of crops or agricultural produce between farms to consumers, if there is a study in your country?
□ Very High (> 20~ 30%)
☐ High (10~20%)
☐ Medium (5~10%)
□ Low (< 5%)
□ Negligible (<1%)
Challenges (policy/ institutional/ technological/ financial) faced in implementation:
- policy/ institutional/ technological/ financial
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) -
<i>Is this Goal relevant for your country?</i> □ Highly □ Partially ✓ Not at all

II. 3R Goals	in Rural Areas
Goal 11	Promote full scale <b>use of agricultural biomass waste and livestock waste</b> 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.
_	nuch amount of – (a) agricultural biomass waste and (b) livestock waste are grossly per annum?
appropriate	are most of the agricultural biomass wastes utilized or treated? (Please check all boxes)  dary raw material input (for paper, bioplastic, furniture, etc.)
□ biogas/e	lectricity generation s/fertilizers
<u>-</u>	eft unutilized or open dumped open burned
agriculture	pecific policies, guidelines, and technologies are introduced for efficient utilization of all biomass waste and livestock waste as a secondary material inputs towards full scale benefits? Relevant websites could be shared for additional information.
	(policy/ institutional/ technological/ financial) faced in implementation:
Examples	cy/ institutional/ technological/ financial of pilot projects, master plans and/or policies developed or under development – include here relevant -
	policies/programmes/projects/master plans the government plans to undertake within ears (2016~2021) -
Is this God	l relevant for your country? ☐ Highly ☐ Partially ✓ Not at all

III. 3R Goals for New and Emerging Wastes
Goal 12 Strengthen regional, national, and local efforts to address the issue of waste, in particular plastics in the marine and coastal environment.
Q-1 What specific policies and regulations are in place to address the issue of plastic wastes in
coastal and marine environment?
Q-2 What extent issue of plastic waste is considered in integrated coastal zone management (ICZM)? (Please check the appropriate box)
□ Very much □ Somehow □ Not at all
Q-3 Please provide a list of centre of excellences or dedicated scientific and research programmes established to address the impacts of micro-plastic participles (<5 mm) on coastal and marine species? If yes, please provide relevant websites.
Challenges (policy/ institutional/ technological/ financial) faced in implementation: - policy/ institutional/ technological/ financial
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)
-
<i>Is this Goal relevant for your country?</i> □ Highly □ Partially ✓ Not at all

	_
Country Name- Myanmar	

III. 3R Goals for New and Emerging Wa
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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)

1 -> 111gnes	t priority)	
Check if	Number in	
applicable	priority order	
		Take to recycling center / resource recovery facilities
		Take to landfill
		Take to the retailer
		Take to local charity for re-use
		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)?

- We have no specific Policies and Regulations.

Q-3 How much amount of e-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			
Computer			
Mobile phone			
Refrigerators			
Washing machines			
Air conditioners			
Others			

		' institutional/			

- policy/ institutional/ technological/ financial		
Examples of pilot projects, master plans and/or polici	es developed or	under development – include
websites where relevant		
_		
Important policies/programmes/projects/master planext five years (2016~2021)	ns the governm	ent plans to undertake within
-		
Is this Goal relevant for your country? ☐ Highly	☐ Partially	✓ Not at all

HI 2D C 1 f N 1E ' W 4
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?
- We have no specific policies and regulations.
Q-2 Do you have required number of well-trained custom or other officials (for airport. sea-port,
land border control, etc.) to track illegal export and import of e-waste?
□ Yes ✓ No
Challenges (policy/ institutional/ technological/ financial) faced in implementation:
1' /' '' 1' 1 1 1 1 1 1 1 1 1 1
- policy/ institutional/ technological/ financial
$Examples\ of\ pilot\ projects, master\ plans\ and/or\ policies\ developed\ or\ under\ development-include$
websites where relevant
- Hazardous Waste Management Project
Important policies/programmes/projects/master plans the government plans to undertake within
next five years (2016~2021)
Hazardous Wasta Managamant Mastar Plan
- Hazardous Waste Management Master Plan
Is this Goal relevant for your country? $\square$ Highly $\checkmark$ Partially $\square$ Not at all

III. 3R Goals for New and Emerging Wastes
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)
<del>-</del>
Q-2 Please provide a list of products and product groups targeted by EPR nationally?
_
Challenges (policy/ institutional/ technological/ financial) faced in implementation:
- policy/ institutional/ technological/ financial
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant-
websues where relevant-
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)
-
<i>Is this Goal relevant for your country?</i> □ Highly □ Partially ✓ Not at all

II. 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?
- We have no specific Policies and Regulations.
2-2 What is the total annual government expenditure towards healthcare waste management
US\$ per year)?
Q-3 List the agencies or authorities responsible for healthcare waste management.
<del>-</del>
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:
- policy/ institutional/ technological/ financial
Examples of pilot projects, master plans and/or policies developed or under development – include
vebsites where relevant
- Ministry of Health and Sport are preparing Health Care Waste Management.
Important policies/programmes/projects/master plans the government plans to undertake within
next five years (2016~2021)
<del>-</del>
Is this Goal relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

IV. 3R Goals for Cross-cutting Issues
Goal 17 Improve resource efficiency and resource productivity by greening jobs nation-wide in all economic and development sectors.
Q-1 What specific policies and guidelines are introduced for product standard (towards quality/durability, environment/eco-friendliness, labour standard)?
Q-2 What specific energy efficiency schemes are introduced for production, manufacturing and service sector?
Q-3 What specific policies are introduced to create green jobs in product and waste sector?
Challenges (policy/ institutional/ technological/ financial) faced in implementation: - policy/ institutional/ technological/ financial
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)
<i>Is this Goal relevant for your country?</i> □ Highly ✓ Partially □ Not at all

IV. 3R Goals	for Cross-cutting Issues
	Maximize co-benefits from waste management technologies for local air, water, oceans, and soil pollution and global climate change.
~	e share how climate mitigation is addressed in waste management policies and es for co-benefits?  -
•	(policy/institutional/technological/financial) faced in implementation: cy/institutional/technological/financial
-	f pilot projects, master plans and/or policies developed or under development – include here relevant -
	policies/programmes/projects/master plans the government plans to undertake within ears (2016~2021)
Is this Goa	l relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

IV. 3R Goals for Cross-cutting Issues
Goal 19 Enhance national and local knowledge base and research network on the 3Rs and resource efficiency, through facilitating effective and dynamic linkages among all stakeholders, including governments, municipalities, the private sector, and scientific communities.
Q-1 What specific policies are introduced to encourage triangular cooperation between government, scientific & research institutions and private/business sector in 3R areas?
Q-2 Please share the number and list of dedicated scientific institution, or coordinating centers in the areas of 3Rs (e.g., waste minimization technologies, eco-products, cleaner production, recycling technologies, industrial symbiosis, resource efficiency, etc.)?
Challenges (policy/ institutional/ technological/ financial) faced in implementation: - policy/ institutional/ technological/ financial
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) -
<i>Is this Goal relevant for your country?</i> □ Highly ✓ Partially □ Not at all

IV. 3R Goal	s for Cross-cu	itting Issues		
Goal 20	private se consumpti	ctor in raising publ	ic awareness and a lresource efficiency,	overnments, civil society, and the advancing the 3Rs, sustainable leading to the behavioural change
<del>formulate</del>	3R-related	00	O	ti-stakeholders in the process to keholders are involved in the
✓ NGOs	i icase <u>circe</u>	<u>k an</u> applicable)	✓ Industrial A	ssociation
✓ Local (	Government		☐ Academic I	nstitution
☐ Others	, please add	/specify ( )		
~		•		le production and consumption, ck the appropriate box)
□ Very h	igh	✓ Moderate	□ Low	☐ Almost Negligible
~	mption and	of citizens' awarenes, resource efficiency.		ets of 3R, sustainable production propriate box)   Almost Negligible
Challenges (policy/ institutional/ technological/ financial) faced in implementation: - policy/ institutional/ technological/ financial  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 God	ıl relevant f	or your country?	Highly ✓ Partial	y □ Not at all

IV. 3R Goal	s for Cross-cutting Issues
Goal 21	<b>Integrate the 3Rs</b> 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.
	e a list of formal programmes that addresses areas of 3R and resource efficiency as part lemic curriculum?
-	e provide an overview of the Government policies and programmes to promote velearning and development (non-formal education) on 3R and sustainable waste ent.
	provide a list of academic and research institutions offering PhD programmes in the Rs and resource efficiency?
_	provide a list of management institutions (offering BBA / MBA courses) which have resource efficiency and life cycle assessment (LCA) as part of their curriculum or elopment?
_	s (policy/institutional/technological/financial) faced in implementation: icy/institutional/technological/financial
-	of pilot projects, master plans and/or policies developed or under development – include here relevant -
_	policies/programmes/projects/master plans the government plans to undertake within ears (2016~2021) -
Is this God	al relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

policy/institutional/technological/financial

websites where relevant

*next five years* (2016~2021)

Strategy and Action Plan

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

Country Name- Myanmar

IV. 3R Goals for Cross-cutting Issues
Goal 22 Integrate the 3R concept in relevant policies and programmes, of key ministries and agencies such as Ministry of Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Industry, Ministry of Trade and Commerce, Ministry of Energy, Ministry of Water Resources, Ministry of Transport, Ministry of Health, Ministry of Construction, Ministry of Finance, Ministry of Labour, Ministry of Land and Urban Development, Ministry of Education, and other relevant ministries towards transitioning to a resource-efficient and zero waste society.
Q-1 Please list the name of the Ministries and major Government Agencies which are promoting
3R and resource efficiency as part of their policy, planning and developmental activities at local and national level.
una national teres.
- Ministry of Natural Resources and Environmental Conservation, City Development
Committees, State and Region Government
Q-2 What type of coordination mechanism are there among ministries and agencies for a resource efficient economic development?  VOfficial 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:

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

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

National Waste Management Strategy and Action Plan, City Level Waste Management

☐ Partially

□ Not at all

IV. 3R Goals	s for Cross-cutting Issues	
Goal 23	Promote <b>green and socially responsible procurement</b> 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?	
	<u>_</u>	
Q-2 Please	provide details of eco-labelling schemes of your country.	
	_	
Q-3 Please	provide a list of criteria for eco-labeled products and services in your country.	
	_	
Q-4 Please provide the list of Ministries and major Government Agencies which have adopted green procurement policy.		
9 F		
	-	
Q-5 What	% of municipalities have adopted the green procurement policy?	
~		
	-	
Challenge	s (policy/ institutional/ technological/ financial) faced in implementation:	
_	icy/ institutional/ technological/ financial	
-	of pilot projects, master plans and/or policies developed or under development — include here relevant	
	-	
Important	policies/programmes/projects/master plans the government plans to undertake within	
	potectes programmes/projects/master plans the government plans to undertake within pars (2016~2021)	
	-	
Is this God	al relevant for your country? ☐ Highly ✓ Partially ☐ Not at all	

IV. 3R Goals for Cross-cutting Issues
Goal 24 Phase out harmful subsidies that favour unsustainable use of resources (raw materials and water) and energy, and channel the freed funds in support of implementing the 3Rs and efforts to improve resource/energy efficiency.
Q-1 Are there any government subsidy programmes that directly or indirectly favour unsustainable use of resources (raw materials, water, and energy)? If so, please provide a list of such programmes along with the responsible Ministry or Agency administering and implementing it.
Challenges (policy/ institutional/ technological/ financial) faced in implementation: - policy/ institutional/ technological/ financial
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)
<i>Is this Goal relevant for your country?</i> ☐ Highly ✓ Partially ☐ Not at all

IV. 3R Goal	s 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 was	ste management a public health priority in your country?
	-
Q-2 What	are the rules and regulations to prevent open dumping and open burning of waste?
	<del>-</del>
_	the five most important rivers in terms of water quality (BOD values) passing through es and urban areas?
	<del>-</del>
Q-4 What bodies?	are the specific laws, rules and regulations in place to prevent littering in river and water
- En	vironmental Conservation Law and Rule
Q-5 What	are the specific laws, rules and regulations in place to prevent marine littering?
- En	vironmental Conservation Law and Rule
_	es (policy/ institutional/ technological/ financial) faced in implementation: licy/ institutional/ technological/ financial
	of pilot projects, master plans and/or policies developed or under development – include where relevant
	-
-	policies/programmes/projects/master plans the government plans to undertake within tears (2016~2021)
	-
Is this God	al relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

Country Name- Myanmar	

IV. 3R Goals	for Cross-cutting Issues
	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 a	re major recycling industries in your country?
- Plas	tic and Metal recycling industries
Q-2 Please	specify the regulation on transboundary movement of hazardous waste.
- Now	y, we are drafting the export and import procedure of Hazardous Waste.
~ "	government has restriction on import of non-hazardous waste or quality control of lous waste, please list it up.
0.45	-
Q-4 Does yo	our government restrict import of remanufactured goods?
- Yes	
Q-5 Does your government regard remanufactured goods as secondhand goods, and regulate it as secondhand goods?	
	-
	(policy/ institutional/ technological/ financial) faced in implementation: cy/ institutional/ technological/ financial
	f pilot projects, master plans and/or policies developed or under development – include nere relevant -
next five ye	olicies/programmes/projects/master plans the government plans to undertake within ars (2016~2021)
- Haz	ardous Waste Management Master Plan
Is this Goal	relevant for your country? ✓ Highly □ Partially □ Not at all

Country Name- Myanmar

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

Goal 27

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

Q-1 Please give an overview on availability of various data and information on material flow and waste management by checking (X or I 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		<b>√</b>			
Material flow			<b>√</b>		
Cyclical use			<b>√</b>		
Amount of final disposal		<b>√</b>			
Disposal to land		<b>√</b>			
Direct disposal to water			<b>√</b>		
Import of waste			<b>√</b>		
Export of waste			<b>√</b>		
Total landfilled waste		<b>√</b>			
Import of recyclables		<b>√</b>			
Export of recyclables		<b>√</b>			
Hazardous waste generation (solid, liquid, sludge, etc.)		<b>✓</b>			
e-waste generation			✓		

(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?

- National Waste Management Strategy and Action Plan , City Level Waste Management Strategy and Action Plan

Cnallenges (policy/ institutional/ tecn	notogicat/ financiat) faced	a in impiementation.
---	-----------------------------	----------------------

- policy/ institutional/ technological/ financial

 $\label{lem:examples} Examples \ of \ pilot \ projects, \ master \ plans \ and/or \ policies \ developed \ or \ under \ development-include \ websites \ where \ relevant$ 

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

- National Waste Management Strategy and Action Plan , City Level Waste Management Strategy and Action Plan

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

IV. 3R Goal	s for Cross-cutting Issues
Goal 28	Promote heat recovery (waste-to-energy), in case wastes are not re-usable or recyclable and proper and sustainable management is secured.
Q-1 What o	re the government policies and programmes, including incentives, for waste-to-energy es?
CI II	
_	s (policy/institutional/technological/financial) faced in implementation: icy/institutional/technological/financial
-	of pilot projects, master plans and/or policies developed or under development – include here relevant
	-
-	policies/programmes/projects/master plans the government plans to undertake within ears (2016~2021) -
Is this God	al relevant for your country? ☐ Highly ✓ Partially ☐ Not at all

IV. 3R Goals	for Cross-cutting Issues
	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?
_	
	ctions are being taken to promote inter-municipal or regional cooperation in areas of anges, resource recovery, recycling, waste-to-energy and trade of recyclables?
- Was	ste to Energy Plant is now implementing by JCM Project at Yangon.
	(policy/ institutional/ technological/ financial) faced in implementation:
- poli	cy/ institutional/ technological/ financial
- '	f pilot projects, master plans and/or policies developed or under development – include nere relevant
	onal Waste Management Strategy and Action Plan , City Level Waste Management tegy and Action Plan
Important p	policies/programmes/projects/master plans the government plans to undertake within
next five ye	ars (2016~2021)
	onal Waste Management Strategy and Action Plan , City Level Waste Management tegy and Action Plan
Is this Goal	Trelevant for your country? ☐ Highly ✓ Partially ☐ Not at all

IV. 3R Goals	for Cross-cutting Issues	
Goal 30	Pay special attention to issues and challenges faced by developing countries including SIDS in achieving sustainable development.	
Q-1 Please	describe any past and on-going cooperation with SIDS (Small Island Developing	
States) cou	ntries in 3R areas.	
	-	
0.4.71		
	list 3R related projects linked to climate change, biodiversity, disaster management	
ana sustair	nable tourism. (This is to be reported by SIDS countries only)	
	-	
Challenges	(policy/ institutional/ technological/ financial) faced in implementation:	
Chancinges	-	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<del>-</del>	
	policies/programmes/projects/master plans the government plans to undertake within	
next five ye	ears (2016~2021)	
	-	
Is this Goa	<i>l relevant for your country?</i> □ Highly □ Partially ✓ Not at all	

IV. 3R Goals for Cros	s-cutting Issues
where	te 3R + "Return" concept which stands for Reduce, Reuse, Recycle and "Return" recycling is difficult due to the absence of available recycling industries and scale of markets in SIDS, especially in the Pacific Region.
~ 1 0 1	policies, programme, including pilot projects, are implemented to promote 3R+ (This is to be reported by SIDS countries only)
	<del>-</del>
Challenges (policy	/ institutional/ technological/ financial) faced in implementation: -
Examples of pilot p websites where rel	rojects, master plans and/or policies developed or under development – include evant -
Important policies, next five years (20	/programmes/projects/master plans the government plans to undertake within 16~2021)
Is this Goal releva	nt for your country? ☐ Highly ☐ Partially ✓ Not at all

IV. 3R Goals for Cross-cutting Issues			
Goal 32	Complete elimination of illegal engagement of children in the <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	Ith insurance a mandatory to all informal workers in waste sector by law?		
	-		
	specific policies and enforcement mechanisms are in place to prevent illegal		
engageme	nt of children in waste sector?		
	-		
O-5 Numb	per of landfill sites accessible to register waste pickers?		
Q-5 Numb	er of unafti sites accessible to register waste pickers:		
	-		
O-6 Avera	ge life span of informal waste workers?		
2 0 11,014	ge the span of informat waste workers.		
	-		
0 7 Any a	overnment vaccination programmes for informal waste workers?		
Q-7 Any g	-		
0.0.4			
Q-8 Any measures?	public awareness programmes for informal waste workers on health and safety		
measures.	-		
Challenge	s (policy/ institutional/ technological/ financial) faced in implementation:		
	-		
Examples	of pilot projects, master plans and/or policies developed or under development – include		
_	here relevant		
	-		

IV. 3R Goals	ls 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.	
Important policies/programs/projects/master plans the government plans to undertake within next five years (2016~2021)		
Is this God	al relevant for your country? ☐ Highly ☐ Partially ✓ Not at all	

Country Name- Myanmar

IV. 3R Goals	s 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.		
	-	
Challenge	s (policy/ institutional/ technological/ financial) faced in implementation: -	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant		
	<del>-</del>	
-	policies/programmes/projects/master plans the government plans to undertake within ears (2016~2021)	
	<del>-</del>	
Is this God	al relevant for your country? ☐ Highly ✓ Partially ☐ Not at all	

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

- We are now preparing the National Waste Management Strategy and Action Plan (final draft).
- **Vision** of National Waste Management Strategy and Action Plan is Sustainable Green, Clean and Healthy Environment towards a Brighter Future for Myanmar.
- **Mission** of the National Waste Management Strategy and Action Plan is To develop and implement the holistic and integrated waste management strategy based on principles of inclusiveness, zero waste, zero emission and circular economy to achieve a greener, cleaner and healthier environment in Myanmar.
- Setting Goals of National Waste Management Strategy and Action Plan -
  - (A) Extending sound waste management practices for all types of waste to eliminate uncontrolled treatment, disposal and open burning
  - (B) Promote waste minimisation, reuse, recycling and recovery to establish a resource circular society
  - (C) Ensure sound budgeting for securing sustainable sources of revenue for waste sector
  - (D) Awareness raising, advocacy and capacity building
  - (E) Compliance, monitoring, enforcement and recognition